

Air Force Association



Aerospace Education Newsletter

Chapter, State, and National Aerospace Education Activities

From Dick Bundy - Vice Chairman for Aerospace Education

Your Aerospace Education Council jumped into our programs and has not missed a beat since being confirmed by the Board of Directors in October. We announced the 12 Mike and Gail Donley scholarship winners, one in each MAJCOM. The Civil Air Patrol's Aerospace Connections in Education continues to expand and we now have classrooms in 39 states, over 150 classrooms reaching approximately 22,000 students. Our National Teacher of the Year, Greg Ennis from Alabama, is running some incredible STEM programs and has connected well with Rolls-Royce, our new National sponsor. StellerXplorers has quadrupled in size this year with 132 teams registering and they are getting ready for the second round of competition. Cyber Patriot is also going outstanding with over 4,400 teams competing this cycle. The Arnold Air Society and Silver Wings had very successful Area Conclaves and got strong support especially in Colorado and Massachusetts where AFA units held joint meetings. Our Aerospace Education Integration team met with members of the National Staff to reinforce our grant and scholarship processes and provided draft feedback forms to be included with all awards. These were very well received. We are being so successful because we are getting phenomenal support from the field and the AFA National Staff. We expect to have more successes in 2017. Merry Christmas and a very Happy and Prosperous New Year!

Dick Bundy
Vice Chairman, Aerospace Education

FY 2017 AEC Members

Dick Bundy	Jim Hannam	Edgar Alexander	Sharon Branch
Christine Brown	Buck Buckwalter	Bill Croom	Dave Dietsch
Whitney Distasso	Bob Elder	Greg Ennis	Stephen Gourley
Gabrielle Kearney	Susan Mallett	Evan McCauley	Shannon Mulkern
Mike Peters	Rick (Rags) Ragaller	Nia Reeves	Hannah Richmond
Larry Sagstetter	Joan Sell	Noah Sherman	Mary Anne Thompson



Jack C. Price of Pleasant View, Utah Distinguished Sustained Aerospace Education Award Recipient for 2016



The Air Force Association is proud to honor Jack C. Price as the 2016 recipient of the Distinguished Aerospace Education Award. He served a six year enlistment in the Air Force before he started his career as an Air Force civilian in 1953 repairing teletype and telephone equipment. He rose through the ranks during his career serving as director or deputy director of missiles, electronics and aircraft. His last office was in Building 849, a building which has subsequently been named in his honor due to his major contributions to Hill AFB and the Air Force. He retired from Hill in 1988 at the grade of GM-15.

Jack devoted much of his time to the Air Force Association. He was full-time national president from 1988 to 1990, national chairman of the board from 1990 to 1992, and was named Member of the Year in 1992. Most would have stopped there, but not Jack. After his terms as President and Chairman of the Board, Jack became president of the AFA's then—Aerospace Education Foundation. Jack always had a great concern and abiding interest in the future. He believes that education is instrumental in our individual and our nation's success and competitiveness. He and his devoted wife, Gretchen, who recently passed away, have had more than a passing interest in this pursuit, since they have five children, nineteen grandchildren and sixteen great-grandchildren.



Jack Price with sons, daughter-in-law, and grand children.



Mr. Jack Price, Continued

During his tenure leading AEF, Jack worked to significantly expand the number of existing AEF programs with a FOCUS on STEM education. He also wanted to provide teachers with aerospace curriculum materials and he wanted to honor the best among them so they could serve as role models for other teachers. AEF programs did just that.

Jack knew that education is a lifelong pursuit, not only for students, but for all of us. He was instrumental in the establishment and success of the “Focus on Defense” program. This program started out as a small local AFA program at Hill AFB and now has grown to be an important and integral part of the Air Force’s continuing education calendar for key decision makers in the Air Force, the aerospace industry and the media.

Jack also believes that the years teach. Honoring and studying those who came before us guides the way and sets the standards for what lies ahead. That’s why Jack has been involved in and passionate about the construction and operation of the Air Force Memorial in Washington D.C, and the Hill Aerospace Museum in Ogden. I served as a very junior colonel on the AFMC IG team and remember us being told by the senior staff to ensure no effort was being put into local museums. Jack saw things differently and the Hill Aerospace Museum is a testament to his efforts. *Ken Goss*



Col Hammerstedt, 75 ABW/CC, Jack Price, Col Dunkler, 75 ABW/CV, CMSgt Rodney Gaither, Command Chief, Bob George

CONGRATULATIONS AND THANK YOU TO MR. JACK PRICE!



Civil Air Patrol – Aerospace Connections in Education

The 2016-2017 academic year CAP/AFA Aerospace Connections in Education (ACE) class registration is soaring! With 20,000 students registered last year in 28 states, there are already over 22,000 students from schools in 39 states as of the first of December. Thus, K-8 ACE students far exceed last year's numbers. Each state was contacted to try to get at least one AFA-sponsored ACE school in each state.

The ACE program is the free program for schools the AFA sponsors with class shirts and award plaques. AFA National and AFA chapters contribute 48/52% to sponsor the class shirts which include AFA's logo as the Presenting Sponsor. Three hundred and twenty ACE classes were sponsored by the AFA last year.

The AFA Ft. Wayne Chapter 143 recently sponsored the 2016-2017 National ACE Lift-off event school, St. Aloysius Catholic School in Yoder, IN. The Ft. Wayne AFA chapter and CAP squadron will join hands to provide personnel and programmatic support to the school this year. A video went out to each chapter to share the excitement of such a joint sponsorship. A 2015-2016 thank you video to the Rawlings chapter from the University ACEs school in SD is found on the CAP website. There are two free options to assist local educators in STEM education support from the chapters.

These are: 1) Free CAP AE Membership which includes a plethora of free K-12 STEM products and programs from astronomy to robotics, engineering, UAVs, and flight simulators; and, 2) Free K-8, grade level specific ACE program with the only cost to chapters is \$75 per class of 30 shirts. Find out more by contacting afa@capnhq.gov.



Civil Air Patrol - Aerospace Connections in Aerospace Education



Led by the **AFA GLR president, Paul Lyons**, in October 2016, the Ft. Wayne AFA Chapter 143 and the GLR AFA joined hands with the GLR CAP to sponsor the 2016-2017 National ACE Lift-off event in Yoder, IN, at **St. Aloysius K-8 Catholic School**. The school was selected as the national lift-off site as they were named the **2016 National ACE School**; their lead ACE instructor, **Lt Tony Vining**, a CAP volunteer at the school, was named the **2016 National ACE Educator**; and **Henry Kiracofe** was named one of the **2016 National ACE Students**. The school principal, **Mrs. Tina Voors**, worked with the AFA and CAP to provide the entire school an exciting day of aviation experiences and STEM enrichment activities, to include a **Lutheran Air** helicopter landing and tour. The entire school was proud to be the first school to wear the distinctive, new 2016-2017 ACE shirt: "purple for power." Thanks to the Ft. Wayne AFA Chapter for leading the way for this academic year.



Arnold Air Society/Silver Wings



As the Arnold Air Society and Silver Wings Area-Region Conclave (ARCON) season comes to a close, we want to first take the opportunity to thank the Air Force Association and its members for the abundant support, both financial and in turnout, received in order to make these conclaves happen. For our members, it makes a huge difference when a member of the AFA attends an ARCON, can explain firsthand how the association operates and how AAS/SW members can be active participants. Members also learned at these conclaves how to get the local AFA chapters more involved at their university through the Joint National Project (Fight Hunger) which both AAS and SW support and the Signature National Project (Mental Health Education) which is specific to SW. Students were encouraged to reach out to the AFA to assist with canned food drives, volunteer with AFA members at local food banks and partner with AAS/SW to work on other projects. Additionally, our members are looking to become more involved with the local AFA chapters either by attending meetings, providing information about AAS/SW or even becoming the social media manager for the chapter. If any chapters are looking for their local AAS/SW counterparts, please feel free to email Shannon Mulkern at president@silver-wings.org or Noah Sherman at commander@arnold-air.org.

The other hot topic at ARCONs was the AAS/SW National Conclave (NATCON) which all AFA members are invited to! This year, NATCON will be held over Easter weekend (14-18 April 2017) in Orlando, Florida at Disney World. It is a special year for our organizations as we celebrate the 70th anniversary of AAS. We also look forward to hearing from distinguished speakers including Colonel (Retired) Ed Hubbard (Vietnam POW and Leadership Specialist), Lieutenant General CQ Brown (Lieutenant Commander, US Central Command) and Major Rob Marshall (Team Lead, USAF Seven Summits). We are sure NATCON this year will be one to remember so make sure to join us!

Shannon Mulkern and Noah Sherman



The 2016-2017 Joint Executive Board at the 2016 AFA Air, Space and Cyber Conference



CYBERPATRIOT 2016-2017

The CyberPatriot National Youth Cyber Defense Competition has registered more than 4,400 teams to compete in the 2016-2017 season, marking an impressive 30% growth from last year. Teams registered represent all 50 States, Puerto Rico, the U.S. Virgin Islands, the Northern Mariana Islands, U.S. Department of Defense schools in Europe and the Pacific, Canada, Australia, Singapore, and Hungary. "Thanks to the generous support of our sponsors, participants and supporters, our program continues to grow, which ultimately gets more youth involved in STEM activities and education – and that's our goal," said Bernie Skoch, CyberPatriot National Commissioner. "We look forward to hosting a competitive season this year, and have some fun along the way." "We are thrilled with CyberPatriot's growth and the impact it's making on addressing the global demand for cyber professionals," said Diane Miller, director, Global Cyber Education and Workforce Development Programs. "Not only are teams returning, but we're seeing teams from new regions join-in. The program's focus on diversity means we're inspiring youth from every corner of society, thus widening our talent pool and creating a robust pipeline, critical to our future defense." The first two rounds of competition will have been completed by the time this newsletter is published. Go to uscyberpatriot.org for more information.

STELLARXPLORERS 2016-2017



StellarXplorers, AFA's National High School Space Competition, registered 132 teams in the the third season of competition. Of the 132 teams, an impressive increase from the 27 teams registered for StellarXplorers II, 30 states and two overseas Department of Defense Installations are represented. StellarXplorers Program Director Stephen Gourley said, "The response to our third season has been tremendous. The number and broad geographic scope of the teams registered are a testament to the attractiveness of space endeavors and the fun of competition. We are thrilled to offer such an exciting and engaging program for our youth." The StellarXplorers program is designed to inspire and attract high school students to pursue science, technology, engineering and mathematics (STEM) education and careers through hands-on learning about technology, emphasizing teamwork and leadership, and exercising critical-thinking skills. StellarXplorers is sponsored by the US Air Force STEM Program, DoD STEM Program, United Launch Alliance, Orbital ATK, Kratos Defense, and SpaceX, as well as additional educational support of AGI, CEI, and the Space Foundation. To learn more, please visit the StellarXplorers website and watch the program video at www.stellarxplorers.org. Follow StellarXplorers on Facebook.



SPOTLIGHT: CYBERPATRIOT SUCCESS STORIES

Courtesy of 15 under 15: Rising stars in cybersecurity by Sara Sorcher and Ann Hermes. Read the full stories at <http://passcode.csmonitor.com/hackerkids>

Blanca Lombera, 15, had never considered a career in computers, until last year when she signed up for a cybersecurity and technology class on a whim. Yet as an eighth grader at Lairon College Preparatory Academy, a public school where most students receive public assistance and learn English as a second language, computer security turned out to be a major source of inspiration.

Through the class taught by teacher Kathy Smith, who has led the charge to enroll her students in high-tech training programs that could elevate their job prospects down the line, Blanca attended a summer camp for hacker girls hosted by Facebook. She spoke on a panel for CyberGirlz Silicon Valley, and competed in CyberPatriot, the national cyber defense competition.

Blanca, now a freshman at Andrew Hill High School, wants to go to college and then go into marketing at a tech company or be a software engineer. She would be the first in her family to do that. Her older siblings didn't finish high school and her mom completed school until the 3rd grade.

"There are a lot of jobs [in cybersecurity]," Blanca says. "Companies need people from other countries to fill them because they don't have enough right here, and I'm living in Silicon Valley."

Her career ambitions have kept her motivated despite the efforts of some kids to tear her down for earning recognition as a girl in tech. "This kid was like, 'Oh, you're a woman. You can't go into cybersecurity. That's just for men,'" she recalls. "That hurt my feelings and I thought, 'Oh, okay, I can't do it.'"

Then, she says, "after I walked away, I was like, 'Why do I have to listen to him? He's not in security. He's not in CyberPatriot. How can he know I can't make it? It motivated me more to prove him wrong, and to show myself I am capable of many things, and you can't let society define who you are. Nobody can tell you what to do.'"



Through hard work and dedication, her school-skipping fantasy came true. The duo made it to nationals, beating out some 460 teams from across the country to get there.

It was an intense challenge. Min was literally running around the table, manning five computers running the Windows operating system and Isag was juggling three with Linux. "They [the attackers] would keep on leaving messages and we had to block them from logging us out of our computer," Min recalls. "We were like, fighting them. When I first got hacked I was really scared and surprised because the mouse was moving, and I was yelling at Isag, 'I got hacked!' It was just going crazy."

But it was also thrilling. The pair, who share a love for competition and Korean pop star G-Dragon, have known each other since third grade, and say it's their bond together that helped them win the competition. Under pressure, Min says, "you have to talk to each other about what's going on. We just talked to each other naturally, since we were close." This was especially helpful, as Min says, "since we're really shy around high schoolers or other middle schoolers most of the times."

The competition also helped them build confidence. "Guys are meant to be energetic and more into adventure stuff and girls are kind of supposed to be like, princesses and very girly," says Isag, who is 14. "It helps us know that girls can be just as good as boys."

But this year, the program that manages the state-funded after school activities canceled the middle school CyberPatriot program, Min explains as she breaks into tears. Kids at their school aren't joining the program, Isag adds, because they "don't like studying anything." But she believes it's critical they start paying attention to these issues, even if it means more homework. "When you get hacked, you might not actually know [when] you have been hacked," Isag says. "If you learn about cybersecurity, you'll know – and how to prevent it."

Min and Isag can't compete this year, but they are shadowing the high school's CyberPatriot team and taking on side projects.



When Min Kim and Isag Kim (no relation) realized they were the only two students at their school who were signed up for CyberPatriot, they never thought they had a shot at going very far. "I just wanted to go to nationals since I would get to go to Baltimore and stay at the hotel and miss school for a week," says Min, 13, of last year's middle school competition. "I was just going all out for that. But I didn't really think we would go. We only joked about it."



FLORIDA AREA CONCLAVE

This past October 8-9, I attended a Silver Wings/Arnold Air Society (SW/AAS) Area Conclave (ARCON) in Puerto Rico. Before I talk more about this particular ARCON, let me give some background about ARCONs. As the Florida Region President, I feel it was important to connect with SW/AAS members, since they are all AFA members.

In October of 2105, I had just begun my new role as Florida Region President and I was invited to attend Region IV SW/AAS ARCON. As a previous Chapter AEVP and President for the Central Florida Chapter, I had worked with the AAS from the University of Central Florida for several years. I had been a member of the AEC for 5 years and since the National President of SW and National Commander of AAS were members of the AEC, so I knew about some of their activities. Plus SW/AAS spoke each year at the AFA National Convention. I felt as Region President, I should know more about both organizations. It turned out I had a lot to learn.

The SW/AAS regions do not perfectly align with AFA Regions. Florida Region includes all Florida AFA Chapters plus Puerto Rico. Region IV of SW/AAS includes Silver Wings units at Florida State University and Embry-Riddle Aeronautical University and Arnold Air Society units at Valdosta State University and the Universities of Florida, Central Florida, South Florida (USF), Miami and Puerto Rico. The October 2015 ARCON was hosted by the ERAU Silver Wings unit at their Daytona campus from October 2-3. On Friday night, they held a social event where I got to talk informally with many SW/AAS leaders and members.

Saturday was a day of business meetings. The first thing I found out was how SW/AAS is governed, which I did not fully know. SW/AAS is governed by a Board of Directors which sets the strategic course of the organization, including financial oversight. The day-to-day support is provided by the Executive Management Center (EMC) which provides continuity in administrative, financial, and external affairs. The EMC works closely with the SW/AAS National Staffs and provides assistance, as required, for Region and Chapter leadership. Dan Woodward, co-Chairman of the EMC briefed the attendees on the roles of the Board and EMC and how they can assist Region and Chapter leadership.

Not surprisingly, this is similar to AFA governance. AAS formed their first unit in 1947 and in 1951, the AAS became officially affiliated with AFA and their current structure was introduced. Silver Wings began in 1952 but was known as Angel Flight. In 1958, they chose to become united with Arnold Air Society and support AFROTC units at their locations. In 1995, they changed their name to Angel Flight – Silver Wings and finally in 1998 became just Silver Wings.

Throughout the day, some meetings were just for Silver Wings, some just for Arnold Air Society, and some were joint meetings. These provide opportunities for everyone to learn from other units in their area. Since I was unfamiliar with Silver Wings, I attended most of their individual sessions. I found that while some SW members are AFROTC cadets (limited to 50% max), the majority are students who have no plans to join the military but support the Air Force mission. The Silver Wings mission is committed to developing strong civilian leaders with an understanding of aerospace power.



At one of the joint sessions, I spoke about the AFA mission and the importance of working with Florida AFA Chapters to achieve common goals. Two primary goals of ARCONs is to select the new Region HQ unit and solicit volunteer units to host the following year's ARCON. Valdosta State University became the new Region IV HQ, with C/Col Ja'llen Ricks the new Region IV Commander, and the University of Puerto Rico (UPR) volunteered to host the 2016 ARCON. The 2015 ARCON ended with a dinner where Dan Woodward gave a talk about his Air Force experiences and how they related to the SW/AAS mission. I felt this was an extremely worthwhile event and I was already looking forward to the 2016 ARCON, called PuertoCON.

PuertoCON was scheduled for October 7-8, 2016 and wouldn't you know it, Hurricane Matthew was heading towards Florida at the same time. Throughout the week, contingencies plans were discussed. The Region Commander from Valdosta State University, along with about 20 of their AAS cadets, were able to fly down early on October 6. Gary Copsey, a Board member, was also flying in early. As with most hurricanes, they are unpredictable and it wasn't determined until late Thursday October 6 that only three Chapters would be able to attend due to airport closures in Orlando and Miami. I had planned to fly down on Friday October 7 from Tampa and Matthew would not affect my departure. I talked with Gary Copsey and the Region IV staff and determined it would be beneficial for me to still attend.

Because there was not a Region Quorum, they could not hold any business meetings, so they improvised. Gary Copsey gave his talk about the SW/AAS National staff and Board support and I again talked about the Florida AFA mission and working together. Gary Copsey gave a briefing on a helicopter mission he had flown in Iceland where he was part of two helicopter aircrews awarded the MacKay Trophy in 1994. The MacKay Trophy is given to the "most meritorious flight of the year" by an Air Force person, persons, or organization. Their mission was recognized for extraordinary heroism and self-sacrifice during the rescue of six Icelandic sailors stranded when their ship floundered in heavy seas and strong winds. Gary related how this mission demonstrated Air Force Core Values and how it could be applied to SW/AAS values and training. The ARCON ended with a Q&A session with Gary, myself, and Lt. Col. Kenneth Sierra, the UPR AFROTC Commander. While this was a non-typical ARCON, I still felt it was worthwhile.

On November 13, a follow-on business meeting was held at the University of Central Florida, where a quorum of Region IV SW/AAS units participated. The newly re-activated AAS squadron from Embry-Riddle Aeronautical University was able to attend in person while two AAS squadrons, from the University of Florida and the University of Puerto Rico, participated using Skype. The most important decision at the business meeting was the decision to have the Area IV HQ at the University of Puerto Rico with Cristian Alfonso as the new Area IV Commander.

I would encourage AFA members to attend an ARCON and interact with the Silver Wings and Arnold Air Society members.

Bill Yucuis

AFA Florida State/Region President



AFA Teacher Grants

Earlier this year, we granted a \$250 educator grant to Mrs. Anderson's 5th Grade Class to conduct a two week program learning the principles of flight. With the after action report, we received pictures, hand drawn thank you notes and a copy of the article referencing the AFA grant in the local newspaper. I hope you can take a moment ...and smile thinking of how an AFA program affected these kids. I can't do it without a tear or two!

Kari Voliva

Vice President, Member and Field Relations, AFA

