Commissioner’s Cache

Summer is in full swing, and CyberPatriot is running at full speed!

July 14-18 marked the first ever AFA CyberCamp pilot! Texas Woman’s University (TWU) in Denton, Texas, was our host institution, and the event was a great success. Many thanks to Dr. Don Edwards, chairman of the TWU Department of Mathematics and Computer Science, and to Dr. Jian Zhang, TWU assistant professor. Our next pilot will take place in San Antonio on Aug. 4. More details are in this edition of The CyberSentinel.

Exhibition Round 5 is coming up later this month and the new version of the CyberPatriot Competition System is under development. Oh! A huge shout out to the Los Angeles Unified School District for earning AFA’s prestigious Hoyt S. Vandenberg Award for excellence in aerospace education (see p. 3)! As always, thanks to our Presenting Sponsor, the Northrop Grumman Foundation, and all of our other sponsors for making CyberPatriot better than ever!

Enjoy the rest of your summer and please register for CP-VII if you have not yet done so. There are less than 90 days left until the first round of competition!

Bernie Skoch
National Commissioner
CyberPatriot Program
Air Force Association

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Program Office Bits

Registration for CyberPatriot VII is open! Register today at www.uscyberpatriot.org

Exhibition Round #5:
August 18 – 27

Coach of the Year
Ken Steffey
Centurion Battalion, Winter Park, Fla.

Mentor of the Year
Ron Woerner,
Bellevue East HS, Bellevue, Neb.

AFA CyberCamp: Success!

A week at the lake? A few days at a theme park? A camping trip? A few lazy days lounging by the pool?

While many high school students were enjoying more traditional summer activities, a dozen north Texas high school young men and young women were venturing into an exciting new world: cybersecurity.

The Air Force Association’s CyberPatriot National Youth Cyber Education Program conducted the lead pilot for its upcoming AFA CyberCamp program at Texas Woman’s University (TWU) July 14-18 in Denton, Texas.

AFA’s CyberPatriot Program Office developed the AFA CyberCamp program to allow educational institutions to engage students in cyber education year round. The Denton area high school students who participated in the TWU pilot CyberCamp had a unique opportunity to learn about cyber ethics, online safety, cyber threats, and how to secure Windows and Ubuntu computers, in advance of the AFA CyberCamp program’s full rollout later this year.

After opening remarks by CyberPatriot National Commissioner Bernie Skoch and members of TWU’s administration about the abundance of cybersecurity career and academic opportunities available to students, the TWU pilot AFA CyberCamp began with cyber ethics, online safety, and basic computer science instruction and activities led by instructors from AFA.

On the second and third days of the TWU pilot AFA CyberCamp, AFA instructors first discussed the logic and importance of various cybersecurity principles and then taught students how to make the relevant Windows system settings on simulated computer systems called “virtual machines.” The fourth day followed a similar format, except students learned how to navigate and secure computers running the Ubuntu operating system, a version of Linux.

The weeklong TWU pilot CyberCamp culminated in an exciting and very closely contested team-based competition that simulated the annual CyberPatriot National Youth Cyber Defense Competition. (cont’d on p. 2)
On June 24, 2014, CyberSilver sponsor Symantec launched a new kind of program designed to close the cybersecurity workforce gap. The program was officially launched as a Commitment to Action by former Secretary of State Hillary Rodham Clinton and Symantec Cyber Career Connection Executive Director Aled Miles at the 2014 Clinton Global Initiative America meeting.

Known as SC3, the program addresses the global workforce gap in cybersecurity and provides new career opportunities for young adults (ages 18-29) who may not be college-bound. A pilot of the program will start this month in New York City, Baltimore and the San Francisco Bay Area, with the help of a network of partners including Year Up, NPowers, and LifeJourney. These partners will work in conjunction with the Symantec Foundation.

The pilot program will include a cybersecurity curriculum developed by Symantec in partnership with the nonprofits, as well as a virtual mentorship program designed to promote and familiarize students with the industry. Following their training, students will be placed in cybersecurity internships to learn how to be anything from systems administrators to network defense technicians. Symantec will help program graduates seek jobs through its network of customers and partners.

For more information about SC3, visit http://www.symantec.com/corporate_responsibility/topic.jsp?id=cyber_career_connection

The competition, which was held on the fifth day of the camp, challenged the students to work in teams of four to find and correct vulnerabilities in virtual Windows and Ubuntu environments. The TWU pilot CyberCamp participants performed exceptionally well, working quickly to harden their virtual computer systems against attack, using the tools and principles they learned earlier in the camp.

Overall, the lead pilot for the AFA CyberCamp program was a great success. Skoch was extremely impressed by the speed at which the TWU camp participants picked up on the concepts and technical skills AFA’s instructors presented.

“If any of these students decide to compete in CyberPatriot VII, the upcoming season of the National Youth Cyber Defense Competition, Texas would stand to be well represented at our National Finals Competition in Spring 2015. We think this camp has stimulated local interest in cybersecurity and STEM education, and we hope all of our subsequent pilots are as successful,” Skoch said.

Pending the completion of additional pilot camps in San Antonio and Chantilly, Va., AFA CyberCamp kits will be available to schools and educational organizations nationwide later this year. The AFA CyberCamp kit will consist of instruction modules, hands-on activities, demonstration software, and competition software that will teach students important skills in cybersecurity, to include identifying potential threats, defending a network, and protecting themselves on the Internet.

Students from the winning team of the Virginia Governor’s Cup, Marshall Academy, were recognized at a recent event hosted by the Armed Forces Communications and Electronics Association (AFCEA). During the event the team visited multiple industry exhibits and had lunch with a few key JAG legal experts. They also met the director of the NSA, Adm. Mike Rogers (pictured above).

AFCEA is a 501(c)(6) non-profit dedicated to increasing knowledge through the exploration of issues relevant to its members in information technology, communications, and electronics for the defense, homeland security, and intelligence communities.

**Coaches’ Corner**

- **Online Coaches’ and Mentors’ Meeting.** This month’s Coaches’ Meetings are a great time to ask any questions about the upcoming competition season. This month’s meeting will provide details on CP-VII registration in a slideshow with a questions afterward. Due to low demand in summer months, there will only be one live meeting. A recording of the meeting will be shared on the CyberPatriot website. We will resume multiple meeting sessions in September. Information on joining the meeting will be emailed to all registered Coaches and Mentors a week before the meeting.

  - **Online Coaches’ and Mentors’ Meeting:** 4:30 p.m. EDT/3:30 p.m. CDT/1:30 p.m. PDT

- **MSDN—DreamSpark.** Fully registered Coaches, Mentors, and Competitors are given a premium account to Microsoft DreamSpark. With it, you can download and access a wide range of Microsoft developer tools, servers, and platforms for free! Accounts are created and emails sent out on a weekly basis. We appreciate your patience on the matter.

- **October 10 Registration Deadline.** Don’t forget! All teams must be registered by the Oct. 10 deadline.
LAUSD Beyond the Bell Branch Receives Major AFA Award

In 2010, Northrop Grumman was recognized with the Hoyt S. Vandenberg Award for its visionary sponsorship of CyberPatriot. Now four years later, the same award is being given to another huge supporter of CyberPatriot.

The Los Angeles Unified School District (LAUSD) Beyond the Bell Branch has received the Air Force Association’s Hoyt S. Vandenberg Award for its outstanding contribution in the field of aerospace education.

Beyond the Bell ensures that all children and youth in LAUSD have access to high quality, safe, and supervised academic, enrichment, and recreation programs that inspire learning and achievement beyond the regular school day. There are over 178,000 students from over 600 schools within the district who participate in BTB programs on a daily basis.

In 2011, LAUSD, in conjunction with Beyond the Bell, became the first CyberPatriot Center of Excellence and adopted the cyber defense competition as its main STEM program. Since then, LAUSD involvement has been tremendous. The number of teams from LAUSD schools has gone from roughly 50 teams to over 100 teams in just three short years. But its promotion of CyberPatriot and cybersecurity in general does not stop when the competition ends. The LAUSD Beyond the Bell branch has partnered with California State Polytechnic University, Pomona, to hold cyber events on a regular basis, and they even kick off each new CyberPatriot season with Cyber Day LA, a small cyber competition of their own, held among all of the LAUSD-based teams. LAUSD has also served as the host organization for several pilot CyberPatriot programs.

The hard work and dedication over the past several years has certainly paid off. The championship trophy for CyberPatriot VI, the most recent season of competition, was awarded to North Hollywood High School. This is the first national win for a school out of LAUSD.

The award will be presented to Beyond the Bell’s administrative coordinator, Harry Talbot, at AFA’s annual Air & Space Conference. The ceremony is scheduled for the morning of Monday, Sept. 15, at the Gaylord National Convention Center in National Harbor, Md.

The award is named in honor of the late Gen. Hoyt S. Vandenberg, the second Chief of Staff of the Air Force (CSAF). The award was established in 1948, the same year that General Vandenberg was named CSAF. Nominations are solicited from the U.S. Air Force, members and leaders of AFA and aerospace industry, plus US citizens and/or organizations having a deep interest in aerospace activity. Awardees are selected from all nominations by AFA’s Awards Committee. To learn more about General Vandenberg or the history of the award, visit the links below:

- http://www.afa.org/informationfor/military/nataerospaceawards/Vandenberg_Award_Recep

Cal Poly Pomona Hosts CyberGirlz Summit for LAUSD Students

July 12, 2014 was a day for young women at California State Polytechnic University in Pomona, Calif. The CyberGirlz Summit, hosted by the College of Business Administration’s Center for Information Assurance, was geared not only at attracting more young women to participate in CyberPatriot but, more importantly, at helping them realize that the technology field is something that they should always consider when thinking about their future careers.

More than 130 middle school and high school female students from the Los Angeles Unified School District (LAUSD) attended the daylong event where they went through coding and cybersecurity training, a networking lunch, and a "Women in Cyber" panel discussion. Panelists included Luz Rivas, founder and executive director of DIY Girls, an organization that helps girls explore technology; Jessica DeVita, technical evangelist at Microsoft; and Lee Ann Kline, president and founder of STEM Advantage, a group that mentors young women and underserved communities to pursue careers in the STEM disciplines. DeVita, who usually only works with university students, was excited to work with a younger group. She said, “I think it’s very powerful for girls to see people like them working in tech. They need to know that this is a career for them. It’s especially rewarding to support an event that will also teach hands-on technical skills.”

The event also included several hands-on learning opportunities, including a coding exercise by Microsoft’s Developer Evangelist Christine Matheney and a cybersecurity game led by two Facebook security engineers.

Thanks to work of Cal Poly Computer Information Systems Department Chairman Dr. Dan Manson, CyberPatriot is looking forward to an increased percentage of females in the program.

A group shot of the CyberGirlz Summit (photo courtesy of http://www.twitter.com/BTBLA)
Fake Apps Pose Threat to Millions of Mobile Devices  By Mike Byon

Many smartphone owners today would agree that they don’t give much thought when they make the decision to download a particular app onto their devices. It could be carelessness or a lack of awareness, but regardless, millions of tech-savvy phone users are faced with the threat of downloading a fraudulent application.

The Google Play Store has seen an overwhelming number of fake apps posing to be legitimate as a way to lure users to download them. One of the more recent examples that sparked a scare was ironically an antivirus app known as “Virus Shield.” From a hacker’s perspective, creating a fraudulent antivirus that asks users for administrator privileges would not raise too many eyebrows since it is, after all, a security application. These elevated privileges create wider access to the phone’s software and data, which can have costly consequences for millions of owners. Hackers can exploit these mobile applications and launch Denial of Service attacks in the background while the fake application is running.

Smartphone users should take extra precautions before they know whether a particular app is legitimate or not. A few ways to determine this is to first check out the ratings and the reviews on the app store. Users should also avoid third party app stores as the chances of coming across a fraudulent app dramatically increase. Unfortunately, Android users are more at risk than those using an iOS platform as the majority of these reported incidents of fraud took place in the Android marketplace and Google Play.


This Month in Cyber History

On Aug. 12, 1981, the IBM Personal Computer (PC) model 5150 was released. Model 5150 came with a 4.77 MHz Intel 8088 microprocessor and Microsoft’s MS-DOS operating system. Buyers had their choice of monochrome or CGA (16-color) display adaptors, a cassette player, and up to two 5 1/4-inch drives. They could also opt for a bonus power supply to get a 10MB hard drive. The product was nothing extraordinary despite its rather large price tag (about $3,000); however it laid the foundation for future computers, as many companies based their products on the architecture of IBM’s PC.

For more information go to: http://www.computerhistory.org/tdih/August/12/

CyberPatriot Exhibition Round Images Available

Teams interested in use of Exhibition Round images outside of the scheduled Exhibition Rounds for events and camps should contact cpoc@uscypberpatriot.org. Favorable consideration will be given to requests that meet the following criteria:

- Use by registered Coaches – a currently registered Coach must be the POC for the image
- Use for a specific CyberPatriot recruiting or training event – images must explicitly be part of a CyberPatriot event
- Use for a specific, short duration – images will not be given to a team for extended training
- Use in a nonprofit-making, noncommercial venture – the event or camp cannot make a profit from the free use of the images
- Use with the CyberPatriot Module – the pilot module covers basic cyber safety, cyber hygiene, and cybersecurity