



# The CyberSentinel

## Commissioner's Cache

I hope you are having a terrific summer. The CyberPatriot Program Office has been abuzz with preparations for the upcoming competition season. The July CyberPatriot Middle School Program Lead Pilot deployment in Los Angeles was a great success, and you can read more about it elsewhere in this edition of *The CyberSentinel*. And more than 100 teams participated in Exhibition Round 2, which ended on July 25. Exhibition Round 3 will take place August 19-28, and we hope you can join us for it. New additions to the CyberPatriot VI competition season include an exciting Cisco Networking Event in the Semifinals. Details will follow. And finally, we are delighted to welcome the newest member of the CyberPatriot Program Office team, our new Sponsorship and Outreach Coordinator, Rebecca Dalton. Enjoy the last few weeks before the school year. We look forward to seeing your team in Exhibition Round 3!



Bernard K. Skoch  
Commissioner  
CyberPatriot  
Air Force Association



## Program Office Bits

### CyberPatriot VI Coach Registration Is Open!

Go to: [www.uscyberpatriot.org](http://www.uscyberpatriot.org)

- **Northrop Grumman Internships**— See the link below:  
<http://careers.northropgrumman.com/cyberpatriot.html>
- Follow us on Facebook at [www.facebook.com/CyberPatriot](http://www.facebook.com/CyberPatriot) and on Twitter [@CyberPatriot](https://twitter.com/CyberPatriot)



Middle schoolers compete during the Lead Pilot Program for the CyberPatriot Middle School program in Los Angeles.

## LAUSD Middle School Pilot Is a Huge Success

The CyberPatriot Middle School Program took another step toward a full rollout during an event with 70 sixth-, seventh-, and eighth-graders in Los Angeles in June. These middle schoolers performed admirably over five hours during this Lead Pilot at California State Polytechnic University, Pomona (Cal Poly Pomona).

The Los Angeles Unified School District (LAUSD) Lead Pilot was structured similarly to the CyberPatriot presentation at the Delaware DigiGirlz Day in May. (Information on that event can be found in the May issue of *The CyberSentinel*.) The day was split into three modules focusing on cyber safety, basic cybersecurity, and system administration. Each module contained videos that related the material to the students' everyday cyber activity and activities that tested the students on the presented material.

Unlike the Delaware DigiGirlz Day where CyberPatriot spoke to middle schoolers for the first time, the LAUSD Lead Pilot featured a more in-depth competition. Students were challenged to work on an image similar to those found in the early rounds of the high

school competition. They searched out and fixed vulnerabilities using basic techniques they learned in the system administration module.

Representatives from the CyberPatriot Program Office, Presenting Sponsor Northrop Grumman, Cal Poly Pomona, LAUSD's Beyond the Bell, and Cyber Diamond and Cyber Gold Sponsors were in attendance. The audience was impressed by the teams' performances during the culminating competition. The winning team from Pio Pico Middle School managed to score 70%, an impressive feat considering the short amount of training and competition time.

The Lead Pilot showed that middle schoolers are ready and able to dive into cybersecurity instruction and competition. The Middle School Program will next expand to CyberPatriot Centers of Excellence, the final step before a full program rollout.

For more information on this event, check out this entry on the Air Force Association blog: <http://airforceassociation.blogspot.com/2013/07/cyberpatriot-launches-middle-school.html>

## Features

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Days until the team registration deadline

# 61



## Sponsor Profile: Symantec

As a global technology company that helps consumers and organizations protect and manage their information, Symantec considers information security a central aspect of our corporate responsibility in this digital age of increased threat. As cyber threats become more sophisticated, we have made it a priority to work with companies, individuals, and communities to share information, provide resources, and advocate for a safer online world. With its total global cost topping \$110 billion in the past year (as identified in the [2012 Norton Cybercrime Report](#)), cybercrime continues to evolve in complexity. We recognize the need to evolve along with it, developing innovative tools and initiatives to protect against the newest forms of the threat.

Our children are growing up in an interconnected world that enriches their lives, but also presents new safety challenges. One of the ways we address this

is through partnerships with organizations and projects that help youth identify online risks and safeguards, as well as recognize the wider impact of their actions and the actions of others online.

We believe strong partnerships are crucial not only to help us have maximum impact, but to ensure we build a diverse and innovative workforce for the future. We work to ensure our leaders of tomorrow are equipped with the right skills to continue to advance cybersecurity by supporting STEM education efforts in schools around the world. As a top employer of engineers who work to secure the world's ever burgeoning digital information, Symantec believes kids should recognize STEM fields as not only accessible but also exciting. We want to inspire children and teens and spark their interest in STEM so they are aware of the vast career possibilities available to them.

## CyberPatriot VI Continues With Second Exhibition Round

CyberPatriot VI continues to grow with more teams joining the competition during this month's Exhibition Round 2. Like the first Exhibition Round this April, Exhibition Round 2 gave both new and old teams a chance to familiarize themselves with the CyberPatriot Competition System and practice their cybersecurity skills before the scored rounds this fall.

The Windows 7 image also provided a starting point for Coaches and Mentors to teach their Competitors system administration skills. By walking the students through the 10 vulnerabilities, the instructors were able to explain how to fix certain problems. Competitors could then view their progress on the image's scoring page.

New to Exhibition Round 2 was a You-

Tube training video for new participants. The video showed how to download and prepare an image for the competition. Additionally, it provided guidance on how to fix one of the vulnerabilities and showed how the scoring page is updated as a result.

Teams that have not yet signed up for CyberPatriot VI may have missed this round, but they are not out of luck. There is still plenty of time to sign up for the CyberPatriot VI season and participate in future Exhibition Rounds, as well as the scored rounds of competition. The upcoming Exhibition Round 3, scheduled to take place between August 19 and 28, will be the final Exhibition Round before the CyberPatriot VI competition truly begins.

### Coaches' Corner

- **Exhibition Round 3.** The next Exhibition Round will take place between August 19 and 28, 2013. The purpose of the Exhibition Round is for teams to introduce CyberPatriot to their communities and familiarize new Competitors with the CyberPatriot Competition System. The image can be used multiple times during the round. Introductory training sessions will also be conducted during the round. Tech support will be offered between 9:00 a.m. and 5:00 p.m. EDT on weekdays. More information to follow in emails.
- **CyberPatriot VI Coach Registration.** CyberPatriot VI Coach Registration began on April 1, 2013. Coaches must be registered and cleared before their teams may register. Go to [www.uscyberpatriot.org](http://www.uscyberpatriot.org) to sign up.
- **August Online Coaches' and Mentors' Meetings.** Next month's Coaches' and Mentors' Meetings will continue the new format instituted this July. The first two meetings will be more slide-intensive with a short question-and-answer section afterward. The third meeting will have minimal slides and focus on questions from Coaches and Mentors of all experience levels. Information on how to join these meetings will be emailed to all registered Coaches and Mentors at the beginning of August. Below is the August Online Coaches' Meetings schedule.
  - Aug. 13 — 3:30 pm EDT/2:30 pm CDT/12:30 pm PDT
  - Aug. 14 — 4:30 pm EDT/3:30 pm CDT/1:30 pm PDT
  - Aug. 14 — 9:00 pm EDT/8:00 pm CDT/6:00 pm PDT (This meeting will have the more extensive question and answer session.)



CyberPatriot Program Office staff members brief LAUSD students on cyber safety principles.

### The CyberSentinel

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## Spotlight on Missouri: Team Sudo Advances to D.C.

By Lisa Oyler, Summit Technology Academy Coach

For more on this article, go to [facebook.com/CyberPatriot](https://facebook.com/CyberPatriot)



Of the 11 Missouri teams that participated in CyberPatriot V, Team Sudo from Summit Technology Academy was the lone representative from the Open Division. Our first time competing in CyberPatriot was CP-IV, in which we made the Semifinals. That season was a true learning experience. Using what the knowledge we gained in CP-IV, team Mentor John Madick and I were prepared to help Team Sudo make it to The National Finals Competition in the next season.

CyberPatriot V expanded the competition greatly. In April 2012, the Program Office staff started hosting monthly Coaches' and Mentors' Meetings and issued a rules book that defined everything a team needed to know to compete. They created the CCS scoring system and had a Preview Round in September to test the system. Additionally, they had a Practice Round that gave teams a full week to familiarize themselves with the competition images and scoring system. For teams that made it to the Semifinals, they had another Practice Round that helped prepare teams for the addition of digital forensics challenges. These rounds provided many opportunities for teams to practice, perform better, and ratchet up the level of competition.



*Team Sudo Captain Brian Green with President Obama at a Missouri Innovation Campus event at the University of Central Missouri.*

Our team took advantage of everything CyberPatriot made available. During both Practice Rounds we made sure that every single Competitor went through what we refer to as "driving the image." Each team member ran every client and server operating system so that everyone would have the experience and familiarity with all aspects of our training. Was this time consuming? Yes! Did students learn to navigate a Windows system better? Yes! Giving all of the students a chance to practice definitely made the team more proficient overall. By evalu-

ating each member's strengths, we were then able to determine the role that everyone would play during the scoring rounds of competition.

CP-V was an exciting season. The first thing we did was use the materials on the CyberPatriot website to train on a weeknight when everyone could meet. We then identified industry professionals to talk about cybersecurity from their point of view and start training the students in open operating systems. Once we got the calendar set for Rounds 1 and 2 and our training started to fall into place, we set a goal of returning to the Semifinals. Although the students had some confidence from going to the Semifinals the year before, they quickly found out that CP-V would not be easy. After seeing how well other teams performed in Round 1, the Competitors realized they had to step up their game. Their Round 2 score was enough for the team to make it to Semifinals and then set their sights on The National Finals. When the Semifinals were over, the team spent the longest Friday night of the year patiently waiting for the announcement of the National Finalists. When it was released, the students scanned the list for their team name. There it was at the bottom of the alphabetical list: Summit Technology Academy, Lee's Summit, MO.



*Team Sudo with their CP-V Cisco Networking Award. From left: Coach Oyler, Brian Green, Saige Mehl, Kevin Schulmeister, Keaton Thomson, Ben Wolf, Elias Duckworth, and Cisco CTO Dan Kent.*

It was a banner year for Team Sudo. Our team won the Open Division Cisco Networking Award at the CyberPatriot V National Finals. We are now all currently preparing to improve our standing and take home the President's Cup in CyberPatriot VII!

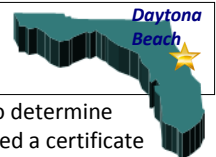
### Missouri and CyberPatriot: The Facts

- |  |  |  |
|--|--|--|
| <ul style="list-style-type: none"> <li>• <b>CP-V State Champions:</b> <ul style="list-style-type: none"> <li>- Open: Summit Technology Academy, Lee's Summit</li> <li>- All Service: Lee's Summit North High School, Lee's Summit</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• <b>Teams Per Year:</b> <ul style="list-style-type: none"> <li>- CP-II: 3    - CP-III: 7    - CP-IV: 10</li> <li>- CP-V: 11    - CP-VI: 13 (so far)</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• <b>CP-V Cisco Networking Event Winners:</b> <ul style="list-style-type: none"> <li>- Open: Summit Technology Academy, Lee's Summit</li> </ul> </li> </ul> |
|--|--|--|

## Bonus Mini-Spotlight on Florida: Daytona Cyber Camp

By Bonnie Callahan, AFA National Director (Emeritus)

To see photos from the camp, go to [facebook.com/](https://facebook.com/)



Have you got what it takes? That was the question emblazoned on the T-shirts of the attendees of the recent Summer Cyber Camp at Daytona State College (DSC) between July 15 and 17. Forty students in grades 9 through 12, mostly from Volusia County, were greeted with stuffed CyberPatriot backpacks and T-shirts designating their team color.

Each day began with all participants meeting in a large classroom, where a keynote speaker discussed various topics including leadership, teamwork, and cyber law and ethics. After that, the groups went to breakout sessions where volunteers taught various cybersecurity topics. Then, it was time for lunch and more breakout sessions. The day ended with labs, challenges, and a wrap-up.

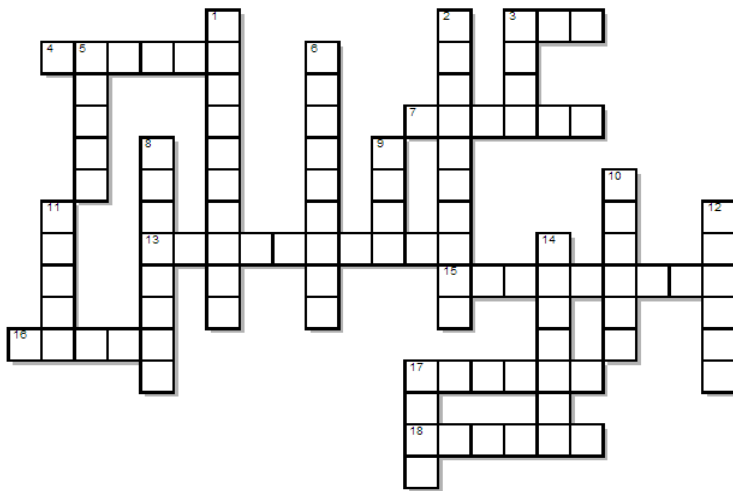
Throughout the camp, participants earned cyber points for participa-

tion, questions, and challenges that accumulated to determine individual and team winners. All participants received a certificate in front of their parents at an awards ceremony on the final day.

The camp was held in conjunction with the DSC Advanced Cybersecurity Education Consortium NSF grant. A local CyberPatriot team Mentor, Scott DeVault, was instrumental in developing the curriculum, teaching some of the sessions, and procuring colleagues from the cybersecurity community to volunteer their time to teach various sessions.

In the end, the participants gained a better understanding of cybersecurity and the importance of teamwork. Overall, the summer camp was a tremendous success, and all involved can be proud of their accomplishments. They indeed proved they have what it takes!

## Crossword Puzzle



\*\*All answers can be found in this issue or at [www.facebook.com/CyberPatriot](http://www.facebook.com/CyberPatriot)\*\*

### ACROSS

- |  |  |
|--|--|
| 3. Name of LAUSD Lead Pilot winners, first word          | 16. Exhibition Round 2 used a Windows ____ image   |
| 4. The third major gaming cyber attack victim in July    | 17. Home city of both CP-V Missouri State Champions, second word                         |
| 7. The second P in CPP                                   | 18. Last name of the CP Mentor who was named AFA Massachusetts State Teacher of the Year |
| 13. Summer Twitter Challenge Prize                       |  |
| 15. Hacking tool used by student to rig college election |  |

### DOWN

- |  |  |
|--|--|
| 1. First day of Exhibition Round 3, Aug. ____                    | 9. Home city of both CP-V Missouri State Champions, first word                 |
| 2. Last name of <i>The CyberSentinel</i> Editor                  | 10. German encryption machine  |
| 3. Name of the LAUSD Lead Pilot winners, second word             | 11. British decryption machine   |
| 5. Coach of the Summit Technology Academy team                   | 12. A Google study found that users ignore security warnings from this program |
| 6. CP-V Vermont State Champion: ____ Valley Union                | 14. Subject of this month's Bonus Mini-Spotlight                               |
| 8. Type of cyber attacks launched against fans of the royal baby | 17. CyberPatriot V Open Division Cisco Networking Champions, Team ____         |



The top three teams in the CyberPatriot Middle School Program Lead Pilot show off their certificates and awards they received for their outstanding performances.

### Presenting Sponsor

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### Cyber Silver



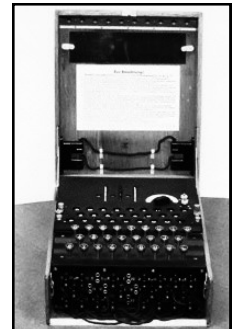
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**UMUC**  
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### This Month in Cyber History

June 15, 1928—The Enigma machine, an encryption device used by the Germans in World War II, encodes its first message. The machine worked by replacing plaintext words with a cipher text based on a certain set-up of rotor wheels. The message could then be decoded by another Enigma machine with the correct rotor wheel configuration for decryption. The Allied Forces were eventually able to decipher German messages encrypted with the Enigma thanks to the invention of the Bombe machine by Alan Turing and a team of British cryptologists. (Source: [www.computerhistory.org](http://www.computerhistory.org))



An Enigma machine used to encode German military secrets in WWII.

For more information go to:  
<http://www.computerhistory.org/t dih/ July/15/>

## Summer Twitter Challenge Update

You did it! Shortly after last month's announcement of our Summer Twitter Challenge (and its accompanying prospect of winning our LIMITED EDITION CyberPatriot sunglasses), we hit our goal of 1,000 Twitter followers! Thanks so much to everyone who helped us reach this frivolous goal.

Now that we've hit 1,000, you may have some questions. I'm here to supply the answers.

Q: Is the contest over?

A: No. The contest ends on August 31. Keep helping us push those Twitter numbers higher. The more followers we have, the more shades we give away.

Q: When will winners be announced?

A: The beginning of September. We will post the winners' names on our Twitter account and send them direct messages asking for the best place to send their prizes.

Q: Will there be more Twitter prizes in the future?

A: Yes! Stay tuned for updates this fall.

Q: Why did your bosses give you less space to write this time?

A: Great question. I'm too out of control. They're trying to reel me in.

Once again, thanks for getting us to 1,000 followers! Let's see how many more we can get!

- Ryne Smith, Assistant Editor/  
Loose Cannon, *The CyberSentinel*