



ISSUE | DEC  
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# THE CYBERSENTINEL

The official newsletter of CyberPatriot—AFA's National Youth Cyber Education Program

## COMMISSIONER'S CACHE



What a competition! And we have only completed Round 1! A record setting number of teams competed and we had some of the highest scores ever seen in any round. Good job, coaches, mentors and competitors! Remember, ALL teams may participate in Round 2 on Dec. 4-6. Your team can compete no matter how well it did in Round 1, and even if the team did not compete at all. And the same goes for the State Round on Jan. 29-31.

We had an awesome opening ceremony for the CyberPatriot VIII competition season at AFA. Representatives of our Presenting Sponsor, the Northrop Grumman Foundation and Cyber Diamond sponsors AT&T, Cisco, and the Department of Homeland Security were in attendance. Additionally, representatives of our UK sister competition, CyberCenturion, Skyped-in for the event. CyberPatriot's superb reputation, which YOU earned, has made our sponsors proud.

Each year our competition has grown in size, but this year the entire CyberPatriot program is already a great success by any measure, more than a 50% growth in registered teams, the successful roll-out of the Elementary School Cyber Education Initiative, and the high demand for AFA CyberCamps. CyberPatriot is now bigger, better, and more fun than ever!

The holidays are not far off and I hope you are able to enjoy some time with family and friends. Stay safe and we'll see you next year!

*Bernard K. Skoch*

Bernard K. Skoch | National Commissioner



## DATES TO KNOW

DEC. 4-6

DEC. 23-JAN. 3

JAN. 29-31

JAN. 29-31

Round 2

AFA Closed for Holidays

State Rounds (H.S.)

Practice Round 2 (M.S.)

## ROUND 1 SCORES

How did your team do?

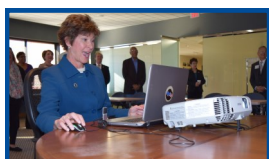
[Open and All Service Division Scores](#)

[Middle School Division Scores](#)



First team to compete in CP-VIII :Applications and Research Lab

## ROUND 1 IN THE BOOKS, TEAMS GEARING UP FOR ROUND 2



The CyberPatriot VIII competition season began with the kickoff ceremony Friday, Nov. 13, at the Air Force Association in Rosslyn, Va. Representatives from Presenting Sponsor, the Northrop Grumman Foundation and sponsors AT&T, Cisco, and the Department of Homeland Security were present. Northrop Grumman's Diane Miller clicked the button to start the server at 9:00 a.m., officially starting Round 1.

Shortly after the server was started, the Open Division team from the Applications and Research Lab of Howard County Public Schools, Md., connected to the server. The distinction made the team the first team to officially com-

pete in CyberPatriot VIII. When asked about his team, the Subnet Surfers, coach Brian Taylor said, "All of the team members were anxious to get started. Last year we had two platinum teams that nearly made it to Regionals. This year, our new teams are very focused on the competition and hope to do even better."

Teams continued to rapidly connect to the server throughout Friday, with the last teams shutting down after midnight Eastern Time. Saturday was the peak of the competition and by midday it was apparent that that last season's record of teams competing would be broken. Sunday was a low volume day, with the last of teams closing out the round at 10:00 p.m.

Round 2 will take place Dec. 4-6. In addition to

three images, high school teams will have their first Cisco Networking Challenge in the form of a quiz. After Round 2, the total scores from Rounds 1 and 2 (in the Open and All Service Divisions) will be added together to determine into which tiers teams will advance. The top 30 percent of teams will be in the Platinum Tier, the next 40 percent will be in Gold Tier, and the remainder of teams will be placed in the Silver Tier according to their performance in the qualification rounds.

Middle School teams will have their Rounds 1 and 2 scores added to determine which teams will go to the Semifinal Round, scheduled for the weekend of Feb. 19-21. There will be a practice round for middle school teams during the weekend of Jan. 29-31 when the high school teams will compete in the State Round.

## HIGH SCHOOL CYBERPATRIOTS RECRUIT YOUNGER STUDENTS [ARTICLE PROVIDED BY ALLEN STUBBLEFIELD]



LVMS CyberPatriot team working on Round 1 images

(LV) Middle School of Fullerton, Calif., competing in Round 1 of CyberPatriot VIII.

Last May, four CyberPatriot competitors from Troy High School came to LV to give a presentation to interested students. Two of the four had attended LV a few years before. "I remember about 10 students being there, and all were in Mr. Elmore's honors science classes," commented Commander Allen Stubblefield, Troy's CyberPatriot coach of six years. "Mr. Elmore was very receptive to the idea. Our high school students had made a short slide show that was kind of quirky but it really grabbed the attention of the middle schoolers. We started with the Norse attack map that is very sobering and captivating at the same time, and the other slides talked about what cybersecurity is and how competitions operate."

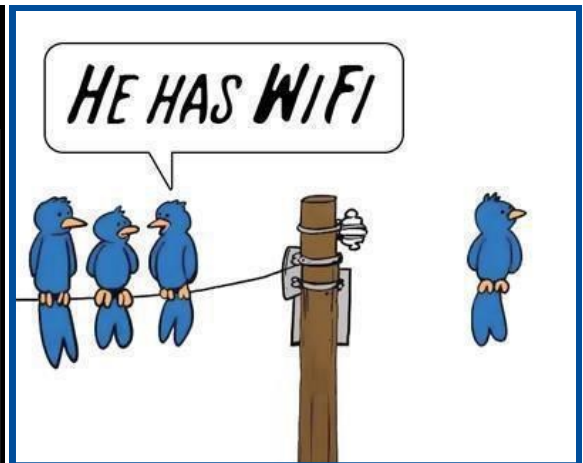
Troy invited those students to the first ever Troy cyber camp in July. Two students from LV came to the four day camp, and one helped form LV's team when school started in August. The LV team now has four 8<sup>th</sup> graders and two 7<sup>th</sup> graders. LV's team comes to Troy on Monday's and Thursdays for practice in Troy's computer lab that is run by Joseph Dillon, Troy's NJROTC Information Security Team (InSecT) captain. Dillon stated, "They get the exact same training as my five teams. They work the same practice images alongside our teams, they are developing expertise in both Linux and Windows, and are really soaking up the knowledge."

Mr. Doug Elmore, who has added the title of CyberPatriot coach to his science teacher duties, said, I was very proud of the way two of my 8<sup>th</sup> graders stepped up and led the team. They hadn't practiced that long together before the competition, but their leadership and organization really showed through. After the competition, EVERYONE said they had great time and are looking forward to the next round. We are now also trying to recruit 6<sup>th</sup> graders to the team to start training for other cyber security competitions this spring and prepare for next year. And, of course, my students really enjoy training with their high school counterparts and are treated as equals."

Mrs. Randa Schmalfeld, the principal of Ladera Vista, has been thrilled to see her students working together at Troy, "Thank you [Troy] for including our LV students in this wonderful partnership!"

During the round 1 competition on Nov. 13, Commander Stubblefield observed, "Ladera Vista's team was VERY focused and showed great teamwork all night long. They took our advice and several times stepped away from their keyboards and went outside to review their plan and what they needed to work on. Of the 10 teams we had competing at Troy that night, they showed the most tenacity and stamina; with five minutes left they were still trying to figure how to squeeze out a few more points." Several Troy competitors also commented how they wished that their middle school had offered a CyberPatriot team when they were in 7<sup>th</sup> and 8<sup>th</sup> grade.

It all started with a simple email from a local high school's CyberPatriot coach to a middle school science teacher, "Do you have some students who might be interested in being on a cyber defense competition team?" From that request came a meeting, then a cyber camp, then practices alongside the high school teams, and ultimately a first ever team from Ladera Vista



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### Coaches' Corner

- **Online Coaches and Mentors Meetings.** The Coaches Meetings are a great time to ask any questions about the upcoming round of CP-VIII! The format will be an interactive chat session. Information on joining these meetings will be emailed to Coaches a few days before the meeting. Additional questions can be directed to [info@uscyberpatriot.org](mailto:info@uscyberpatriot.org).

Next Meeting: Jan. 19, 9:00 a.m.—5:00 p.m.

- **Participant Kits.** Due to the significant amount of program growth this season, we are currently waiting for additional inventory to be delivered. While a large majority of the kits have already been packed and shipped, some orders have incurred inventory-related delays. We apologize for the wait and appreciate your patience! (Also note: If you missed the Nov. 6 deadline for payment and/or adding competitors to your roster, a hold has been placed on your order. Your team's participant kit will be packed once all other orders have shipped.)



## SPOTLIGHT: THE CYBERSECURITY SCOOP

### DEBUNKING CYBERSECURITY MYTHS

#### MYTH #1: IT'S ALL ABOUT THE DATA

Too often, "security" is thought of as ensuring data cannot be accessed or used for unauthorized purposes or by unauthorized users. While this is certainly a key concern, the systems and networks on which the data resides must also be protected against attack. For example, a Denial of Service (DoS) attack is not aimed at gaining access to a business' sensitive data, but at preventing others, such as the business' customers and business partners, from accessing and using that data.

#### MYTH #2: IT'S ALL ABOUT PRIVACY

Another common misconception is that security only relates to the protection of personally identifiable information. While protecting personal information is clearly of critical importance, other types of information assets must also be protected. Additional information assets include trade secrets and other intellectual property, competitive information, pricing and marketing data, company financial information, and more. It is particularly important to ensure all forms of confidential and proprietary information are protected in entering into relationships with vendors and business partners.

#### MYTH #3: IT'S ALL ABOUT CONFIDENTIALITY

When talking about security, the tendency is to focus on the most obvious element: ensuring data is not used by unauthorized individuals or for unauthorized purposes. For data to be truly secure, it must be confidential, its integrity must be maintained, and it must be available when needed.

#### MYTH #4: "I CAN ACHIEVE 100 PERCENT SECURITY."

One of the most common misconceptions about security is that complete security can be achieved and that complete security is required by law or industry practice. Neither is correct. Both laws and industry practices require businesses to do what is "reasonable." Complete security is not required or even realistic. Studies show that it would require businesses to increase overall security budgets nine-fold to address just 95 percent of the threats. That increase would, in most cases, exceed the overall budget for the entire business.

For more debunked myths, visit <http://www.csoonline.com/>



### FAST FACTS!

Cybersecurity is everywhere! Check out these cyber facts:

- Cyber security incidents have surged 38% since 2014.
- Malicious cyber attacks can cost the US anywhere from \$300 billion to \$1 trillion a year!
- Data breaches average \$154 per record, while the average cost per data breach has reached \$3.79 million.
- Attackers often have more than 200 days before being discovered.
- Privilege misuse is #3 out of nine attack patterns found in 96% of all breaches, according to the 2015 Verizon Data Breach Investigations Report.
- 44% of organizations still believe they can keep attackers off their network entirely, despite daily reports revealing the contrary.
- 28% of organizations claim to have a "problematic" shortage of cyber security skills today.



Source: <http://www.cyberark.com/>

### CYBER SAFETY FOR THE HOLIDAYS

Watch out for those holiday Grinches! December is a time for holiday cheer, but did you know it's also a popular time for cybercrime? Cybercriminals are getting creative with their "gifts," causing headaches and concern for unassuming shoppers. Here's what to look for:

#### The "free" Wi-Fi might cost you.

You may want to use your phone while shopping to check if you are getting the best deal, but fraudsters may be lurking on the networks, ready to use that connection to steal credit card or other personal data. If you can, use VPN software to keep hackers off of your network.

#### Avoid potential phishing.

Emails that offer great deals on holiday gifts could actually be an attempt to steal your credit card or login information. Also be wary of fake emails supposedly sent by online retailers or shippers, saying that a payment for an order didn't go through, or that an order didn't ship.

#### Keep an eye on your bank account.

Both during and after the holidays, shoppers need to keep a close eye on their accounts. The easiest way to do this is to use the same credit card for all of your holiday shopping. Never use your debit card; if hackers get that number, they could clean out your bank account.



Source: [www.dailyrecord.com](http://www.dailyrecord.com)

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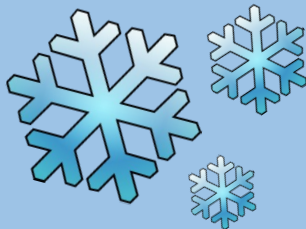
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How quickly can you find all the words?



## The CyberPatriot ELEMENTARY SCHOOL CYBER EDUCATION INITIATIVE

Get your **free copy** today!  
(For grades K-6)



**Wishing you a safe  
and happy holiday  
season!**

From,  
The CyberPatriot Program Office

## THIS MONTH IN CYBER HISTORY



**Dec. 30, 2004** — On this day in cyber history, the one millionth user registered on the social networking website Facebook. By the end of 2012 Facebook had over 1 billion active users and the social networking juggernaut continued to add users despite a plethora of new players entering the arena on a regular basis. Although Facebook was initially conceived of as a private network for US college students, it sustained rapid growth among American youth and eventually within all demographic sectors and soon commanded a worldwide user base. It has had trouble gaining a foothold in China, however, where government monitoring and restrictions, in addition to a number of homegrown social networking sites, limited Facebook's presence in the region. Today, there are over 1.5 billion Facebook users.

For more information, visit:  
<http://www.computerhistory.org/tdih/December/30/>

*Presented by:*

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