ISSUE 75 | JULY 2018

# The CyberSentinel

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

## Commissioner's Cache

The CyberPatriot National Youth Cyber Education Program is all about our participants. We work hard to attract students to STEM education and careers in general, and to cybersecurity in particular, and our latest assessment report (to be released shortly) validates that with your generous support, we are doing exactly that.

This isn't based on "We kinda think that," or "We're pretty sure…" It's based on hard data showing CyberPatriot participants go into STEM (and cybersecurity) education and career tracks at demonstrably higher rates than their non-CyberPatriot peers. And in large measure they attribute their education and career choices to what you have done to make this program the international success it has become.

There is another measure of success that you will read about in our pages this month: The tremendous achievements of our participants and alumni. This month we are proud to report that Joshua Klosterman was named Civil Air Patrol's National Cadet of the Year. There are 30,000 cadets in CAP, and Joshua—a key part of Big Sioux Squadron's CyberPatriot team—was THE one. Congratulations, Joshua.

And we are equally proud of Tiffany Dinh, one of only eight U.S. students selected for the prestigious Future Cybersecurity Leaders Exchange (CSP) Program by the U.S. Embassy in London.

We are grateful for the educators, coaches, supporters, and sponsors—led by Northrop Grumman Foundation--who make CyberPatriot possible. Thank you!

**Bernard K. Skoch | National Commissioner**

## Dates to Know

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|---|---|
| **JUL. 17** | Start of Exhibition Round 2 |
| **AUG. 16** | End of Exhibition Round 2 |
| **SEPT. 6** | Training Round Begins |

## Exhibition Round 2: Jul. 17-Aug. 16 — All Coaches and Teams Invited

Summer training and recruiting activities will end with Exhibition Round 2, scheduled for Jul. 17 to Aug. 16. Unlike competition rounds, registered Coaches and Mentors may participate in the Exhibition Round to familiarize themselves with the competition's Network Security Challenge and to provide demonstrations and training for potential CyberPatriot participants. Students are not required to be registered to participate in the round since its purpose is to recruit them.

As in Exhibition Round 1, beginner-level Windows 10 and Ubuntu 14 virtual operating systems will be used for Exhibition Round 2. No answer keys will be provided. Training materials with supplementary videos may be found on the Coach and Mentor Dashboards. Archived materials are at http://uscyberpatriot.org/competition/training-materials/training-modules. Units 5-8 are especially helpful. Supplementary videos of approximately five minutes are found on the Dashboard. Updated training materials will be available on the Coach and Mentor Dashboards in Sept..

Following Exhibition Round 2, the next training event will be the Training Round Sept. 6 - Oct. 4. The Training Round is the only round in which answer keys will be provided to participants. The Practice Round is scheduled for Oct. 10 - 22. For a list of training events and competition dates, please see the competition timeline at http://uscyberpatriot.org/competition/competition-timeline.

**Competition Season Notes**

- All teams may participate in Rounds 1, 2 and the State Round, even if they scored low or did not compete previously. In the State Round, teams will compete for State Awards with no previous round's score counting.
- Cisco Networking Academy accounts will be available in September. Individuals will register for the Content (Training) Course. The Competition Course credentials will be located on the Coach's Dashboard in Sept.
- Team Unique Identifiers will change with the Training Round.
- Non-Windows host operating systems (e.g., Mac, Linux) are permitted, but will not receive special consideration in the event of a competition software compatibility issue.

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# 2018 AFA CyberCamps

We are halfway through the AFA CyberCamp sessions for Summer 2018! We hope our campers and instructors have been loving the camps as much as we are loving the pictures that have been shared with us! Even Pat the service dog is excited to be at a camp.

We are looking forward to the remaining weeks of camp and to seeing more pictures of happy campers in their spiffy shirts!

## Download Cyber Threat Defender to Your PC Today

CyberPatriot is pleased to share that the popular cybersecurity card game, Cyber Threat Defender (CTD), is now available in an electronic game format that you can download to your PC!

The PC version of CTD, created by the Center for Infrastructure Assurance and Security (CIAS) at UTSA, teaches players how to protect themselves from cyber-attacks while building robust networks to become true Cyber Threat Defenders. The game introduces students to basic cyber vocabulary and hones players' understanding and reinforcement of defense implementation.

To download your copy of the CTD PC version or to learn how you can support the program, visit CyberThreatDefender.com.

## Coaches' Corner

- **CyberPatriot XI Registration is OPEN.** All current coaches who plan on participating in the CyberPatriot XI competition season (2017-2018) must re-create their teams for the new season. CP-X rosters have been removed from the volunteer dashboard. You will be assigned a new team number for the next season upon re-registering. Click here for full registration instructions.
- **Exhibition Rounds.** The sooner you register a team, the more access to practice images you'll have over the summer months. Exhibition Round images will be sent to registered CyberPatriot XI coaches. The current Exhibition Round ends June 14. A new exhibition round will begin July 17. Students do not need to be registered in order to participate in an Exhibition Round, nor do team fees need to be paid.

# SPOTLIGHT: NEW CYBERPARTNERS JOIN CYBERPATRIOT

## Liberty University

Could your knack for solving complex problems save the world?

Today, people, companies, and entire governments are vulnerable to technological attack, and protecting them requires leaders who are willing to fight cyber threats with skill and integrity.

At Liberty University, we're committed to helping you become one of those leaders. With six different cyber-focused degrees, you're sure to find the information science, information technology, or computer science program that fits your passion and skills. And you'll be prepared to enter a high-paying career field with incredible growth potential.

Undergraduate and graduate courses are available on our Lynchburg campus or around the world through our 100% online degree programs. And because you'll be studying at a Christian university that teaches from a biblical worldview, you'll be mentored by seasoned experts from the intelligence community who care about your success. You can be confident you'll learn how to use the latest techniques to fight cyber threats ethically, getting an education you — and your future employers — can trust.

So, put your gift for solving problems to work. Liberty students have graduated and gone on to work for companies like Amazon, Booz Allen Hamilton, Cisco Systems, the Federal Bureau of Investigation, IBM, Lockheed Martin, and Microsoft. Learn more about our Cybersecurity degree programs.

"Today, our technology and cybersecurity fields have a great need for ethics and morals. Our world is counting on them to protect their personal and financial transactions. To that, I say who better than Christians to build and secure the technology of the future? We, as Christians, answer to a higher standard — the Word of God. So yes, make, break, and secure technology, but do it for the glory of God!"

-Dr. Allen Harper, co-author of *Gray Hat Hacking, The Ethical Hacker's Handbook* and Executive Director of Liberty University's Center for Cyber Excellence.

### College for a Weekend / CyberSpark Overview

Calling all geeks! Do you have what it takes to be a digital defender? Show us your cyber skills this Sept. 20-23 at Cyber Spark for your chance to win a $10,000 scholarship to Liberty University! Cyber Spark is part technical problem-solving and part digital capture the flag. It takes place during College For A Weekend (CFAW), a four-day immersive experience that allows you to test-drive college life. Stay in a residence hall with current students, eat in the dining hall, and attend a variety of cyber security classes. Enter by yourself or with a teammate today at Liberty.edu/MS/CyberSpark/.

## Tenable

The CyberPatriot Program Office is pleased to welcome Tenable as a CyberPartner to the program.

Cybersecurity is one of the existential threats of our time. New types of connected devices and compute platforms, from Cloud to IoT, have exploded the cyber attack surface. And more tools collecting more data doesn't equate to actionable insight for the CISO, C-suite and Board of Directors. The old way of simply scanning on-premises IT devices for vulnerabilities is no longer enough. It's time for a new approach.

Founded in 2002, Tenable works with customers around the world to help them manage and measure cybersecurity risk in the digital era. It continues to build on its deep technology expertise, providing broad visibility across the modern attack surface and deep insights to help security teams, executives and boards of directors prioritize and measure Cyber Exposure. Tenable is increasingly seeing organizations of all sizes factor in Cyber Exposure as a key risk metric to guide strategic decision making, just as they would leverage other organizational systems.

- Every Security team will have a live view into their organization's Cyber Exposure at all times.
- Cyber Exposure will arm the CISO and CIO with insight into cyber risk with the same accuracy and predictability as other organizational systems of record.
- Every strategic business decision will factor in Cyber Exposure as a quantifiable metric of cyber risk
- Cyber Exposure data will be a must-have for every Board of Directors meeting.

"The cybersecurity industry is facing a serious challenge right now. There simply aren't enough skilled cyber experts to fill the thousands of open security jobs," said Bridgett Paradise, chief people officer, Tenable. "That's why early exposure to STEM disciplines is so critical. It's one of the many reasons Tenable is proud to partner with the CyberPatriot program, making cybersecurity a fun and educational opportunity for students everywhere."

Tiffany Dinh, an upcoming senior at Huntsville High School (AL), has been selected as a participant in the US Embassy London funded, PH International implemented, Future Cybersecurity Leaders Exchange (CSP) Program, taking place, Friday, July 20 – Thursday, August 2, 2018.

Tiffany is one of eight US students selected from across the United States for this program. She will also be joined by eight UK students.

- Students will attend an 8-day cybersecurity camp at Champlain College in Burlington Vermont
- Students will learn new skills and tools for application and implementation of cross-border projects in their home community
- Students will be introduction to UK culture
- Students will meet government and private think tank leaders
- Students will visit Burlington Vermont, Boston Massachusetts and Washington DC

Tiffany has been a driving force in the creation and growth of Huntsville High School's open division CyberPatriot Program.

## FORMER CYBERPATRIOT COMPETITOR AND CYBER ALL-AMERICAN RECIPIENT NAMED NATIONAL CIVIL AIR PATROL CADET OF THE YEAR

South Dakota Wing Cadet Lt. Col. Joshua Klosterman of Brandon, a member of the Big Sioux Composite Squadron in Brookings, SD, has been named the Civil Air Patrol (CAP) Cadet of the Year for 2017.

From a field of more than 30,000 CAP cadets, he was selected as the most outstanding cadet in the nation.

Since joining CAP as a 12-year-old cadet, he has been a consistent high achiever rapidly rising through the ranks and earning numerous awards, achievements and qualifications. While a cadet he qualified as a ground branch director, a position normally held by an adult officer, on a CAP Emergency Services Incident Command Team.

In addition, he qualified as a ground search and rescue team leader and has participated in numerous real-world searches and in training events. He was a member of his squadron's award winning Big Sioux CyberPatriot computer cyber-defense team for several years.

Klosterman has served on several cadet advisory councils, first representing his squadron to the wing, then the South Dakota Wing to the North Central Region and finally the North Central Region to national level council.

Klosterman recently graduated from Dakota State University with a master's degree in information assurance and computer security. Last year, he received his bachelor's degree in network and security administration. This August, he will begin working at the MITRE Corporation in Maryland doing cybersecurity research.

Klosterman, who recently turned 21, has transitioned from a Civil Air Patrol cadet to senior member status as an officer with the rank of first lieutenant. He plans to continue his service with the Civil Air Patrol by transferring from South Dakota Wing to one of the CAP squadrons in the Maryland Wing.

## THIS MONTH IN CYBER HISTORY

**July 17, 1977** — A programming error temporarily threw the Internet into disarray. This was just a glimpse of the difficulties that inevitably accompany a world dependent on e-mail, the World Wide Web, and other electronic communications.

At 2:30 a.m. Eastern Daylight Time, a computer operator in Virginia ignored alarms on the computer that updated Internet address information, leading to problems at several other computers with similar responsibilities. The corruption meant most Internet addresses could not be accessed, resulting in millions of unsent email messages.

For more information, visit:
http://www.computerhistory.org/tdih/june/25/#microsoft-incorporated

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