COMMISSIONER'S CACHE

I hope you are all enjoying a relaxing and rewarding summer.

We at AFA's CyberPatriot Program Office are hard at work with AFA CyberCamps, with the exciting next (CyberPatriot IX) video, with the newest release of ESCEI, with getting our hardware "rolling stock" ready for CP-IX, and with ton of other stuff. And in all sincerity, it's a labor of love, as everyone in AFA does this because of YOU! Thanks for being part of CyberPatriot.

Oh! Stand by for some WAY exciting news. We are putting the finishing touches on publishing our latest national outcomes assessment. The last one in 2014 produced excellent data on how effectively we are attracting young men and young women to STEM. The 2016 survey shows equally amazing survey results, and we are thrilled. None of this would be possible without the support of Northrop Grumman and our other visionary sponsors, or without the superb support of educators, parents, mentors, students, and others who understand what a special program this is. Thank you!

Bernard K. Skoch | National Commissioner

DATES TO KNOW

JULY 1	Last Day for 20% Registration Fee Discount
JULY 6-15	Exhibition Round #3
AUG. 10-19	Exhibition Round #4
OCT. 5	Team Creation Deadline
OCT. 11-25	CP-IX Practice Round
NOV 2.	Competitor Registration & Reg. Fee Payment Deadline

CPIX: ~~1,000+~~ 1,400+

CYBERTITAN: CANADA'S CYBER DEFENCE CHALLENGE

AFA's CyberPatriot and the Information and Communications Technology Council (ICTC), have partnered to launch CyberTitan: A Canadian National Cyber Defence Challenge for High Schools.

The partnership, stemming from the dedication of the Network and Cyber Security Academy at Sisler High School (Winnipeg, MB), is the second international expansion CyberPatriot has seen in two years. As Sisler High School has paved a path for Canadian schools in cyber security learning, ICTC will look to leverage their expertise as more schools and students join across Canada.

Taking on the name CyberTitan, the partnership between AFA and ICTC will join the United Kingdom's CyberCenturion in what is becoming a family of CyberPatriot-hosted cyber defense competitions. This new partnership is focused on increasing even further Canadian school participation in cyber security competitions.

"We are excited to announce our partnership with the Air Force Association and introduce CyberTitan in Canada," expressed Namir Anani, ICTC President and CEO. "With the increasing connectedness of devices and the Internet of Things, tooling youth with critical cyber security skills will prepare them for future career opportunities and will also increase their knowledge in how to protect their own, as well as, Canada's digital assets."

IT SKILLS SHORTAGE LEADING TO CYBER-SECURITY ISSUES, RESEARCH ARGUES

If a security system flags up an issue in your organization and nobody acts on it, is it even an issue? Many organizations are acting that way, according to a report from Skyhigh Networks and the Cloud Security Alliance (CSA).

The research found that security budgets continue to rise – more than half (53%) of the 220 IT and security professionals polled expect their allocations to go up in the coming year – and the myriad of tools at teams' disposals is a growing trend, with one in five companies having more than 10 available to them. Yet almost half (30%) of those polled admit to ignoring alerts because of the frequency of 'false positives' – an alert which erroneously flags normal behavior as malicious.

Part of the issue relates to a lack of IT skills, the report asserts, with respondents saying the most important new IT skill in the coming five years is incident response management. IT workers believe the best solution to a shortage of skills is training current employees, while IT executives think bringing in junior IT workers is the best way forward.

It leads to a worrying pattern; hackers staying one step ahead of organizations and teams unable to cope.
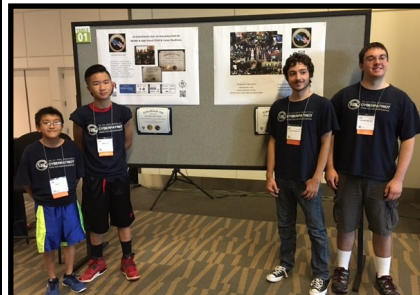
"The frequency and sophistication of cyber threats is exposing a serious lack of the relevant skills needed to maximize the full value of new technology," said Nigel Hawthorn, chief European spokesperson at Skyhigh Networks. "Businesses are forever playing catch up with hackers who are discovering new ways of probing networks, and firms are turning to more advanced cyber security solutions to compensate.

"To resolve the skills shortage, 37% of businesses believe that hiring junior IT professionals and investing in training is the most effective way," he added.

Bourne, James. "IT Skills Shortage Leading to Cybersecurity Issues, Research Argues." Cloud Tech News. Cloud Tech, 28 June 2016. Web. 28 June 2016.

ESCEI 2.0
COMING AUGUST 2016

For more information on the CyberPatriot Elementary School Cyber Education Initiative, visit

www.uscyberpatriot.org

CYBERPATRIOT VIII
COACH AND MENTOR OF THE YEAR

The nominations for CyberPatriot VIII coach and mentor of the year are currently being reviewed . We would like to thank everyone who submitted a nomination. We loved hearing about all the amazing coaches and mentors who made CyberPatriot VIII such a success and can't wait to announce the winners on July 18, 2016.

Students from Rangeview and Frontier (Aurora Public Schools) did an exceptional job representing CyberPatriot at the 2016 ISTE Conference last month. Pictured left to right: from Frontier – Danny Vo, Johny Vu and From Rangeview – Connor Hannaman, Vincent Morgan. Bottom: Mentor Ron Woerner of Bellevue High School and Coach Gywnn Moore from Frontier High School talk with the students.

Coaches' Corner

- **CyberPatriot IX Registration**. Don't delay! Team registration for the upcoming season of competition (CyberPatriot IX) is now open! Returning coaches should log in with their current username and select "Create Team" to complete a team application. New coaches must first create a volunteer account. A single coach may register up to five teams. Registration fees for CP-IX are listed below:

  Open Division: $195 per team   All Service Division: Waived
  Middle School: $155 per team   All-Girls Teams: Waived
  Title 1 Schools: Waived

- **Exhibition Rounds.** Exhibition Rounds will be held for 10 days each month from May to August. The purpose of the Exhibition Rounds is for Coaches to recruit team members and orient potential CyberPatriot supporters. Only registered Coaches may participate in the Exhibition Rounds. Competitors do not have to be registered.

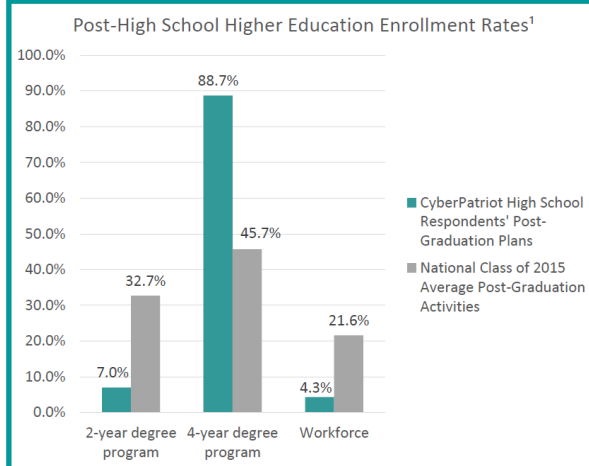 - July Exhibition Round: July 6-15
  - August Exhibition Round: Aug. 10-19

SPOTLIGHT: 2016 ALUMNI SURVEY RESULTS

The most recent CyberPatriot Alumni results are in, and it's positive feedback across the board! Thanks to nearly 2,900 responses from CyberPatriot VIII competitors and alumni, we have solid evidence that CyberPatriot is working! The Air Force Association created CyberPatriot with a goal of attracting students to cybersecurity and other STEM fields. Not only is the program achieving it's mission, but it is doing so at very high rates. Check out these results:

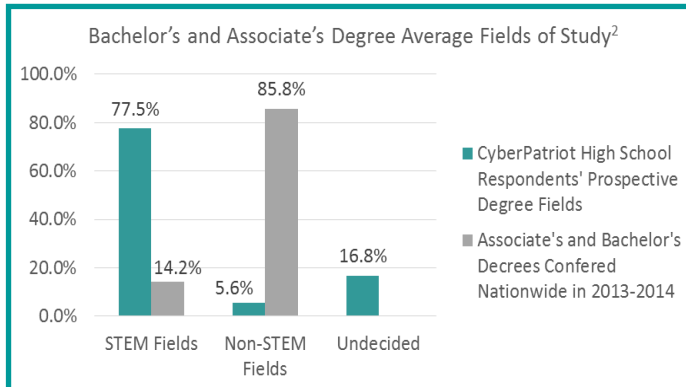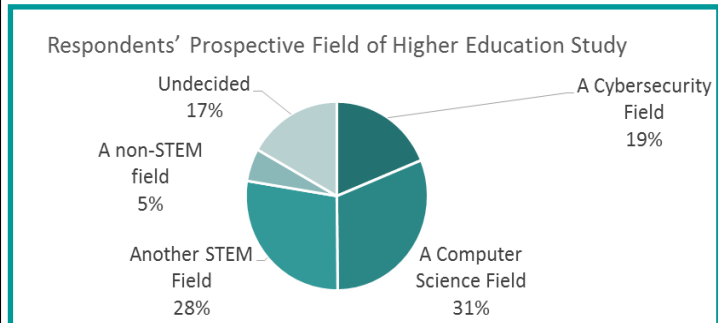Post-High School Higher Education Enrollment Rates[1]

CURRENT HIGH SCHOOL STUDENTS: POST-HIGH SCHOOL PLANS

2,397 of the 2,871 respondents were still enrolled in high school or an equivalent program at the time of the survey. A cumulative 95.7% of those currently enrolled respondents indicated their intention to pursue a higher education program after receiving their high school diploma. By comparison, according to the Bureau of Labor Statistics1 , only 69.2% of American students who graduated high school in 2015 entered college.
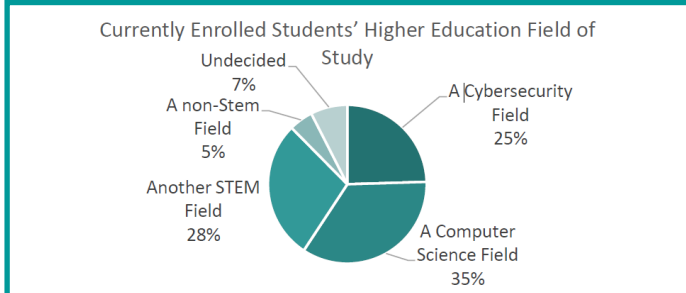
CURRENT HIGH SCHOOL STUDENTS: HIGHER EDUCATION ACADEMIC PLANS

1,774 of the 2,287 high school students who indicated they will pursue a 2-year or 4-year education program plan to study cybersecurity (18.8%), computer science (31%), or another STEM field (27.7%). The remaining 22.4% of those respondents were undecided (16.8%) or plan to study a non-stem field (5.6%). According to the most recent National Center for Education Statistics report2, computer and information sciences degrees only represented 3.7% of associate's degrees and 3% of bachelor's degrees awarded nationally in 2013-2014. Including computer and information sciences degrees, degrees in STEM fields accounted for only 8.9% of associate's degrees and 16.8% of bachelor's degrees conferred nationally in 2013-2014.

Respondents' Prospective Field of Higher Education Study

Bachelor's and Associate's Degree Average Fields of Study[2]

HIGH SCHOOL GRADUATES: HIGHER EDUCATION ENROLLMENT

Of the survey's 2,871 respondents, 687 have already obtained their high school diploma, GED, or equivalent home school education. Of those graduates, 77.2% are currently pursuing a higher education degree and 2.2% have already obtained a higher education degree. A full 87.5% of the alumni respondents currently pursuing higher education degrees are doing so in a cybersecurity (24.5%), computer science (34.7%) or other STEM field (28.3%).

Currently Enrolled Students' Higher Education Field of Study

RESPONDENTS' PERCEPTION OF THE DEGREE TO WHICH CYBERPATRIOT IMPACTED THEIR CAREER OR EDUCATION GOALS

A full 92.2% of the survey respondents indicated that their participation in CyberPatriot somewhat (50.1%) or significantly (42.1%) impacted their career and educational goals.

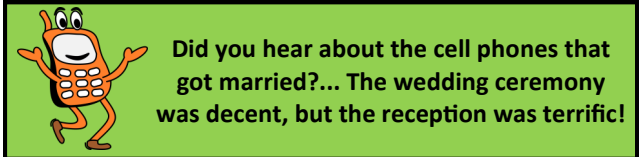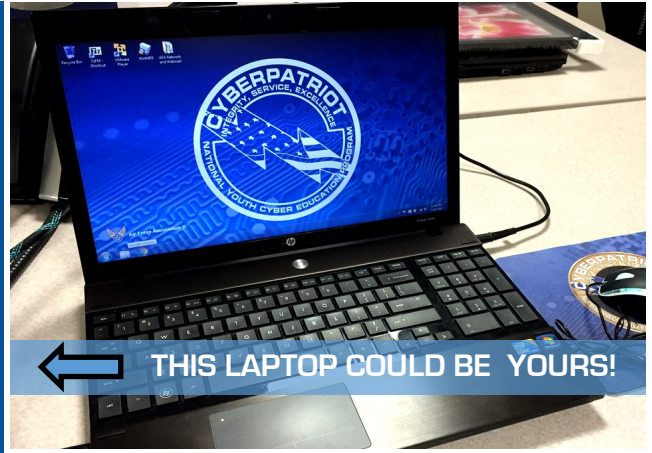**Want to see more results? View the full report here.**

#CyberPatriotAroundTheWorld

We want to see where our CyberPatriot participants are traveling to this summer! *Hanging out with a group of locals? Summiting a mountain! Parasailing over the beach? Show us where you've been and you could*
*win an official CyberPatriot laptop computer**

THE OFFICIAL RULES:

1. **SAFETY FIRST!** We're all about creativity, but please do not put yourself in danger trying to capture the perfect picture. Be smart and be safe!

2. **CYBERPATRIOT COIN or T-SHIRT MUST BE PICTURED!** It doesn't have to be the main subject of the photo, but your CyberPatriot coin or t-shirt (any season) must be clearly visible in the photo.

3. **SUBMIT YOUR PHOTO** no later than SEPT. 2, 2016. Only one submission per person, so choose wisely!

* We make no guarantees on the performance of this well used, historical CyberPatriot artifact, but we do guarantee that it has a cool gold sticker!

Submit your photo to info@uscyberpatriot.org and include the following information:

Full Name
Photo Date
Photo Location

THIS LAPTOP COULD BE YOURS!

Did you hear about the cell phones that got married?... The wedding ceremony was decent, but the reception was terrific!

This Month In Cyber History

July 2009 — During the month of July in 2009, there was a series of coordinated cyberattacks against major government, financial websites and news agencies of both the United States and South Korea, involving the activation of a botnet. These attacks involved a number of hijacked computers that caused servers to overload due to the flooding of traffic called a Denial of Service (DoS) attack. The number of hijacked computers varies depending on the source, but it is estimated to include 50,000 computers from the Symantec's Security Technology Response Group, 20,000 computers from the National Intelligence Service of South Korea, and more than 166,000 computers from Vietnamese computer security researchers as they analyzed the two servers used by the invaders.

For more information, visit:
http://list25.com/25-biggest-cyber-attacks-in-history/

CP Coach Wins TN Teacher of the Year

Cook Chapter President Randy Witt (right) reads the citation accompanying the 2016 Tennessee AFA Teacher of the Year Award to Leslie Brommer, a computer science teacher and CyberPatriot coach at Houston High School. The presentation was among several at the Tennessee AFA Convention, held this year in Memphis on April 23rd. Looking on is Convention guest speaker, Lt Colonel Jack Trimble, USAF (Ret).