



# THE CYBERSENTINEL

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

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## National Commissioner's Cache



Congratulations to our CP-XIII National Finalist teams! Being a National Finalist in any season of CyberPatriot is an enormous accomplishment (it's mathematically about half as probable as making it to the NCAA Men's or Women's Final Four). But doing it in a season dealing with pandemic-induced rules changes, managing the technical complexities of working as a distributed team, and often being unable to pull a team together all at once even online as a team, borders on the miraculous. Our heartiest congratulations go out to all 28 finalist teams. You did it! And while we would have far preferred to greet you in person at a wonderful venue in Maryland, AFA's CyberPatriot Program Office is REALLY busy getting things ready for what we hope will be a spectacular virtual event. Our guiding principles? A QUALITY event, a FAIR event, a SAFE event, a MEMORABLE event, and a WOW EVENT! We hope families, friends, fellow students, teachers, administrators, organization leaders, sponsor employees, AFA Volunteers, and interested members of the public will tune in. We will soon have details on our website.

Registration for the summer-2021 season is open, and we plan on a large number of camps for this summer. AFA CyberCamps are a terrific way for community groups, organizations, schools, colleges, universities, sponsors, and AFA Chapters to stimulate interest in cybersecurity in general and in CyberPatriot in particular. Be sure to visit our website for details: [Host a Camp \(uscypatriot.org\)](https://uscypatriot.org)

As always, thanks for all of you for your generous support of a great program that is shaping positively the STEM workforce and the cybersecurity talent pipeline. And a special thanks to our sponsors, led by Northrop Grumman Foundation, for having the vision and trust to underwrite what we do.

## Air Force Association Leadership Profile

### Jim Hannam | AFA's Vice Chairman of the Board Aerospace Education

Jim Hannam, Vice Chairman of the Board for Aerospace Education, is the volunteer leader guiding the overall direction of the AFA Education Mission and overseeing its Aerospace Education Programs. An AFA Life Member, he joined AFA in 1976. He serves in the Executive Committee of the DW Steele Chapter, and previously as Steele Chapter President, Virginia State Secretary, Central East Region President, AFA Board of Directors, Long Range Planning Committee, Chairman of the Strategic Planning Committee, and for the last many years, Vice Chairman of the Aerospace Education Council. AFA awards include the Medal of Merit, Exceptional Service Award, President's and Chairman's Award, and AFA Member of the Year.



Hannam earned a Bachelor of Science in Engineering from the United States Air Force Academy, a Master of Science in Applied Mechanics from Stanford University, and an MBA from Auburn University. He was a fighter pilot and Instructor Pilot in F-105 Thunderchiefs with 100 combat missions over North Vietnam. He also flew F-4 Phantoms in Southeast Asia and Europe, and F-16 Falcons in Europe. He served as an Assistant Professor in Engineering Mechanics and Flying/Soaring Instructor at USAFA, Wing Director of Operations and USAFE IG Director of Inspections in Europe, Commander on Aviano, AB Italy, and on the TAC and Air Staffs in Requirements. After 26 years of service, Hannam retired as a Colonel.

Jim offered this comment to CyberPatriot participants:

***“Despite the COVID-19 challenges this year and having to virtualize the CyberPatriot Finals, exciting young Americans like you into STEM is central to your future, America’s competitiveness and our National Security. The Air Force Association is proud of your efforts –every one of you is a winner.”***

## AFA CyberCamps

AFA CyberCamp registration opened on February 1, 2021 and will remain open through May 1, 2021. Instructions for registering to host a camp can be found [HERE](#).

The 2021 AFA CyberCamp dates are:

- Week 1: June 7-11
- Week 2: June 14-18
- Week 3: June 21-25
- Week 4: July 12-16
- Week 5: July 19-23
- Week 6: July 26-30
- Week 7: August 2-6

CyberPatriot has modified camp materials to be able to be conducted in a virtual environment but will also allow camp host to hold in-person camps so long as they follow CDC Guidelines and local regulations surrounding COVID-19.

## Booz Allen Hamilton recognizes top teams with Paid Internships

### Cyber Internships and Community Engagement with Booz Allen Hamilton

The CyberPatriot program has deep roots in San Antonio, TX, where teams are celebrated annually by the Mayor and top teams are recognized by a highly respected cyber organization, Booz Allen Hamilton. For CyberPatriot XIII San Antonio, TX had 175 registered teams and two teams in the All Service Division qualifying for the Virtual National Finals Competition. In addition to the recognition for state and tier awards from CyberPatriot, the top scoring team wins the San Antonio Mayor's Cup.

Booz Allen Hamilton recognizes the talent that comes from the teams competing in CyberPatriot and designed a paid internship program with sponsored security clearance for members of the top three scoring teams. Thus up to 18 CyberPatriot competitors each year have the ability to apply for the Booz Allen Hamilton paid four-year internship program when they make it as a top three team in the city.



Mark Rydell, who leads the San Antonio Community Engagement and Cyber Business at Booz Allen Hamilton stated the program has been successful with all the first cohort of four-year graduates of the internship program gaining full time positions with the company. He said Booz Allen is invested in the talent from CyberPatriot and works with the competitors to allow them to participate in the internship at a degree that allows them to be successful in college. The internship is designed to have an 8-week summer program with projects and less formal activities during the school year. Booz Allen offers incentives and recognition to the individuals and their families with a reception each year. Additional benefits to the paid internship program, is upon completion the intern has already gained security clearances and four years tenure toward educational benefits with Booz Allen.

Rydell was kind enough to put us in touch with two CyberPatriot alumni who have completed or are currently in the Booz Allen Hamilton internship program.

### Sasha Rukhina | Current Intern at Booz Allen Hamilton and CyberPatriot Alumni

"In high school, I joined JROTC my freshman year but didn't join CyberPatriot until my sophomore year, where I continued until graduation. My team made it to Nationals (in Baltimore) my junior and senior years, where I met highly intelligent professionals in the cybersecurity workforce, both civilian and in the military. I was almost jealous of how capable and cool these people were, and I wanted to continue to see how deep I could get into cybersecurity.

When I accepted the internship opportunity with Booz Allen, I happened to meet some neat people who also competed in CyberPatriot who I can call friends today. I still have communication with my CyberPatriot mentors and some cadets from the JROTC I once competed with. CyberPatriot really had a strong impact on my future, since it's where I found skills I cherish and want to improve", said Rukhina in an interview.

### Rameez Shaukat | Booz Allen Hamilton and CyberPatriot Alumni

"I've been actively interested in Cybersecurity for 5+ years now, with my interest peaking in 2015 when I first joined ITSA. I remember in 2012, my brother (at the time National Guard) got a magazine about cybersecurity from the Guard, and I took some interest into it, but never had a chance to grow that interest until 3 years after that. CyberPatriot gave me the opportunity to learn, meet amazing new people, and find a community of people, and Booz Allen guided me through my career and into a place of success", said Shaukat.

Q: How many years did you compete in CyberPatriot?

A: I competed in CyberPatriot for two years, my junior and senior year of college, with ITSA (Information Technology and Security Academy)

Q: How did CyberPatriot impact your career choice?

A: CyberPatriot definitely impacted my career choice. When I joined CyberPatriot cybersecurity was such an intimidating field, but as I competed and progressed, the competition left me with knowledge and motivation to further my career in the field!

Q: Do you have any interesting stories about your experiences with the Booz Allen internship?

A: There was never a dull moment at Booz Allen, so its hard for me to pinpoint an interesting story. I'd say every moment (I know, a bit sappy) was interesting, exciting and amazing all in its own way. If I had to choose, it'd be my time working with a large stack of servers, migrating from an old system to new, getting to work with hardware and reminding myself the IT field isn't just a mental labor field!

Q: Do you have any involvement with CyberPatriot or new interns with the BAH internship program?

A: I've spent my time mentoring with Cyber Texas, and also with other high schools around San Antonio. I've unfortunately been busy most of this past year, and 2020 restrictions made it harder for me to be available to help mentor. Being full time now, I unfortunately do not interact as much with the new interns, but I'm always there when they need a hand!

## CyberPatriot National Finals – Meet the Teams

The graphic features a dark blue background with a hexagonal pattern. At the top, the text 'CP-XIII NATIONAL FINALISTS – OPEN DIVISION' is written in white. Below this, there is a 4x3 grid of teal-colored boxes, each containing the name of a high school, its team name, and its location. A small white logo is visible in the bottom right corner of the graphic.

CP-XIII NATIONAL FINALISTS – OPEN DIVISION		
<b>Cookeville High School</b> <i>TNPatriot   Cyber Age Is Tennessee</i> Cookeville, TN	<b>Del Norte High School</b> <i>CyberAegis Nobelium</i> Escondido, CA	<b>Del Norte High School</b> <i>CyberAegis Cobalt</i> Escondido, CA
<b>Faith Lutheran High School</b> <i>Delete DNS</i> Las Vegas, NV	<b>'Iolani School</b> <i>'IoSec</i> Honolulu, HI	<b>Liberal Arts and Science Academy</b> <i>Callipygian Consortium of Cybersecurity</i> Austin, TX
<b>Loyola Blakefield</b> <i>Team Crystal</i> Towson, MD	<b>Parkway West High School</b> <i>MOPatriot   Cyber Age Is Swift</i> Chesterfield, MO	<b>Rolling Meadows High School</b> <i>ILPatriot   101sec</i> Rolling Meadows, IL
<b>Thomas Jefferson High School for Science and Technology</b> <i>VAPatriot   Cyber Age Is ScubaSquad</i> Alexandria, VA	<b>Troy High School</b> <i>A Certain Scientific Cybersecurity Team</i> Fullerton, CA	<b>W. T. Woodson High School</b> <i>VAPatriot   Cybercavs</i> Fairfax, VA

## CP-XIII NATIONAL FINALISTS – ALL SERVICE DIVISION

**Air Academy Cadet Squadron**  
*The Lockouts*  
CAP – Colorado Springs, CO

**Brandeis High School**  
*Foxhounds*  
AFJROTC – San Antonio, TX

**Forest Park High School**  
*A-Team*  
AJROTC – Woodbridge, VA

**Fullerton Composite Squadron 56**  
*Tempest*  
CAP – Fullerton, CA

**ILTEXAS Garland High School**  
*CyberEagles2*  
USMC JROTC – Garland, TX

**La Cueva High School**  
*CyberBears*  
USMC JROTC – Albuquerque, NM

**Patrick Henry High School**  
*Patriot Battalion*  
NJROTC – San Diego, CA

**Roosevelt High School**  
*TXPatriot | Invicta*  
AJROTC – San Antonio, TX

**Scripps Ranch High School**  
*Falcons GigaBites*  
AFJROTC – San Diego, CA

**Troy High School**  
*Runtime Terror*  
NJROTC – Fullerton, CA

**Sacramento Division**  
*Spartans*  
USNSCC – Yuba City, CA

**Band of the West Division**  
*Silicon Knights*  
USNSCC – Redwood City, CA

Wildcard – **MAR-NC-300** | *Union County Composite Sapphire* | CAP – Matthews, NC



## CP-XIII NATIONAL FINALISTS – MIDDLE SCHOOL DIVISION

**Design 39 Campus**  
*CyberAegis Iridium*  
San Diego, CA

**Oak Valley Middle School**  
*CyberAegis Technetium*  
Escondido, CA

**Toby Johnson Middle School**  
*CyberBots*  
Elk Grove, CA

## Meet the CyberPatriot Staff



### An Interview with Leah McCloud | Coordinator, Computer Operations at CyberPatriot

**Q:** As the newest addition to the CyberPatriot technical team, what has been the biggest learning curve.

**A:** When I first entered my role at CyberPatriot, I was overwhelmed with support from the tech team on what I needed to learn and how. The CyberPatriot program at my high school was implemented after I had graduated, so I had not even seen the competition from the front end until my first day on the job. The biggest learning curve was learning exactly how the competition works from the competitor point of view by competing on images myself and then learning how the competition works from my role's point of view by rebuilding images.

**Q:** Speaking about learning, you have an amazing background in cybersecurity, what are you currently studying in your program?

A: Thank you! Learning and teaching is a passion of mine, so I am always looking for a way to expand my knowledge. I currently hold a bachelor's degree in criminal justice and criminology, a master's degree in information technology, and a master's degree in cybersecurity. Right now, I am working on my Doctor of Science degree in cybersecurity, which has granted me the opportunity to choose by dissertation topic of online trafficking.

*Q: What is your favorite CyberPatriot memory?*

A: This is a great question, and it is incredibly hard to choose just one! I think I would have to say our luau themed wedding party to congratulate our office mascots Coconut Maraca Woman and Tiki Man. We had a full ceremony with General Skoch officiating, poke bowls, and even a wedding cake. I still wear my Hawaiian CyberPatriot shirt regularly!

*Q: For a student who is looking to study cybersecurity, what advice would you have for them?*

A: My best piece of advice for anyone seeking to get into information technology and cybersecurity is to understand that you will never know everything in the fields. Technology and its adversaries are rapidly changing, so one solution that may work one day, may not work the next. I have heard many of my colleagues say that "the more I learn, the more I don't know". This is why we believe it is important to learn how to research and to work as a team. Regardless of your level of education or how many certifications you have, there will always be something you do not know that your teammate may know.

*Q: How secretive do you have to be with the competition images?*

A: Sorry, that is classified. No, I am just kidding. There is a lot of work that goes into the images before they get sent to competitors. A huge part of my role at CyberPatriot is thoroughly testing the images to ensure that everything scores correctly despite everything I throw at them. This means that I have to receive a perfect score on each of the images; sometimes more than once! During a round, we receive many calls about the challenges, including why they aren't scoring and how to do them. Even though I know the solutions, I am unable to provide any hints or advice to ensure the fairness and integrity of the competition. Our competitors are held to a high standard when competing, and I must uphold the same high standard by not releasing even the smallest details about the images.

## CyberPatriot & The News

### [King's Academy Knights Battalion CyberPatriot Teams Recognized for STEM Excellence](#)

WOODSTOCK, GA -- Senior Army Instructor SAI COL(R) Rick O. Stepat, & Army Instructor AI SFC(R) Robert A. Clements are proud of our TKA Knights BN Cyber Patriot Teams' efforts this year and want to specially recognize the great job our Cyber Patriot Team Commander Cadet SGM Matthew Perrino has done and he has sent these encouraging words to the teams to close out another successful Cyber Patriot season.

### [Seneca JROTC Students Place First In CyberPatriot Challenge](#)

Tabernacle, NJ – Five motivated Seneca High School Air Force Junior ROTC (JROTC) students, led by Freshman Chris Cerra, earned first place in the unit's inaugural CyberPatriot Challenge Season.

### [Education Cyber Security Market Worth Observing Growth | AWS, Juniper Networks, Oracle](#)

2020-2029 Report on Global Education Cyber Security Market by Player, Region, Type, Application and Sales Channel is latest research study released by HTF MI evaluating the market, highlighting opportunities, risk side analysis, and leveraged with strategic and tactical decision-making support. The study provides information on market trends and development, drivers, capacities, technologies, and on the changing investment structure of the Global Education Cyber Security Market.

# PHASE I: UPLOAD COMPLETE

GANNON UNIVERSITY'S INSTITUTE FOR HEALTH AND CYBER KNOWLEDGE NOW OPEN

## Learn to lead the way in the cyber industry:

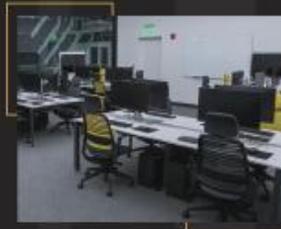
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### CYBER ATTACK LAB

Deploy White Hat Hacking techniques in a controlled environment to ethically simulate and study real-world attacks to prevent them in the future.



### CYBER DEFENSE LAB

Learn how to protect digital lives by assessing systems for vulnerabilities, detecting scams and designing solutions against emerging cyber threats using well-established cyber defense tools.



### CYBER INNOVATION LAB

Gain hands-on experience experimenting on IoT-connected devices to design and build secure data using next-generation quantum-resistant cryptosystems. Learn how to protect security platforms enabled with AI and ML using cybersecurity.



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