



MVHS CYBER PANTHERS:
Starting the Season With A Roar

I would like to welcome our returning team members, as well as our newest team members for another CyberPatriot season. I usually have the first issue of "Bits and Bytes" published in October. However, the team has had an eventful first two months. Here is a brief summary of the first half of the season.

- The team was invited to volunteer at the Texas Cyber Summit.
- Medina Valley was one of six schools selected to participate in Project Ares.
- The team competed in the first round of CyberPatriot XI.
- Medina Valley also hosted two guest speakers.

On December 3rd, select members of the MVHS CyberPatriot team members will be attending the National Initiative for Cybersecurity Education (NICE) conference in San Antonio. These students will discuss the CyberPatriot program and demonstrate the use of the Project Ares cyber training platform.

Then on December 7th and 8th, MVHS will compete in the second round of the CyberPatriot competition. During this round Medina Valley High TX-20009th AFJROTC CyberPatriots will host Warren High's TX-20022nd AFJROTC Cyber Warrior team. This will be the first time the competing teams will be at the same school going head to head battling for cyber supremacy.

The Medina Valley coaching staff is looking forward to an exciting second half of the season. Parents are welcome to contact me or Mrs. Webb if there are any questions.

-Head Coach Frank Hall

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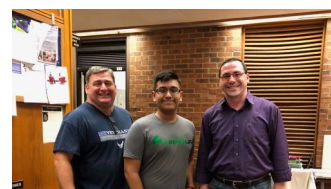


CYBERING OVER SUMMER Vacation

I have been asked by team members and parents why I continue to hold team meetings until the second week in May. The reason is simple: summer cyber camps. It isn't until May when local universities and organizations around San Antonio release details for their free summer week long cyber camps. The largest of these camps is GenCyber. The GenCyber camp also affords its attendees to explore different topics under the cyber umbrella that we as a team do not get discuss during our season, such as building a computer (Hardware), basic coding, and scripting in Linux and Windows.

Medina Valley CyberPatriot students have attended this camp for the past two years and it has helped them to stay engaged with a larger cyber community. It also helps them to avoid the cyber summer slip. This occurs during the summer break when all CyberPatriot team members forget all they have learned during the previous season.

In May, the CyberTexas Foundation requested a detailed outline about how the coaches are helping our team to prepare for the next CyberPatriot season. The best submission would win tuition for two students that were in CyberPatriot (One Year or less) to attend the Cybersecurity for Beginners Camp at St. Mary's University. I am proud to announce that my submission was selected and that I was able to send Cadet Henry Nino to the St. Mary's cyber camp.



Pictured from left to right are Mr. Scott, Cadet Nino, and Dr. Barsoum.

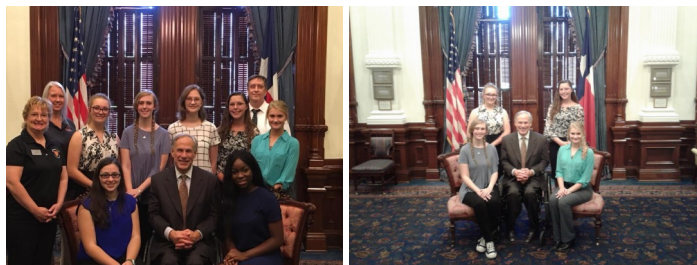
The Cybersecurity for Beginners Camp is a hands-on cybersecurity program that raises students' awareness of the cybersecurity field and increases interest in cybersecurity careers and diversity in the cybersecurity workforce of the nation. Students are introduced to basic computer programming skills that help them to understand the cybersecurity first principles, develop various programs for: symmetric and asymmetric encryption schemes, checking data integrity, and performing cryptanalysis and code breaking. Moreover, different cybersecurity topics will be presented to students: cybersecurity ethics and cybercrimes, security settings on personal computers, administering operating systems securely, various security threats and attacks, secure internet access, and social engineering. The camp includes instructor-led lectures, individual hands-on activities, and group-based activities.

MVHS TEAM GO to the State Capital: GIRLS GO CYBERStart

In February, Medina Valley High School competed in the SANS Institute Girls Go CyberStart cybersecurity competition. This was an initiative created by The SANS Institute to get high school aged females interested in the cyber career field. Our very own Mrs. Joules Webb led the way by coordinating the event. Medina Valley had twenty-three teams participate, and one team placed second in Texas. The team consisting of Kelsey Maine, Miraclyn Anderson, Hailey Perron, and Sara Guinn placed 2nd in Texas and 28th in the nation, a top 1% finish, and earned them a trip to Austin to visit with Governor Greg Abbott. (Continued on Page 3 Girls Go CyberStart)

GIRLS GO CYBERStart:

On June 29, the Medina Valley Girls Go CyberStart team visited the state capital and spoke with Governor Greg Abbot. The members of the team are Kelsey Maine, Miraclyn Anderson, Hailey Perron, and Sara Guinn. The team, led by Mrs. Joules Webb, computer science teacher at Medina Valley High School, helped to lead the team which placed 2nd in Texas and 28th in the nation. The team talked with the Governor to discuss the competition and the future of computer science curriculum in school. Each member of the team received a special proclamation signed by Andrew Murr State Representative District 53 which congratulated each member of the team for their remarkable performance and placement in the SANS Institute Cyber Competition.



The MVHS Girls Go CyberStart team with Governor Greg Abbot and members of his staff.

Each team member received a State of Texas Resolution signed by Andrew Murr, State Representative District 53. Here is an excerpt of the resolution:

“Four talented students from Medina Valley High School in Castroville earned second-place honors at the state level in the 2018 Girls Go CyberStart competition. Cybersecurity is a rapidly growing field in need of talented professionals, especially women, and through their fine showing in the Girls Go CyberStart competition, the members of the 4 Stooges have demonstrated exceptional aptitude and a considerable interest in a sector critical to national security...”

Congratulations to the team on a job well done.



Mrs. Joules Webb is displaying the Resolution that each team member received.

CYBERPatriot Team: GUEST SPEAKERS

Each year I ask associates and friends in the cyber community to come speak to the team about various topics of cyber or their specific area of expertise. This year I decided to start inviting guests early. During our practices on November 5 and 8, we were fortunate enough to have our former team mentor Ms. Caitlyn Chapman and Piotr Wojtyla from CrowdStrike speak to the team about starting a career as an incident response consultant and cyber defense. They also discussed a recent cyber incident that was being investigated and how they were able to detect, track, and help their customer to secure their information enterprise. Then Mrs. Michelle Vélez Marte, a network systems engineer, spoke with the team about high school and college internships and cyber education pathways to pursue while in college.



Ms. Chapman and Mr. Wojtyla pose with the team.



Mrs. Marte poses with the team.

“CYBERSECURITY IS a RAPIDLY GROWING FIELD IN NEED OF TALENTED PROFESSIONALS, ESPECIALLY WOMEN, and THROUGH THEIR FINE SHOWING IN THE GIRLS GO CYBERStart COMPETITION, THE MEMBERS OF THE 4 STOOGES HAVE DEMONSTRATED EXCEPTIONAL aptITUDE and a CONSIDERABLE INTEREST in a SECTOR CRITICAL to national SECURITY.”



“MEMBERS OF
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BRIG GEN.
USAF
(RET). “



TEXAS CYBER SUMMIT



In September, I received an e-mail from Mr. Joseph Mlodzianowski, event coordinator of the Texas Cyber Summit, inviting the Medina Valley and Warren TX-20022nd AFJROTC CyberPatriot teams to volunteer at the summit. This was a valuable opportunity for members of both teams to learn about cybersecurity from the larger cyber community. While their official roles were that of Room Wranglers, they were able to attend all the seminars, and a tour of a Network Operations Center (NOC) had been scheduled. After officially accepting the invitation, Mrs. Ell Marquez and Mr. Brandon Bruce became our event representatives for the duration of the summit. Together they had arranged an amazing experience for all the CyberPatriot team members.

On the first day of the summit, our event representatives had scheduled guest speakers who were industry leaders and cybersecurity professionals from around San Antonio and the country. The speakers worked in all facets of cyber security from law enforcement, members of Red and Blue teams that are employed by private companies, to CEO of cybersecurity companies. The students asked questions about education, career opportunities, and the legal implications of being caught illegally hacking.

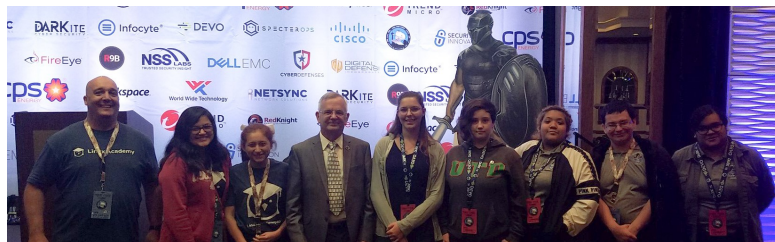


Members of the Medina Valley and Warren AFJROTC CyberPatriot teams.

On the second day of the competition, members of both CyberPatriot teams had an opportunity to meet with the Commissioner of CyberPatriot Bernard K. Skoch, Brig Gen. USAF (Ret). Commissioner Skoch spoke to each member of the team asking about themselves and their role on their schools' team. He went on to discuss the CyberPatriot program and how it evolved over the past eleven years. He went on to offer everyone words of encouragement in becoming a cybersecurity professional and wished them luck during this year's competition.

I would like to thank Mr. Joseph Mlodzianowski, Mrs. Ell Marquez, and Mr. Brandon Bruce for inviting us to be a part of this wonderful event. Mr. Mlodzianowski has stated

the CyberPatriot teams will be invited to volunteer at the next Texas Cyber Summit. We look forward to being part of your next event.



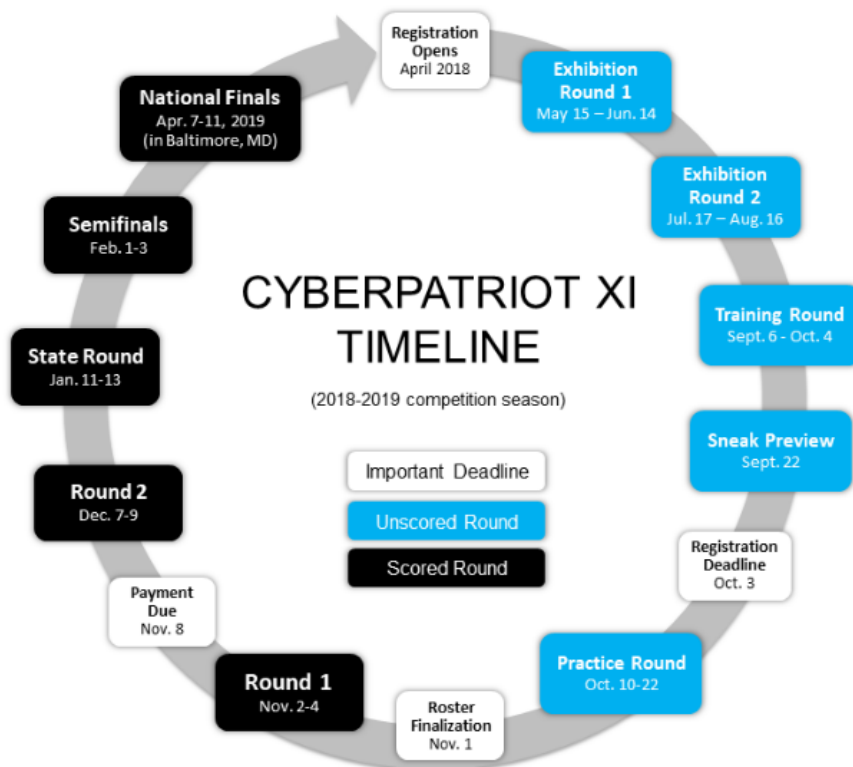
Members of the Medina Valley and Warren AFJROTC CyberPatriot teams pose with Commissioner of CyberPatriot Bernard K. Skoch, Brig Gen. USAF (Ret)



PICTURES OF THE TEAM



CYBERPATRIOT SCHEDULE OF COMPETITIONS



The CyberPatriot Time of Events

“This was a valuable opportunity for members of both teams to learn about cybersecurity from the larger cyber community.”



Medina Valley High School

CyberPatriot Team

We are the Medina Valley CyberPatriots!! We are the cyber warriors that relentlessly defend networks from attack. Our cyber hunting skills cannot be matched. We find threats, eliminate them, and strategically launch counter attacks against our cyber enemies. We are CyberPatriots!!

About the MVHS CyberPatriot Team

The Vision

The vision of the Medina Valley CyberPatriots program is to promote cyber awareness, computer security practices, and cyber ethics. All of these are essential attributes for creating a secure network infrastructure, teaching the students how to detect threats, and how to defend against cyber-attacks in a safe virtual environment.

The skills and knowledge the students will gain from participating in this program will give them an advantage to obtain information technology certifications, scholarships in computer related fields of study, and ultimately provide an opportunity to start a great career in information technology and cyber security.

The Mission

The mission of the Medina Valley CyberPatriot program is the proper instruction and implementation of information technology principals and cyber security practices. All students will be taught how to use various operating systems, inter-connecting network devices, and how to secure the entire infrastructure. The students will also be taught how to properly use tools and methodologies to assess and troubleshoot problems that range from inoperable workstations to misconfigured networking equipment. These are the skills that will be necessary to compete in the CyberPatriot competitions and will enable us to advance to each round and ultimately to the national finals.

Medina Valley High School

CyberPatriot Team

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Angela M. Hall—Chief Editor

