Medina Valley High School CyberPatriot Team

July 2021 Volume 4, Issue 3



MVHS CYBERPATRIOT: GRADUATES, CYBER EVENTS, AND CYBER VIKINGS

We have reached the end of another school year and cyber season. Congratulations to all our senior team members who graduated on June 4, 2021. Over the last four years, our team started team traditions such as singing "Feliz Navidad" during the December round of the competition, and the time honored tradition of coin-checking every one they meet. Even though they are moving on to start their college or military careers, they will always be a member of the Medina Valley CyberPatriot team. I would like to wish all of our seniors the very best in their future endeavors.

To all of our returning Cyber Viking crew members, I look forward to embarking on the digital high seas as we journey through the cybersphere. As a member of this team you are learning the fundamentals of cybersecurity and how it affects every aspect of your life. Recently there have been cybersecurity incidents reported nearly every week. Many of you have seen the news about the ransomware attack on Colonial Pipeline which has affected fuel prices. Then almost two weeks later, another ransomware attack on JBS caused an increase in food prices. There will be new challenges in CyberPatriot XIV and in the CTF competitions that may reflect or mimic the cyberattacks that have occurred this year. I encourage each of you to read the official finding reports from Cybersecurity and Infrastructure Security Agency (CISA), FBI, Homeland Security, and the NSA.

Check the team Facebook page and our Discord server for team information, events, and resources.

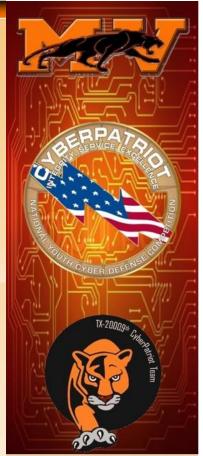
In this issue of Bits and Bytes I have implanted an encrypted message using my favorite type of dinosaur. Here is what you need to know to solve the problems,

- Stylesuxx online tool
- https://www.gillmeister-software.com
- The key is the folder name

Once you answer the question post your answer on the team Discord server or send to mvhscp-team@gmail.com . This contest is for current MVHS CP team members only.

Remember to CYBER LIKE A VIKING!

-Head Coach Frank "Odin" Hall



INSIDE THIS

GRADUATES,
EVENTS, CYBER
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ROOKIE2
CONGRATULA-
TIONS2
NUMBER 13
CRSE
STUDY4
SCHEOULE
TERM INFO6

"It is because of this great attitude and willingness to help his team that he was chosen to be rookie of the year."



MEDINA VALLEY AFJROTC TEAM ROOKIE OF THE YEAR



CROET MRRCOS "SCRIBE" TORRES THE 2020-2021 ROOKIE OF THE YERR.

On April 21, 2021, the TX-20009th AFJROTC held their annual award ceremony. The CyberPatriot team members received their CyberPatriot XIII Participation Certificates. This year a new award was created to honor the cadet who showed exemplary behavior throughout the season.

The winner of the first TX-20009th AFJROTC CyberPatriot Team Rookie of the Year is Cadet Marcos "Scribe" Torres. At the beginning of the season Cadet Torres wanted to be the team scribe because he was hesitant about being on the competition team. His plan was to record and

observe with the goal of joining the competition team for the 2021-2022 season.

Fate had something else in store for this cadet. He joined Team Three (The Pepsi Kings) as their Linux guru. He knew nothing about Linux at the beginning of the season and by the end he was well on his way to becoming a Linux expert. Cadet Torres never gave up during a competition; he was determined to get all 100 points. He always encouraged his team mates to not give up and to keep searching for answers. He was always willing to help his Windows and Cisco team members.

It is because of this great attitude and willingness to help his team that he was chosen to be rookie of the year.

Congratulations Cadet Torres!

CONGRATULATIONS!!

Congratulations to Mrs. Joules Webb, MVHS Open Team Coach, on winning the WeTeach_CS Change Maker Award at the WeTeach_CS Virtual Summit. Keep up the great work at our school and providing the school an opportunity to learn computer science and cybersecurity.



Established Computer Science Program at Medina Valley High School

- Teaches Cybersecurity Pathway courses:
- Foundations of Cybersecurity, AP CSP, Computer Science I, and Digital Forensics
- 30% female students enrolled in pathway
- Hosts UIL Computer Science, CyberStart America, Digital Divas, Girls Who Code, and a Computer Science Club.
 - 50% female participants in UIL Computer Science team





Joules Webb Medina Valley ISD



THE NEW AFJROTC CYBERPATRIOT TEAM CAPTAIN

On April 28, 2021, The TX-20009th AFJROTC CyberPatriot (CP) team selected their new team captain, Cadet Staff Sergeant Pilár "Khan" Zinsmeyer. Cadet Zinsmeyer has been on the team since her Sophomore year and specializes in Windows. During the 2020-2021 season, she led her three person



CADET STAFF SERGEANT PILAR "NUMBER I" ZINSMEYER

team to compete in the Platinum tier, All-Services Division. She also volunteered to learn Cisco networking portion of the CP competition. It is because of her leadership that her three person team finished 151st out of 1, 414 team in the All-Services Division.

It is tradition within the team that when you are selected to become team captain your "Hack Name" changes. Therefore, from now until the end of the 2022 season, Cadet Staff Sergeant Pilár "Khan" Zinsmeyer will be known as Number 1.

In May, Cadet Zinsmeyer was selected to attend the DEPARTMENT OF THE AIR FORCE AIR UNIVERSITY (AETC), Cyber Scholarship Program (AFJROTC Cyber Academy). She attended a virtual, online summer university program for college credit and the opportunity to earn an industry IT certification. There were only 100 students that were selected out of the nation.

One assignment she had to do was to write a case study on a major cyber event. Her case study will be featured in this edition of "Bits and Bytes". The source article Cadet Zinsmeyer used as a source is titled "Cybersecurity and Society", Senario 1. The source article is licensed with a Creative Commons Attribution 4.0 International License ©2017 Catalyzing Computing and Cybersecurity in Community Colleges (C5).

She has also been invited to attend the Women in Cybersecurity (WiCyS) conference in September 2021.

Cadet Zinsmeyer will also be taking part in the National Initiative for Cybersecurity Education (NICE) National Cyber Signing Day during the NICE K-12 National Conference later this year.

Congratulations Number 1! We have a lot of work to do this cyber season.

"During the 2020 -2021 season she led her three person team to compete in the Platinum tier, All-Services Division."



"With the knowledge of the software used, type of data that was targeted, and the transmission of said data, agents were able to identify the occurrence as Russian interference."



HIGH STAKES EMAIL HACKING BY CADET PILAR "NUMBER 1" ZINSMEYER

During the approach of the 2016 presidential election, Russian Government operatives hacked their way into Republican and Democratic emails in an attempt to interfere with the outcome of the election. Only those in Democratic Parties had any information leaked out into the public with the use of Wikileaks and DCleaks. Even though there was no reported change in election outcome, this incident caused some alterations to down-ballot congressional races and the resignation of some Democratic individuals.

The FBI knew before the Democratic National Committee (DNC) that accounts had possibly been hacked into. With the knowledge of the software used, type of data that was targeted, and the transmission of said data, agents were able to identify the occurrence as Russian interference. Later, a similar incident tran-

spired, but was now targeted at Hillary Clinton's campaign manager, John Podesta. Podesta, however, was hacked by misinformation and a phishing attack. DNC emails, campaign strategy, and campaign information was leaked out through Wikileak.

The Democratic Congressional Campaign Committee (DCCC) also had information stolen and leaked to accompany the information from the DNC. The same approaches were made to get into the accounts of DCCC and were also identified as Russian interference. Wikileaks and DCleaks spread the information, causing many people of DCCC to receive threatening messages and calls. This damaged much of DCCC and led to some people resigning from their positions.

Many members of all groups and parties could have been to blame for the attacks. The DNC had relied too heavily on standard spam-filtering in their emails, The FBI agent could have been more stern with the severity of the situation, and John Podesta could have triple checked the safety of the phishing attack before acting upon it. Because of this event, many can learn to do what the campaigning parties did not and can apply more precautions to their online information.

CYBERPATRIOT XVI COMPETITION SCHEDULE

CyberPatriot released the competition schedule for the 2021-2022 season. This year there will be four rounds. The regular season will begin in October 2021 and end in January 2022. I would like to have a theme for each round this season. Since our first round is in October, I encourage all team members to wear a Halloween costume. We will discuss themes for November, December, and January during a team practice.

Here is the CyberPatriot XIV competition schedule.

CP-XIV (2021-2022) COMPETITION SCHEDULE

SCHEDULE UPDATED ON 05/17/2021

NATIONAL YOUTH CYBER DEFENSE COMPETITION

CyberPatriot XIV (2021-2022) Competition Timeline APRIL NOV - DEC ▷ MAY - AUG SEPT-OCT ▷ JAN - MAR **Exhibition Round 1** Training Round Registration Opens May 19 - June 18 September 8 - 30 October 22 - 24 December 10 - 12 20% discount for teams registered by July 1 Roster Finalization **Exhibition Round 2 Sneak Preview** November 1 August 4 - 29 **Registration Closes National Finals** October 5 (Bethesda, MD) March 17-21 Payment Due **Practice Round** October 5 - 17

COMPETITION DATES AND TIMES

(DATES ARE TENTATIVE - MAY BE SUBJECT TO CHANGE)

Teams may compete during the following times on competition weekends. All times are <u>US Eastern Time</u>.

Friday, 9:00 AM - Saturday, 3:00 AM ET Saturday, 8:00 AM - Saturday, 11:59 PM ET Sunday, 10:00 AM - Sunday, 10:00 PM ET

ROUND	DATES	DESCRIPTION
Round 1 (All teams participate)	October 22-24, 2021 Image download instructions and links are sent to Coaches at <u>5 PM ET</u> , on or before the Monday prior to the competition round. The StartEx email with the password to the images is sent to teams at <u>9 AM ET</u> the Friday of the competition round.	All teams may compete. Tests basic of cybersecurity skills.
Round 2 (All teams participate)	November 12-14, 2021 Image download instructions and links are sent to Coaches at <u>5 PM Eastern</u> , on or before the Monday prior to the competition round. The StarfEx email with the password to the image is sent to teams at <u>9 AM Eastern</u> the Friday of the competition round.	
State Round (All teams participate)	December 10-12, 2021 Image download instructions and links are sent to Coaches at <u>5 PM Eastern</u> , on or before the Monday prior to the competition round. The Starftx email with the password to the images is sent to teams at <u>9 AM Eastern</u> the Friday of the competition round.	
Semifinals	January 21-22, 2022 (Two Days only) Image download instructions and links are sent to Coaches at <u>5 PM Eastern</u> , on or before the Monday prior to the competition round. The StartEx email with the password to the images is sent to teams at <u>9 AM</u> Eastern the Friday of the competition round.	
National Finals	March 17-21, 2022	National Finalist teams compete for National Championship in their respective divisions.

"I would like to have a theme for each round this season. Since our first round is in October, I encourage all team members to wear a Halloween costume."



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!!

Medina Valley High School

CyberPatriot Team

Facebook Page Address: www.facebook.com/tx20009MVCPTeam/

High School Website Link: https://www.mvisd.com/ Page/3001

Team E-mail: mvhscpteam@gmail.com

Coach's E-mail: fredrick.f.hall@hotmail.com

Angela M. Hall—Chief Editor

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, interconnecting 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.