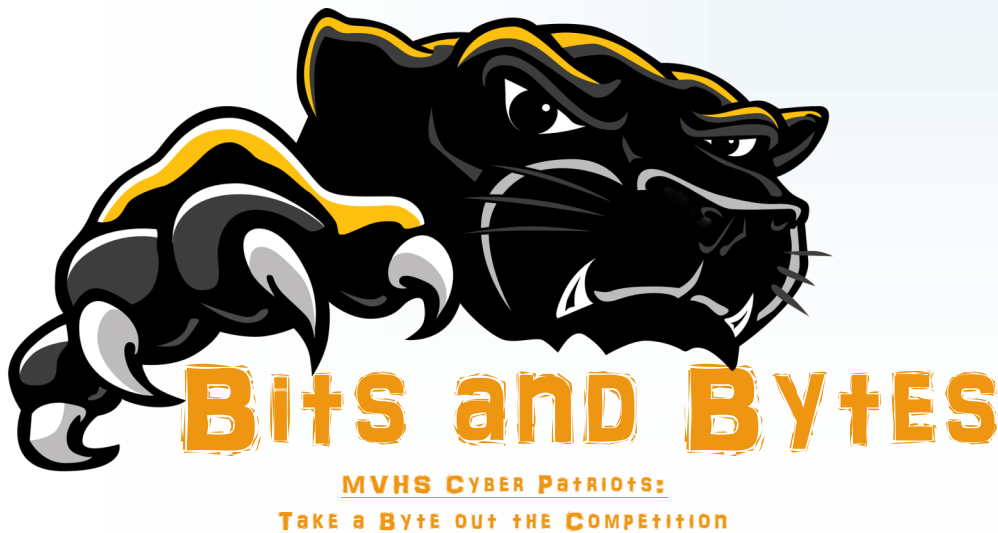




We have reached the end of another CyberPatriot competition season, and what a season it turned out to be. The images and network labs introduced the team to Supervisory control and data acquisition (SCADA) systems and the Internet of Things (IoT) devices. Having SCADA and IoT challenged everyone on our team to learn something new and everyone performed magnificently. These systems are becoming more relevant in the real world and learning about them now will give you a head start if you peruse cybersecurity as a career.

All of our teams in the Open and All Services Divisions (Platinum and Gold) made it to the State Round of the competition. Our AFJROTC Gold Tier team comprising of Jackson Bitters (Windows), Connor Garces (Windows), Josue Reyna II (Cisco), Adrian Mason (Linux) placed first in the State Round. Congratulations.

The Medina Valley CyberPatriot team is more than a collective of six individual teams' competition against each other and the remaining six thousand three hundred and eighty-one teams. Rather, it is a small community of students that want to learn about cybersecurity, programming, and information technology. It is because of this small community helping Team Cybiote that they were able to accomplish such a great achievement.

Now that the season has ended, we can start learning more about cybersecurity. The past few weeks we have been following the curriculum created by Hacker High School. This will give the students that are taking the new cybersecurity course an advantage over other students.

We also have some fun things in store for the team such as the Mayor's Cyber Cup Luncheon, and a possible field trip. There will be more details inside this edition of Bits and Bytes.

This issue does contain two hyper links for a video and a newsletter. These hyper links will only work with the PDF version of Bits and Bytes.

-Head Coach Frank Hall

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TEAM CYBIOTE TAKE FIRST IN STATE ROUND

CYBERPATRIOT XI STATE AWARDS									
Congratulations to the following teams for earning an award during the CPAT State Round									
STATE AWARDS: Hard copy certificates will be mailed in mid-February to those teams earning state awards. State awards are given to the top three teams overall in each state.									
TIER AWARDS: Digital certificates will be emailed before the end of January to those teams earning a Gold/Silver Tier award. Note: State awards outrank tier awards.									
Division	Category	Tier	Award	Organization	Team Nickname	Coach	City	Location	Award Type
All Service	Air Force JROTC	Gold	1st Place Gold Tier	Medina Valley High School	Cybiote	Fredrick Hall	Castroville	Texas	Digital
All Service	Civil Air Patrol	Gold	2nd Place Gold Tier	TX-087	Young Patriots	Timothy Frenz	Weatherford	Texas	Digital
All Service	Navy JROTC	Gold	3rd Place Gold Tier	Seguin High School	Cyber Squires	Bryan Robertson	Seguin	Texas	Digital

Team Cybiote entered the state round as an underdog among the Gold Tier teams in the All Services Division. They emerged as the number one team in Texas and ranked 8th in the All Services Division Gold Tier.

This is a remarkable accomplishment for a team that had only four members, three of which were competing for the first time. Their hard work and don't quit attitude helped them take the number one spot. Team



Pictured from left to right are Josue Reyna II, Adrian Mason, Jackson Bitters, Connor Garces

Cybiote is also the first and only Medina Valley CyberPatriot team to place first in its eight year history at the school. Congratulations to each you.

THE CYBERPATRIOT SUPERHERO?

Does our CyberPatriot team have it's very own superhero? It would appear that the answer is yes. He appeared during the second round of competition. He swung from his web into the room and posed for a picture.



Courtesy of CyberPatriots Twitter Feed

Then CyberPatriot found out about our visitor and Tweeted out a picture of our web slinging cyber superhero. The news spread throughout the school and people started to gather outside of the room. Once he noticed everyone he shot a web and swung out of the school. As he left he dropped a not that read "With great cyber knowledge come great responsibility." No one knows who the web shooting cyber hero is, but I am glad he is on our team.

THE MVHS TEAM AROUND THE CYBERSPHERE

Since last year our team has become quite popular with the MVISD, CyberTexas Foundation, and various cybersecurity companies around San Antonio. On January 21, 2019 our team was featured on the Go Public's Motivation Monday video. Our team appears in the video at 50 seconds. Then on January 30, 2019 our team was mentioned in the MVISD online newsletter. Plus the MVHS website posts our newsletters to their main page for everyone to read.

Here are the links to the video and the MVISD Newsletter:

[Go Public](#) [MVISD Newsletter](#)



9th Annual San Antonio Mayor's CYBER CUP AWARDS

It is time for the Annual San Antonio' Mayor's Cyber Cup Luncheon. It will be held on Saturday, March 30, 2019 at 3201 E. Houston, San Antonio, 78219, Bexar County Freeman Coliseum Arenas, Expo Hall #2. There will be a college and recruiting fair from 10:00 a.m. to 11:30 a.m. The awards luncheon will begin at 11:30 a.m. to 1 p.m. This is a formal event, meaning that all AFJROTC Cadets will wear Combo 1. Open team students will need to wear business casual attire. There will be college recruiters, government agencies, and high ranking military and civilian officials.

CYBERTEXAS™
FOUNDATION



I have registered all the AFJROTC Cadets and I have a copy of your tickets in the event you lose yours. Open team members if you are attending please have Mrs. Webb send me a copy of the tickets.

Please advise your parents to drop off prior to 10 a.m. and for pick up arrive prior to 1 p.m. I will not give any rides to or from the event.

CYBERPATIOTS: BE SAFE WHILE ONLINE

During the course of the year, there are many challenges and hoaxes circulating on the internet. Many of the challenges are harmless and just internet rumors. However, there are certain challenges that are reported in the news and posted on social media because of the danger it poses to teenagers and young adults.

The simple fact is that parents need to know what their children are posting, who they are interacting with, and what apps they are using. There needs to be an open discussion between parents and children about what is harmless, what is unacceptable to post, and the danger that exists online. There are resources that can help parents stay in tune with the current trends and what apps are being used by pre-teens and teenagers.

BLOG: Cyber Safety in Light of the Momo Hoax by
National Integrated Cyber Education Research Center (NICERC)

You've probably seen headlines, Facebook shares, or tweets about the newest digital threat facing the entire world – the Momo Challenge. The basic gist of the challenge is: contact with "Momo" is triggered by sending a text or Whatsapp message to a special phone number found online, and the "player" will be given challenges that range from the mundane to self-harm. Distressing images and threats are sent if the player doesn't complete the challenge. Seems scary, right?

We're all probably familiar with enough chain letters to disbelieve the "send this to 10 people or some ghost or monster will come and get you while you sleep" threat. The Momo Challenge is the modern-day version of this. Like most trends or challenges, social media, especially YouTube, causes them to spread like digital wildfire. It's hard to scroll through any newsfeed and not see the disturbing bird-like woman with bulging eyes and that weird smile thing along with headlines about Momo convincing kids to harm themselves. The problem here is, the Momo Challenge doesn't seem to actually be as big a threat as it's being made to be. (Continued on page 4)



NICERC™
AN ACADEMIC DIVISION OF THE
CYBER INNOVATION CENTER

Courtesy of <https://nicerc.org/>

“ ”



**“MEMBERS OF
BOTH CY-
BERPATRIOT
TEAMS HAD AN
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TO MEET WITH
THE COMMISS-
SIONER OF
CYBERPATRI-
OT BERNARD
K. SKOCH,
BRIG GEN.
USAF
(RET). “**



CYBERPATRIOTS: BE SAFE WHILE ONLINE (Cont'd)



Courtesy of [https://
nicerc.org/](https://nicerc.org/)

According to an article published by Snopes, there is very little evidence of people actually interacting with Momo. There are few screenshots of interactions in a day and age where they should be prevalent if it's truly an epidemic. Coverage of the challenge has also likely been convoluted with stories similar to this one about people splicing disturbing images and video clips into kids' YouTube shows.

This viral craze brings up a whole heap of other topics, but most importantly it brings up an opportunity to discuss what it means to be a good digital citizen. This means sharing stories responsibly, being on the lookout for cyberbullies, and being careful online. By its nature, YouTube is almost impossible to police. Anyone can upload and anyone can comment. Even if they become flagged by the site and blocked, it just takes an email address to set up a new profile. And just because the Momo Challenge may have been exaggerated, it doesn't mean people with ill intentions towards our children won't use its disturbing images and topics as inspiration to create equally disturbing content.

Well meaning people and news outlets have been sharing stories and reporting on this, and rightfully so. Most people want to protect their children. But the problem is that the Momo Challenge isn't actually a viral trend. It's not exactly fake news either though because there are probably cases of kids being traumatized by it, which will inevitably go up as the story gets more and more viral traction. Kids may be familiar with the terrifying visage of Momo, but it's most likely not because they've actually interacted with it.

The important lesson here is to share stories responsibly, have open, honest discussions with your students and children about being safe online, and do your best to be present and aware. Remember to share responsibly. If you don't, you'll be cursed with extra-loud and violent sneezes for the next 3 months.

Suggested Discussion Topics:

- How can you verify what stories you see on social media are true?
- What should you do if you see something online that frightens you?
- What should you do if you think someone is bullying you online?

Here is the link to the BLOG on the NICERC website:

<https://nicerc.org/2019/02/cyber-safety-in-light-of-the-momo-hoax/>

TX-20009th CYBERPATRIOTS: MILITARY BALL

On January 26, 2019 the TX-20009th AFJROTC Corps held their annual Military Ball. There were several members of the CyberPatriot team in attendance. I was honored to be invited to this year's ball to have some fun with the team and not discuss anything cyber related.

My favorite moment was coin checking all members of the team. Team Captain Junessa Vasquez lead the way by calling a coin check on everyone at her table. We challenged team members throughout the ballroom eventually coin checking the whole team. It wasn't just CyberPatriot team members that was challenged, Lt Col Spracale, CMSgt Thayer, active duty guests, and other cadets were challenged. All I have to say is that there are some team members that owe Cadet Vasquez a soda.



Pictured left to right: Coach Hall, Cadet Amaya, Cadet Sanchez, Cadet Vasquez (Team Captain), Cadet Nino (Team LT), Cadet Mason, Cadet Bitters

For those of you that don't know how a coin challenge works here is a short run down of the rules.

A. The challenge is initiated by drawing your coin, holding it in the air by whatever means possible and state, scream, shout or otherwise verbally acknowledge that you are initiating a coin check. Another, but less vocal method is to firmly place it on the table or floor (this should produce an audible noise which can be easily heard by those being challenged, but try not to leave a permanent imprint). If you accidentally drop your coin and it makes an audible sound upon impact, then you have just "accidentally" initiated a coin check. (This is called paying the price for improper care of your coin.)

B. The response consists of all those persons being challenged drawing their coin in a like manner.

C. If you are challenged and are unable to properly respond, you must buy a soda or water for the challenger and the group being challenged.

D. If everyone being challenged responds in the correct manner, the challenger must buy a soda or water for all those people they challenged.

2. WHEN - WHERE:

A. Coin checks are permitted, ANY TIME, ANY PLACE.

3. EXCEPTIONS:

A. There are no exceptions to the rules. At the time of the challenge you are permitted one step and an arms reach to locate your coin. If you still cannot reach it -- SORRY ABOUT THAT!

**“THIS WAS
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“EACH OF THESE STUDENTS POSSESS VALUABLE SKILLS, AND IT IS REFRESHING TO SEE YOUNG PEOPLE THAT HAVE SUCH PASSION AND KNOWLEDGE IN THEIR FIELD OF STUDY!”



MVHS COMPUTER SCIENCE TEAM

Many of the Medina Valley CyberPatriot team members are also in Mrs. Webb's Computer Science (CS) class, and they compete on the computer science team. The team must complete a written test as well as a Java programming lab. The team must complete a written test as well as a Java programming lab.

On Saturday, March 2, 2019, the MVHS CS team places 1st in the Large Team Division at the Somerset Spring Fling. Kelsey Maine placed 6th in the advanced category and Leo Amana placed 5th novice. Evan, Kelsey, and Caleb rocked the hands-on programming clinching the win.



The MVHS Computer Science Team at the Somerset Bulldog Spring Fling.

Following their impressive win at the Somerset Spring Fling, the team was invited to attend the CS4TX Event at the State Capitol. The CS4TX event showcased middle and high schools from around the state to demonstrate the importance of computer science in all Texas public schools. The team was able to talk with other schools to discuss ideas about programming and were able to see the different projects that students were creating and integrating with virtual reality, robotics, and creating computer games.

The MVHS CS team met Texas State Representative Andrew Murr. Representative Murr spoke with a team and with each member individually about their projects. He offered them team encouragement to continue their education and not stop learning how to code. This is a quote from Representative Andrew Murr's Facebook page about our students from Medina Valley, "Yesterday, Ms.

Joules Webb, computer science teacher at Medina Valley High School, and Mr. Frank Hall, youth volunteer, brought four out-



Pictured left to right: Mr. Frank Hall, Kelsey Maine, Leo Amaya, Representative Andrew Murr, Kassidee Webb, and Mrs. Webb

standing students to Austin for the Code at the Capitol event. Kelsey Maine, Caleb Faula, Leo Amaya and Kassidee Webb demonstrated their computer science skills to me and several visitors at the Capitol. Each of these students possess valuable skills, and it is refreshing to see young people that have such passion and knowledge in their field of study!" The team received a Texas House of Representatives pin and wooden coin.

All pictures from the trip are located on the MVHS CyberPatriot Team Facebook page.

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:
<https://www.facebook.com/tx20009MVCPTeam/>

High School Website Link:
<https://www.mvisd.com/Domain/1421>

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.