



The first half of the school year and the cyber season has been busy. Since September we have been in the Castroville and Hondo newspapers. This brought great exposure to our small, but growing, community and showed that Medina Valley High School is starting to focus on the world of information technology and cybersecurity. I was asked, "How is cyber affecting our small rural community?" My answer was, "It is affecting our daily lives, from the tractors the farmers use to plow the fields and harvest their crops, to online shopping at the store for pickup or delivery, and coaching students on a team of cybersecurity technique principals. The world of cyber has arrived in our community and it is going to grow." All of you in this program are a part of that future.

The team had an amazing visit to Rackspace, thanks to Mr. Ramirez. Everyone got an insight into the larger Cybersphere and learned more about the higher level cyber security that is needed to protect companies and their customers. We also learned that if you keep your arms and legs tucked in as you are going down the slide, you'll shoot out like a rocket.

We gained a world of cybersecurity knowledge when our new mentor Caitlyn Chapman joined our team at the start of the season. I had a chance to talk with her at our last practice earlier this month about what she plans on teaching the team during the second half of the year. She is going to fill your minds with so much knowledge your heads are going to explode. The only way any of you will be able to communicate is in binary.

We as a team have had an amazing year so far, let's make the second half better.

Coach Frank Hall

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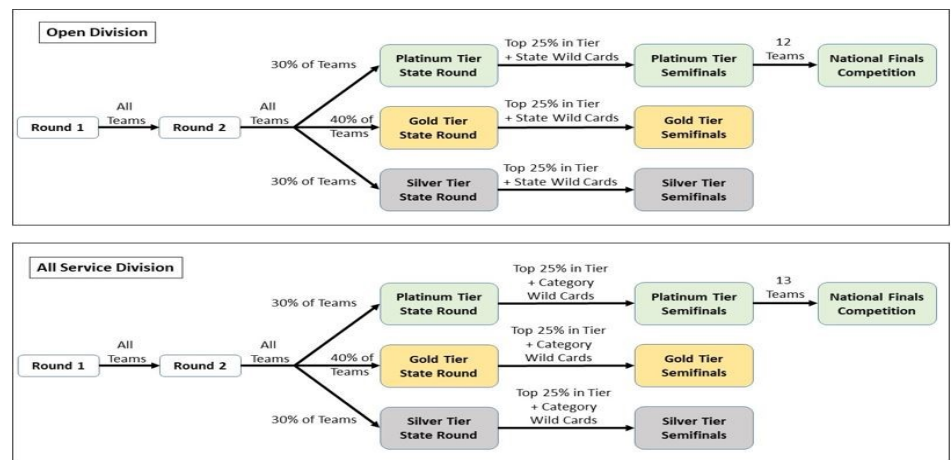


THE STANDINGS, THE POSTSEASON, THE FUN STUFF

In this issue of “Bits and Bytes”, we are going to review how are teams are doing half-way through the CyberPatriot competitive season and how all of the teams rank in their perspective divisions. We will take a look ahead to the postseason; what we are going to be focusing on to enforce your knowledge. This also leads to new areas of interest, such as building a lab and lab-net.

It is halfway through the competitive season and I am pleased to say that we have one platinum team, three gold teams, and three silver teams. An illustration of the division tiers is displayed below. All of you have worked hard, and for many of you, this is your first season in the CyberPatriot program. The next half of season we are going to cover many areas to prepare you for the remaining competitions. Each of you must work harder and study more. The competitions are going to become increasingly difficult with a change of the operating systems, for Linux and Windows, and varying degrees of difficulty with routing protocols and network troubleshooting for the Cisco students.

I expect everyone to give their best and to stick around for the postseason because this is when we have the most fun.



THE LEARNING NEVER ENDS

There might be a misconception that because the competition season has ended that the CyberPatriot team ceases all meetings. This is not correct. The postseason is when we get to have the most fun. We will learn new skills and strengthen our current skillset. We get to do things in the postseason that we don't do during the competition season. For instance, in the off season we will dismantle and reassemble computers, discuss and perform hacking exploits, and create an experimental hacking lab to actually compromise computers.

We are going to rebuild the computers from the hardware to the operations system. Then we will connect the computers to a wireless network. After that is complete, we will use the third computer to hack our newly built boxes. When I say “hack,” I mean gain access to the network and both computers and extract information, load software, and disrupt the communication of both computers. That's right, you get to play the bad guy.

Then in a grand finale, before the end of school, we will have what is called a turkey shoot. There will be 3 teams, 2 people per team, and whoever successfully safeguards their network and gains access to the opposing team's network will win.

EVENTS

The 8th Annual San Antonio Mayor's Cyber Cup Awards Luncheon & College Fair is being held at the Bexar County Community Arenas located at 3201 E Houston St. The event is on March 24th from 10 am –2 pm. This is a mandatory and formal event. All cadets will be in full dress uniform and the open team will wear formal attire. If I have to wear a suit and tie, so do you. So mark it on your calendar now and let your parents know. More details will follow, if there are any changes the coaches will inform the team.

Here is the link for the event. Copy and paste into your browser.

[https://docs.google.com/document/d/e/2PACX-](https://docs.google.com/document/d/e/2PACX-1vSGyje9F_bG7ycKJ_dHIXy10_WLEtLTcRLXyewLY0b-ixLzQkPzSOEY2IQV--35_uZg4xD_yk6btX/pub)

[1vSGyje9F_bG7ycKJ_dHIXy10_WLEtLTcRLXyewLY0b-ixLzQkPzSOEY2IQV--35_uZg4xD_yk6btX/pub](https://docs.google.com/document/d/e/2PACX-1vSGyje9F_bG7ycKJ_dHIXy10_WLEtLTcRLXyewLY0b-ixLzQkPzSOEY2IQV--35_uZg4xD_yk6btX/pub)

State Round	January 19-21
Semifinals	February 9-11
CyberPatriot Luncheon	Mar-24

The CyberPatriot Time of Events

STUDENT ARTICLE SUBMISSION

There was no student article submitted for this issue of “Bits and Bytes”. I strongly encourage all team members to compose an article on any cyber related topic. Anyone team member can submit an article, or if a team writes a collaborative article it will be published here for everyone to read and discuss. All I ask is that research before you publish, then send to me or one of the coaches to review. This is a great way to develop this important skill.



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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:
http://mvhs.mvisd.com/clubs__organizations/cyber_patriots

E-mail: fredrick.f.hall@hotmail.com



About the AFJROTC 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.