



CYBER SEASON OVERLOAD!

The 2021-2022 cyber season was a whirlwind of competitions, learning, and events. We started off the season by getting our own competition and practice area which was named Val-HALL-ah. That was followed up by having our first guest speaker of the season, U.S. Representative Gonzales, Texas District 23. Congressman Gonzales discussed cyber defense from a national level and inspired the team to become the cyber defenders for small towns across Texas. Our team was also invited to participate in the Alamo ACE Cyber Conference's Deloitte Capture the Flag competition.

This year we had two teams qualify to compete in the Platinum tier. Team 1, Ragin' Cyberpenos, went on to finish 60th in the nation. Team 2, The Pepsi Kings, broke the barrier by going from the Gold Tier to Platinum Tier which is a remarkable accomplishment for a second-year team. The TX-20009th AFJROTC CyberPatriot team also had an all-female team for the first time in our team's ten-year history. Team 3, Binary Beans, consisted of freshman and sophomore female cadets that had never participated in the CyberPatriot program. The Binary Beans had a spectacular year and placed 99th nationally in the Gold Tier.

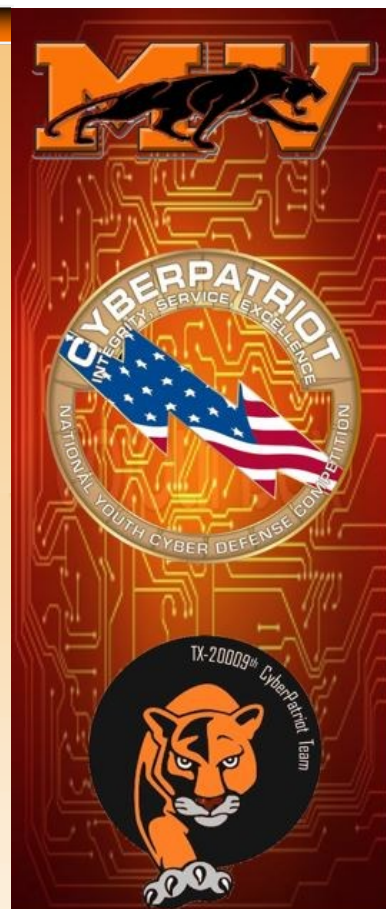
At this year's CyberTexas Foundation Mayor's Cyber Cup Luncheon, the Ragin' Cyberpenos were awarded the inaugural "Best Rural Team" award. Winning this award demonstrates that the reputation of our AFJROTC cyber team is growing in the San Antonio Cybersecurity community. Our team was also featured in the CyberPatriot newsletter "The CyberSentinel" numerous times throughout the season and received national exposure in the March 2022 edition of the Air Force Magazine.

Two of our long-term team members, team captain Pilár "Khan" Zinsmeyer and Jackson "Snickerdoodle" Bitters graduated this year. These team members were cornerstones for the team. They provided leadership to our new cadets and were instrumental in our successes this season. I wish them both the best of luck in their future endeavors.

At the end of this year, our team founder, chief key holder, food getter, and our team's biggest supporter, Lt Col Robert Spracale, retired from teaching. Lt Col Spracale, thank you for everything that you have done for our team over the past ten years.

I am looking forward to seeing all of our returning and new team members for the 2022-2023 cyber season.

Cyber Like A Viking!
Coach Frank "Odin" Hall



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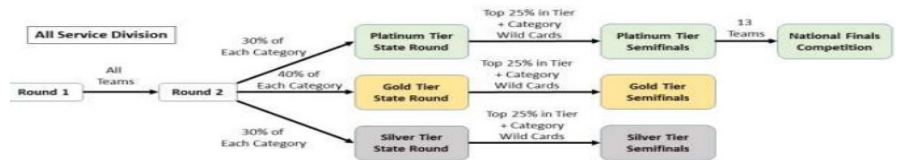
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“This year we had a handful of returning team members and many more new cadets that joined the team. The AFJROTC had teams compete in the Platinum and Gold Tiers of the competition. The Platinum Tier of the CyberPatriot program is the top 30% of all the teams that are registered to compete. The Gold Tier consists of the next 40% of all the registered teams. For the first time since the Medina Valley TX-20009th AFJROTC started competing in CyberPatriot we had our first all-female team.



2021-2022 SEASON RESULTS

Our Medina Valley AFJROTC High School teams had a remarkable cyber competition season. This year we had a handful of returning team members and many more new cadets that joined the team. The AFJROTC had teams compete in the Platinum and Gold Tiers of the competition. The Platinum Tier of the CyberPatriot program is the top 30% of all the teams that are registered to compete. The Gold Tier consists of the next 40% of all the registered teams. For the first time since the Medina Valley TX-20009th AFJROTC started competing in CyberPatriot we had our first all-female team.



Here is a summary of how all of our teams did in the 2021-2022 season:

- 1449 All Service Teams Registered
- 209 All Service Teams in Texas
- 61 AFJROTC Teams in Texas
- 182 Teams All Service All Tiers - Semi-finals
- 74 Teams All Service Platinum Tier
- 315 Teams All Service Gold Tier

AFJROTC Team 1 (The Ragin' Cyberpenos) once again made it to the Platinum Tier and qualified to compete in the semi-final round. Unfortunately, the The Ragin' Cyberpenos did not qualify for the National Finals Round.

Overall Ranking - MV AFJROTC Team 1 (The Ragin' Cyberpenos) Platinum Tier Semi-Final Round

- 60th - Nationally
- 11th - Texas
- 13th - AFJROTC Nationally
- 4th - AFJROTC in Texas

Overall Ranking - MV AFJROTC Team 2 (Pepsi Kings) Platinum Tier State Round

- 151st - Nationally
- 26th - Texas
- 38th — AFJROTC
- 11th—AFJROTC in Texas

Overall Ranking — MV AFJROTC Team 3 (Binary Beans) Gold Tier State Round

- 99th - Nationally
- 10th - Texas
- 20th — AFJROTC
- 5th—AFJROTC in Texas

END OF AN ERA FOR MEDINA VALLEY CYBER

This season was bitter sweet for the MV AFJROTC CyberPatriot team because our team founder, Lt Col Spracale, announced his retirement at the end of the 2021-2022 school year. Shortly after arriving at Medina Valley High School and assuming the role of head aerospace instructor, Lt Col Spracale discovered the CyberPatriot program. The TX-20009th started competing in the national youth cyber defense contest in CyberPatriot III. He was able to find a great mentor, Mr. Ryan Gurr, to start teaching the cadets about cybersecurity so the team could compete in CyberPatriot. Then in 2013, the TX-20009th AFJROTC team qualified for nationals. Since our team's appearance at nationals, Lt Col Spracale helped to grow the AFJROTC team and worked with other Medina Valley teachers to start and grow the Open Division team. It is because of Lt Col Spracale that Medina Valley is involved with the CyberPatriot program. He would often say that he doesn't understand anything about cybersecurity and that all he had to do to run the team was to unlock the doors and get the food. He was our team's greatest fan and cheerleader.



COACH FRANK HALL PRESENTS LT COL SPRACALE WITH THE MEDINA VALLEY TX-20009TH AFJROTC CYBERPATRIOT TEAM AWARD OF EXCELLENCE

On May 4, 2022, at the AFJROTC 2021-2022 Cyber Award Ceremony, Lt Col Spracale was presented with the inaugural Medina Valley TX-20009th AFJROTC CyberPatriot Team's Award of Excellence.

This is what is on his award: "This award of excellence is given in recognition of twelve years of unwavering support and dedication to the Medina Valley TX-20009th AFJROTC CyberPatriot team. Over the past twelve years you have served as chief key holder, door opener, food getter, and cheerleader for approximately thirty cyber competition teams. We owe you a debt of gratitude for building a team from just five cadets to the successful program that it is today. Your contribution to our team's success will always be remembered and appreciated." The team and I will miss him and his leadership.

SPECIAL ANNOUNCEMENT

In this edition of The Cyber Viking Syslogs, pages 5-7, I am honored to share an article written by Mr. Chip Thornsburg, Cyber Defense Program Coordinator, Northeast Lakeview College. His article is based on excerpts from a presentation made by Chip Thornsburg at the June 2022 BSidesSATX Cyber Technology and Security Event held on the campus of St. Mary's University in San Antonio, Texas.

“Over the past twelve years you have served as chief key holder, door opener, food getter, and cheerleader for approximately thirty cyber competition teams. “



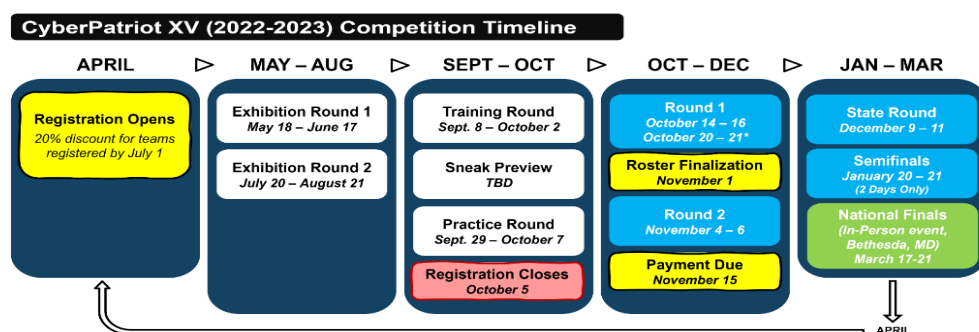
“Since our first round is in October, I encourage all team members to wear a Halloween costume. We will discuss themes for November, December, and January during a team practice. ”



SCHEDULE FOR CYBERPATRIOT XV

CyberPatriot released the competition schedule for the 2022-2023 season. This year there will be four rounds. The regular season will begin in October 2022 and end in January 2023. 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. Full details can be found at <https://www.uscyberpatriot.org/competition/current-competition/competition-schedule>

CYBERPATRIOT XV (2022-2023) COMPETITION SCHEDULE



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 **US Eastern Time**.

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 14 - October 16, 2022 & October 20 – 21, 2022* Because of Fall Break for many teams, Round 1 will have additional competition windows during Oct. 20-21. Teams may choose their competition period from any of the competition windows for Round 1. TEAMS MAY COMPETE ONLY ONCE IN ROUND 1. The Download instructions will be the same for all Round 1 dates. Sneak Peeks or Premature image openings will result in penalties for teams. Image download instructions and links are sent to Coaches at 5 PM ET , on or before the Monday prior to the competition round. The StartEx email with the password to the images is sent to teams at 9 AM ET the Friday of the competition round.	All teams may compete. Tests basics of cybersecurity skills.
Round 2 (All teams participate)	November 4 - November 6, 2022 Image download instructions and links are sent to Coaches at 5 PM Eastern , on or before the Monday prior to the competition round. The StartEx email with the password to the images is sent to teams at 9 AM Eastern the Friday of the competition round.	All teams may compete even if they did not compete in Round 1 or had a low score. More difficult than Round 1, to allow teams to be divided into skill-level tiers for the State Round.
State Round (All teams participate)	December 9 - December 11, 2022 Image download instructions and links are sent to Coaches at 5 PM Eastern , on or before the Monday prior to the competition round. The StartEx email with the password to the images is sent to teams at 9 AM Eastern the Friday of the competition round.	All teams may compete with a clean slate. Past performance or participation in Rounds 1 and 2 do not count toward placement. Teams compete against other teams based on skill level for State Awards and Tier Awards.
Semifinals	January 20 - January 21, 2023 (Two Days only) Image download instructions and links are sent to Coaches at 5 PM Eastern , on or before the Monday prior to the competition round. The StartEx email with the password to the images is sent to teams at 9 AM Eastern the Friday of the competition round.	
National Finals	March 17-21, 2023	National Finalist teams compete for National Championship in their respective divisions.

THE CYBER VIKING SYSLOGS

Stop Trying to be a Unicorn!

Practical Tips for Joining the Cyber Workforce

by Chip Thornsburg

According to a workforce study in 2019 conducted by the National Institute for Cybersecurity Education (NICE) there were more than 314,000 unfilled cybersecurity related jobs in the United States. (CyberSeek, 2019) Earlier studies estimated the global cyber workforce shortage would rise to more than 1.18 million jobs by this year, 2022. (Frost & Sullivan, 2017) The dire predictions from the NICE study and others before prompted a response from the federal government including Whitehouse directives. Creating a wave of cybersecurity related degree or training programs being offered in the U.S. In fact, you would be hard pressed to find a college or university in the U.S. that does not offer some form of cybersecurity program.

Coming out of the COVID-19 pandemic it seems the 2017 predictions underestimated the shortages in the cyber talent pipeline we currently face. Employers face numerous challenges to attract and retain cyber security professionals. The “Great Resignation” and sky-rocketing wages for technical workers are creating an environment where 63% of companies report unfilled cyber security positions and more than half of the jobs that are filled take more than 6 months to find a qualified candidate. (ISACA and LookingGlass, 2022) At the time of this writing the CyberSeek heatmap shows over 714,000 unfilled cybersecurity positions in the U.S. more than double the number of unfilled jobs shown in 2019. (CyberSeek, 2022)

We could make the logical assumption that companies would relax some of the barriers preventing candidates to apply for entry level positions to fill vacancies. Unfortunately, we would be wrong. More than 70% of current job postings for an entry level cybersecurity role (Cybersecurity Analyst) require a 4-year degree, 3+ years of experience and some combination of certifications. If you are looking to join the cybersecurity workforce, we will assume for a moment that you do not yet have 3 or more years of experience. So, what do you really need to do to break into the cyber security field?

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The logical next consideration is formal education. There are many considerations when pursuing the educational component desired by so many employers. First is the choice between private or public schools. Typically, a public school is less expensive than a private school the counter argument is that private institutions provide a higher level of expertise. Think Harvard vs. Ohio State, no offense to my Buckeye friends! Of greater concern is that in a survey of employers only 23% believe existing educational program teach the required technical skills. 61% did not believe recent graduates could perform the basic tasks required in an entry level cybersecurity position. (Crumpler, 2019)

As mentioned earlier you can find a cybersecurity related degree program in most institutions, but many programs tend to be long on theory and short on practical application. Employers are confronting a long-held belief that a 4-year degree equates to subject matter competence or even mastery does not seem to be the case in cybersecurity. Many are slowly relaxing the degree requirements for entry level jobs and instead focusing on the technical skills of the applicant. (Espinosa, 2021)

Certifications can provide a level of skill validation for an employer, depending on the certification and the desired job. A word of caution, simply collecting certifications to amass letters behind your name is no longer sufficient. Many certifications can be earned by attending a bootcamp or 30-day study course. If you choose to pursue a certification, be certain it directly relates to your desired position.

The challenge now becomes how to develop job related skills for a specific work role. Part of our federal response has been to outline cybersecurity work roles and detail the required Knowledge, Skills, Abilities (KSA), and aligns them with specific tasks a worker would perform as part of that job. The Cyber Career Pathways Tool is an excellent place to find out what skills or tools you will need to perform in your desired work role. (National Initiative for Cybersecurity Careers and Studies, 2022) The Pathways Tool lists 52 job titles used by the federal determining factor for government and contractors with related KSA information. Increasingly technical skills will be the cybersecurity workforce.

THE CYBER VIKING SYSLOGS

(Cont'd from Page 6)

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Crumpler, W. a. (2019). The Cybersecurity Workforce Gap. Washington DC: Center for Strategic & International Studies.

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ISACA and LookingGlass. (2022). State of Cybersecurity 2022: Global Update on Workforce Efforts, Resources and Cyberoperations. Schaumburg, IL USA: ISACA.

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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:
[www.facebook.com/
tx20009MVCPTeam/](http://www.facebook.com/tx20009MVCPTeam/)

High School Website Link:
[https://www.mvisd.com/
Page/3001](https://www.mvisd.com/Page/3001)

Team E-mail:
[mvhscpteam@
gmail.com](mailto:mvhscpteam@gmail.com)

Coach's E-mail:
[fredrick.f.hall@
hotmail.com](mailto: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.