Hondo Cyber Owls

July 2022

THE CYBER OWL YEAR IN REVIEW

This season has been our most successful season since our team was established in 2019. For the first time in our history, our four-member high school team went from competing in the Gold Tier of the Open Division to competing in the Platinum Tier. This is a huge accomplishment for our team because that means we finished in the top 30% of the 2,951 Open Division teams registered across the country. Another milestone this year for the Cyber Owls is that we had our first all-girl middle school cyber competition team. These four middle school members had similar Cisco Labs, Windows, and Linux images as their high school team members. They had to learn the same cybersecurity concepts and techniques as the high school team. All of our team members should feel proud of what they were able to accomplish this past season.

Unfortunately, three of our high school team members have just graduated: David "Number 1" Counselman, Ashlyn "Quill" Persyn, and Mariah "Post-It" Persyn. David has been our team captain for the past three years. Ashlyn started out as a Linux team member and developed into our Linux team lead this past season. Mariah took on the role of Cisco team lead for the past two years. I will miss their personalities and getting to watch them work together as a team during a competition. I wish them the best in their future endeavors.

With three members leaving our high school team, we are currently looking for new high school students to join our team. We are also recruiting for our middle school team. If you have a child or student in grades 6-11 that is interested in computers, information technology, or cybersecurity, please encourage them to join our team. There is no fee to join or to participate on the Hondo Cyber Owls; it is completely free. Some of the many benefits of joining the Cyber Owls include scholarship opportunities, attending conferences, and getting a jump start on a path that can lead to a career that has the most impact in all industries from agriculture to national defense.

I would like to thank my two incredible Technical Mentors, Melisa Joyner and Will Cardona, for their wonderful job in helping the teams learn and prepare for the 2021-2022 cyber competition season. A huge thank you to the Hondo Public Library Director, Elsie Purcell, Hondo Public Library Computer Tech, Ken Gallegos, and the Hondo Public Library staff for all of their support and for providing a place for the team to practice and compete.

A big thank you also to Chip Thornsburg, Cyber Defense Program Coordinator, Northeast Lakeview College, for contributing his article "Stop Trying to be a Unicorn" for this newsletter.

Finally, I would like to thank this year's Hondo Cyber Owls Team Sponsors: Inflow Logistics, Respec Consulting, and Russel Persyn. We are extremely grateful for their support with our mission of preparing the next generation of cyber professionals. Please join us in thanking our three team sponsors for their contribution.

Coach Hall

INSIDE THIS ISSUE

"THE TEAM OF FOUR WAS ABLE TO ACHIEVE A GOAL BY QUALIFYING TO COMPETE WITH THE TOP 30 PERCENT OF THE TEAMS IN THE NATION FOR OUR

CYBER OWLS SEIZE PLATINUM

Our Hondo Cyber Owls High School team truly seized the moment to reach the Platinum Tier in the Open Division for the first time in our team's short three year history. I briefly talked about their success on the front page of this edition of our newsletter. In this article I will discuss their success by showing you the numbers of overall teams, number of teams in the Platinum Tier, and Platinum teams in Texas.

The Platinum Tier of the CyberPatriot program is the top 30% of all the teams that are registered to compete. Here is the breakdown of how the team performed in the first, second, and State rounds.

Total Number of Teams in CyberPatriot XIV

These are the totals from Round 1 and 2

- Total Number of Registered Teams - 5,254
- Total Number Open Division Teams - 2,951
- Total Number Open Division Platinum Teams - 646

After the State Round Placement

Hondo Cyber Owls Overall Placement - 512

Open Division Teams in Texas

- Total Number of Open Division Platinum Team in Texas - 57
- Hondo Cyber Owls Placement in Texas - 46

The Open Division has more registered teams then the All-Services Division, which makes it more difficult for a team to qualify to compete in the Platinum Tier. Even though the Cyber Owls did not advance to the semifinal round this season, the team of four was able to achieve their goal by qualifying to compete with the top 30% of the teams in the nation for our division.

Congratulations Number 1, Glitterbomb, Post-It, and Quill on a fantastic season.

Pictured Left to Right Glitterbomb, Number1, Post-It, and Quill

NEW TEAM TAKING FLIGHT

This season we saw our newest team take flight. For the first time in the history of the Hondo Cyber Owls, we had a middle school competition team. In an industry that is predominantly male, this four member all-girl team proves that there is a place for anyone that wants to learn and pursue a career in cybersecurity.

This team had fun learning about cybersecurity concepts such as setting a password policy, user permissions, removing unauthorized software , and removing computer viruses. They also learned about various cyber attacks and how hackers can gain access to a computer, network, or mobile device.

Congratulations to the middle school team and their success during their inaugural season.

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. Mr. Thornsburg has worked in the cyber industry for more than 35 years, bridging the gap between Law Enforcement and Information Technology Professionals. He is an experienced Business and Technology Instructor and public speaker on issues of Computer Security and Cyber Crime Investigation and specializes in Incident Response and Investigation.

This 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.

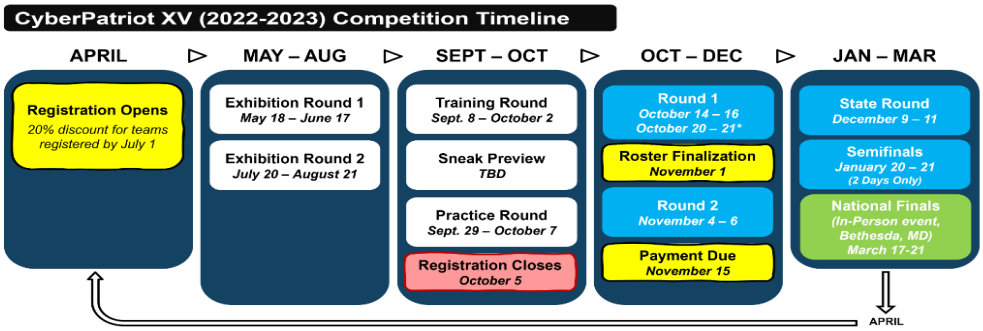
"THIS FOUR MEMBER ALL-GIRL TEAM PROVES THAT THERE IS A PLACE FOR ANYONE THAT WANTS TO LEARN AND PURSUE A CAREER IN CYBER..."

"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"

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.

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?

(Continued on Page 6 Cyber Viking Syslogs)

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"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)"

(Cont'd from Page 5)

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 government and contractors with related KSA information. Increasingly technical skills will be the determining factor for cybersecurity workforce.

(Cont'd from Page 6)

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THE 2021-2022 TEAM SPONSORS

This season the Hondo Cyber Owls were fortunate have some wonderful team sponsors. We had donations from RESPEC Consulting, Inflow-logistics, and a private benefactor. It is because of the donations from our sponsors that we were able to provide breakfast, lunch, snacks, team t-shirts, and matching facemasks for all of our team members, technical mentors, and coach. Thank you for helping to make this season the best one yet.

RESPEC Consulting agreed to sponsor our team. We are extremely grateful for their support with our mission of preparing the next generation of cyber professionals. Please join us in thanking RESPEC Consulting for their contribution.

For more information about RESPEC Consulting you can visit their web site at https://www.respec.com/

"We support those who defend us. Inflowlogistics LLC (DBA Inflow), is a national security firm providing a wide range of expertise and service offerings to the U.S. government and its international partners. Inflow is a Women Owned Small Business (WOSB) headquartered in downtown San Antonio, TX, just two blocks from the Alamo. Inflow's service offerings include Intelligence, Identity Intelligence (I2), Training, Cyber, and value-added Thought Leadership. At Inflow, we push the industry boundaries, providing innovative services in support of National Security.

Additionally, we do the right thing because we decided to; it's just that easy. Our company culture is founded on positively impacting our employees' lives, which is why we choose to support our local community. We care because the community we serve is where we live. At Inflow, we provide each employee paid opportunities to give back to their local community and support local charities tied to the missions we serve. We're proud to support the Hondo Cyber Owls high school program. Enabling cyber skillsets in our youth is imperative to creating a future skilled cyber workforce." Learn more at https://inflow-ns.com/service-offerings.

HONDO CYBER OWLS CYBERPATRIOT TEAM

WE MONITOR NETWORKS BY SOARING THROUGH CYBERSPACE HUNTING FOR PREY. WE USE OUR TALONS AS A DETERRENT TO PROTECT OUR DATA. USING ADVANCED DETECTION TECHNIQUES, WE SPREAD OUR WINGS AND LAUNCH PRECISE COUNTER MEASURES TO DEFEND OUR NETWORKS AGAINST CYBER ENEMIES. WE FIND, CAPTURE, AND ANNIHILATE ALL CYBER THREATS. WE ARE THE CYBER OWLS!

HONDO CYBER OWLS CYBERPATRIOT TEAM

WEB PAGE:: HTTPS://HONDO-TX.ORG/LIBRARY/CYBER_OWLS.PHP

HTTPS://WWW.FACEBOOK.COM/HONDOCYBEROWLS/

E-MAIL: HONDOCYBEROWLS@GMAIL.COM

ANGELA M. HALL— CHIEF EDITOR OF THE CYBER TALON

ABOUT THE HONDO CYBERPATRIOT TEAM

The Vision

The vision of the Hondo Cyber Owls CyberPatriot 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 Hondo Cyber Owls 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.