

Welcome to the 2024 Talmetto Cyber Defense Competition

The goal of the Palmetto Cyber Defense Competition (PCDC) is to energize South Carolina Colleges, High Schools and their students to focus on the development of technical skills in the areas of networking and cyber security in preparation for exciting careers in Science, Technology, Engineering, and Mathematics (STEM).

During the competition, students from each school form Blue Teams of six competitors that are responsible for operating a Palmetto Defense College network. Each of the teams are provided with a mal-configured business network at the start of the competition and are challenged to properly reconfigure the network, add new services, and respond to additional requirements; all the while defending against a Red Team of Naval Information Warfare Center (NIWC) Atlantic, Department of Defense and industry volunteers attempting to disrupt and penetrate their networks.

Competing Blue Teams are scored for accomplishing administrative and business tasks while maintaining network/service availability, such as mail, database and web servers, as well as their ability to detect and respond to cyber threats. Teams must also be able to respond to business requests such as the addition or removal of services, and balance security needs against business needs. The Southeast Collegiate HackWarz Competition, held on Saturday, 13 April will consist of collegiate teams competing in a capture the flag event. Also on Saturday, we have Cyber-n-the Middle (CITM) where middle school students will participate in a program to encourage involvement in STEM and see PCDC and HackWarz teams in action.

Teams from South Carolina High Schools will compete on April 13th, followed on April 14th by teams from Carolina Colleges and Universities. On April 15th cyber security professionals from DoD, academia and industry will compete. The qualifying 2024 PCDC College and High School competitors are:

South Carolina Colleges and Universities

- University of South Carolina
- Charleston Southern University
- US Naval Academy
- University of North Carolina Wilmington
- Horry Georgetown Technical College
- Trident Technical College
- ECPI University
- The Citadel
- Clemson University

South Carolina High Schools

- Academy for the Arts, Science & Technology, Myrtle Beach
- Clover High School, Clover
- Home School Network, Charleston
- South Aiken High School, Aiken
- Ashley Ridge, Summerville
- Cane Bay High School, Summerville
- Hanahan High School, Hanahan
- Academic Magnet High School, N. Charleston
- Swofford High School, Spartanburg
- Military Magnet Academy-Charleston

The competition, awards and scholarships are made possible through the generous support of many industry and institutional sponsors; and over 100 volunteers from NIWC Atlantic and the Armed Forces Communications and Electronics Association (AFCEA) South Carolina Lowcountry Chapter, as well as many cyber security industry supporters & volunteers both in South Carolina & throughout the United States.

This year's scenario: Competing teams will be operating the "Palmetto Co-Op Doctor's Clinic (PCDC) The clinic is expanding from a single location to ten, marking a new chapter in its history. But the transition is marred by chaos as the clinic's IT contractor has been dismissed for gross negligence. The competing blue teams represent newly hired IT professionals tasked with salvaging clinic's digital infrastructure. Their mission: to secure the medical records, charting systems, reservations, email services, and website, all left vulnerable and misconfigured by the previous contractor. The teams will be scored for protecting their network, keeping services running and performing business operations.

NIWC Atlantic and the South Carolina Lowcountry Chapter of AFCEA have jointly organized the 2023 PCDC. This is PCDC's 11th year. PCDC continues to draw the best cyber security talent among South Carolina high schools and Carolina colleges to the competition. Scott Bell, Cyber Warfare Capabilities IPT Lead at NIWC Atlantic, serves as the Director of the 2023 PCDC. Jennifer Greenwell is President and Greg Blackburn is the PCDC Lead for the AFCEA South Carolina Lowcountry Chapter.

2023 PCDC Schedule of Events

Follow us on the web at pcdc-sc.com and https://www.facebook.com/PalmettoCyberDefenseCompetition

Saturday, 13 April 2024, PCDC High School Competition, HackWarz, CitM

Connectivity Checks (PCDC/AWS Network & MS Teams) & Team Registration 7:45 am - 8:15 am: Blue Teams Briefing/Opening Ceremony 8:15 am - 8:30 am: 8:30 am – 10:00 am: Competition begins/Initial Injects/Secure the Network 8:30 am - 8:50 am: Hack Warz continuity checks 8:30 am - 9:00 am Cyber-in-the Middle (CitM) Morning Session Sign-in 8:30 am - 10:00 am: Initial Injects / Secure the Network 9:00 A.M. -2:30 P.M. Hack Warz at PCDC competition 9:00 am - 11:45 am CitM Morning Session 10:00 am - 3:00 pm: PCDC Operate Network Under Hacker Attacks 12:45 am - 1:10 pm: CitM Afternoon Session Sign-in 1:10 pm - 3:40 pm: CitM Afternoon Session 3:00 pm - 3:25 pm: Red Team members visit Blue Teams 3:25 pm - 3:35 pm: Break/View Sponsor Booths

Blue Team Presentations 3:35 pm - 4:15 pm:

4:15 pm - 4:25 pm: Red/Gold Team Debrief: POV, Common Mistakes

4:25 pm - 4:40 pm: Keynote Speaker: Charles Hester, Director, NAO, Fleet Cyber Command

4:50 pm - 5:30 pm: Awards / Closing Ceremony (PCDC & HackWarz)

Sunday, 14 April 2024, Collegiate Competition

7:45 am - 8:15 am: Registration

8:15 am - 8:30 am: Blue Teams Briefing/Opening Ceremony

Competition Begins- Initial Injects / Secure the Network 8:30 am – 9:00 am:

9:00 am - 3:45 pm: Operate Network Under Hacker Attacks 3:45 pm - 4:05 pm: Red Team members visit Blue Teams

4:05 pm - 4:10 pm: Break/View Sponsor Booths 4:10 pm - 4:50 pm: Blue Team Presentations

Red/Gold Team Debrief: POV, Common Mistakes 4:50 pm - 5:00 pm:

5:00 pm - 5:15 pm: Keynote Speaker: Nancy Mace, U.S. Representative, SC's 1st Congressional Dist

5:15 pm - 5:30 pm: Awards / Closing Ceremony.

Monday, 15 April 2024, Pro Day Competition

7:45 am - 8:15 am: Registration

Blue Teams Briefing/Opening Ceremony 8:15 am - 8:30 am:

Competition Begins, Conduct Initial Injects/Secure the Network 8:30 am- 8:45 am:

8:45 am - 4:00 pm: Operate Network Under Hacker Attacks 4:00 pm - 4:20 pm Red Team members visit Blue Teams 4:20 pm - 4:45 pm: Break/View Sponsor Booths/Networking

4:45 pm - 5:15 pm: Blue Team Briefs

5:15 pm - 5:30 pm Red/Gold Team Debrief: Common Mistakes

5:30 pm - 5:50 pm: Keynote Speakers: CAPT Nicole Nigro, CO; Pete Reddy, ED, NIWC Atlantic

5:50 pm - 6:10 pm: Awards / Closing Ceremony



Saturday Keynote Speaker Mr. Charles Hester, Director, Navy Authorizing Official U.S. Fleet Cyber Command/U.S. TENTH Fleet

Mr. Charles Hester serves as the Navy Authorizing Official (NAO) for U.S. Fleet Cyber Command/U.S. Tenth Fleet where he has overall responsibility as approving authority for the operation of Navy Information Systems/Networks/Sites at an acceptable level of risk. The NAO support functions are critical - mechanism by which the Navy decides how much risk to allow on the DoD Information Networks (DoDIN). Prior to selection as NAO Director, Charles was NAO Deputy Director, NAO Division Head, NAO Branch Head and NAO Senior Cybersecurity Analyst. Before returning to the Navy, Charles worked in the commercial/private sector for various companies in IT/cyber roles such as Senior Software Analyst, Senior Network Administrator, Senior Network Engineer, IT Manager, IT Project Manager, and Federal Sector Program Manager. Charles holds a BS in Computer Information Systems from Saint Leo University & Master of Business and Technology from the University of Georgia. He holds CISSP & PMP certifications.



Monday Keynote Speaker: Captain Nicole Nigro, USN, Commanding Officer, Naval Information Warfare Center Atlantic

Captain Nicole K. Nigro assumed duties as CO of NIWC Atlantic, Nov. 4, 2021. NIWC Atlantic hosts more 4,900 federal civilian & military employees & approximately 9,000 industry partners. NIWC Atlantic's is HQed in Charleston, SC, with offices spanning 7 major locations inside & outside the U.S. NIWC Atlantic is a Navy engineering and technology command, and in her role, Nigro oversees the full-spectrum research and development, test and evaluation, engineering design, development and fleet support across the complete Information Warfare domain. A native of Duluth, Minn. Nigro received her commission upon graduating the US Naval Academy with a BS in aerospace engineering in May 1999. In 2000 she was designated as an engineering duty officer (EDO) and transferred to the Naval Post Graduate School where she earned her MS in space systems engineering. After receiving her degree, she reported to SPAWAR Systems Center San Diego for her EDO qualification. Nigro's personal awards include three Meritorious Service Medals, one Joint Service Commendation Medal, four Navy Commendation Medals & one Army Achievement Medal.



Sunday Keynote Speaker: United States Congresswoman Nancy Mace

Nancy Mace grew up in the Lowcountry. Before being sworn into Congress, Nancy earned accolades as one of the most fiscally conservative members of the South Carolina General Assembly. Nancy grew up in Goose Creek, S.C. She worked as a waitress at a Waffle House. Nancy earned her high school diploma a few months later by taking college classes at TTC in N. Charleston. She graduated magna cum laude from The Citadel, where she was the school's first female to graduate from its Corps of Cadets in 1999. In 2004 Nancy earned a masters degree from The Univ of Georgia. She is the author of In The Company of Men: A Woman at The Citadel. In 2008 Nancy started her own company. Her background in business is in technology, PR & marketing and more recently commercial real estate before coming to Congress. Nancy is also the recipient of the Champion Award from Palmetto Goodwill in her efforts in education and in helping those most in need receive job training.



Monday Keynote Co-Speaker: Peter Reddy, Executive Director, Naval Information Warfare Center Atlantic

As Executive Director and senior civilian official of Naval Information Warfare Center (NIWC) Atlantic, Mr. Reddy sets command-wide strategic goals and manages engineering and business operations for more than 4,900 federal civilian and military employees, and approximately 9,000 industry partners. Mr. Reddy is responsible for the execution of technical work applying systems engineering and programmatic discipline to deliver information warfare solutions to warfighters. In January 2017, Mr. Reddy was selected for the Senior Scientific Technical Manager position of NIWC Atlantic Chief Engineer/5.0 Engineering Competency Lead. A 1984 graduate of the University of Virginia with a BS in aerospace engineering, Mr. Reddy also received a MS in systems engineering from the Naval Postgraduate School, Monterey, California; and a Masters of Strategic Studies from the Marine Corps War College. He also has an MBA from George Mason University and a Master's Certificate in Information Systems & Operations from NPS. Mr. Reddy also graduated from the Air Command & Staff College & the Marine Corps War College. He is certified Level III in the Defense Acquisition Program Management and Systems Engineering Career Fields; as a Certified Systems Engineering Professional; and as a Professional Engineer

The AFCEA SC Lowcountry Chapter and NIWC Atlantic wish to recognize the generosity and continuing support of our many Corporate Sponsors who made possible the 2024 Palmetto Cyber Defense Competition



