CYBERPATRIOT'S
NATIONAL YOUTH CYBER DEFENSE COMPETITION

A STEM program of the Air & Space Forces Association

CyberPatriot is AFA's National Youth Cyber Education Program, created to motivate students toward careers in cybersecurity and other STEM disciplines. The program has a variety of offerings for K-12 students, as well as a cyber safety initiative for senior citizens and a community service opportunity for student and adult volunteers.

The National Youth Cyber Defense Competition

At the center of CyberPatriot is the National Youth Cyber Defense Competition, an online-based program that puts teams of high school and middle school students in the position of newly hired IT professionals tasked with managing the network of a small company. Through a series of online competition rounds, teams are given a set of virtual operating systems and are tasked with finding and fixing cybersecurity vulnerabilities while maintaining critical services. The top teams in the nation earn all-expenses-paid trips to Maryland for the National Finals Competition where they can earn national recognition and scholarship money.

> *Registration for CyberPatriot XVI (2023-2024 competition) is open through October 3, 2023.*

Team Overview

Coach: The team coach is typically a teacher or adult leader of a team-sponsoring school or youth organization. Coaches need no special technical background, but they are responsible for registering the team and the student competitors.

Competitors: The team roster must have between two and six competitors (five active, one substitute) who are enrolled at the school or organization they are competing with. No prior cybersecurity knowledge is required for a competitor to be successful.

Technical Mentor (Optional): In cases where a coach needs help with the provided online training or with specific topics, they may request assistance from qualified technical mentor. Technical mentors are registered adult volunteers (coaches have access to a mentor database) who possess appropriate IT knowledge and skills. Background checks are performed on all technical mentors in our network.

Team Assistant (Optional): A non-technical adult volunteer who wished to help a team with administrative tasks. Background checks are performed on all team assistants in our network.

Competition Divisions and Fees:

A team competes in one of three divisions:

- **Open Division / $225 per team:** High schools, scouting units, boys' and girls' clubs, home school programs, and other youth organizations upon approval from CyberPatriot Program Office
- **All Service Division / $0 per team:** High school JROTC / Civil Air Patrol / Naval Sea Cadet Corps
- **Middle School Division / $175 per team:** Open to teams of middle school students (typically grades 6-8)

Fees cover access to practice round virtual images and Cisco's Networking Academy. Additionally, all participants are sent a CyberPatriot t-shirt and challenge coin for their participation in the program. Fee waivers may be requested for:

- **All-Girl teams:** In an effort to attract more girls to STEM, all-female teams do not pay a registration fee
- **Title I Schools:** Teams from Title I schools and other schools with inadequate funding
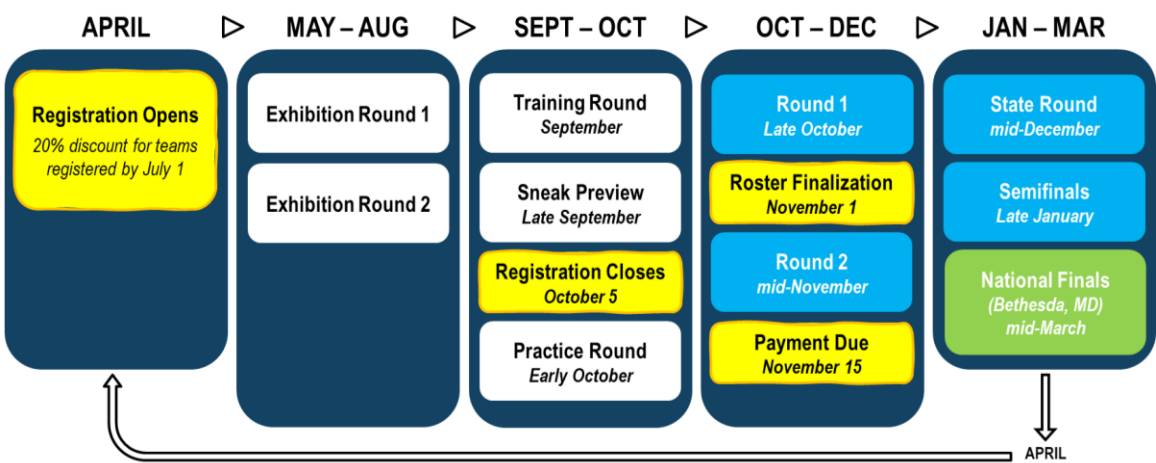
Competition Facilitation

All rounds of the competition (except for the in-person national finals competition) are completed online during weekends from teams' home locations (schools, homes, libraries, etc.). The competition schedule generally follows the timeline below:

APRIL	MAY – AUG	SEPT – OCT	OCT – DEC	JAN – MAR
Registration Opens 20% discount for teams registered by July 1	Exhibition Round 1	**Training Round** September	**Round 1** Late October	**State Round** mid-December
	Exhibition Round 2	**Sneak Preview** Late September	**Roster Finalization** November 1	**Semifinals** Late January
		Registration Closes October 5	**Round 2** mid-November	**National Finals** (Bethesda, MD) mid-March
		Practice Round Early October	**Payment Due** November 15	

APRIL

Prior to the rounds, coaches are emailed downloadable "virtual image" representations of operating systems with known cybersecurity vulnerabilities. At the beginning of the round, a password to unlock the virtual image is sent out. Teams then choose any 6-hour period during the designated round to compete, finding and fixing the cybersecurity vulnerabilities while keeping critical computer functions working. Additionally, students are tested and scored on networking knowledge and building virtual, secure networks. Team progress is recorded by a central CyberPatriot scoring system.

The top 28 teams – 12 Open Division, 13 All Service Division (two from each service and one wildcard), and three Middle School Division teams – qualify for the National Finals competition.

Training Materials and Technical Specifications

All training materials necessary for a successful competition are provided on the CyberPatriot website. Teachers (and other coaches) are encouraged to use the provided materials not solely for use in preparing their team for competition, but also to educate all students in their school or organization about good cybersecurity practices and safe computer and Internet use. Coaches are welcome to supplement the provided teaching materials as they wish.

For the competition itself, a minimum of two to three computers and an Internet connection are required for occasional weekend use during the online portions of the competition. A full list of hardware and software requirements is available on www.uscyberpatriot.org.