

# Air Force Association's CyberPatriot

## The National High School Cyber Defense Competition



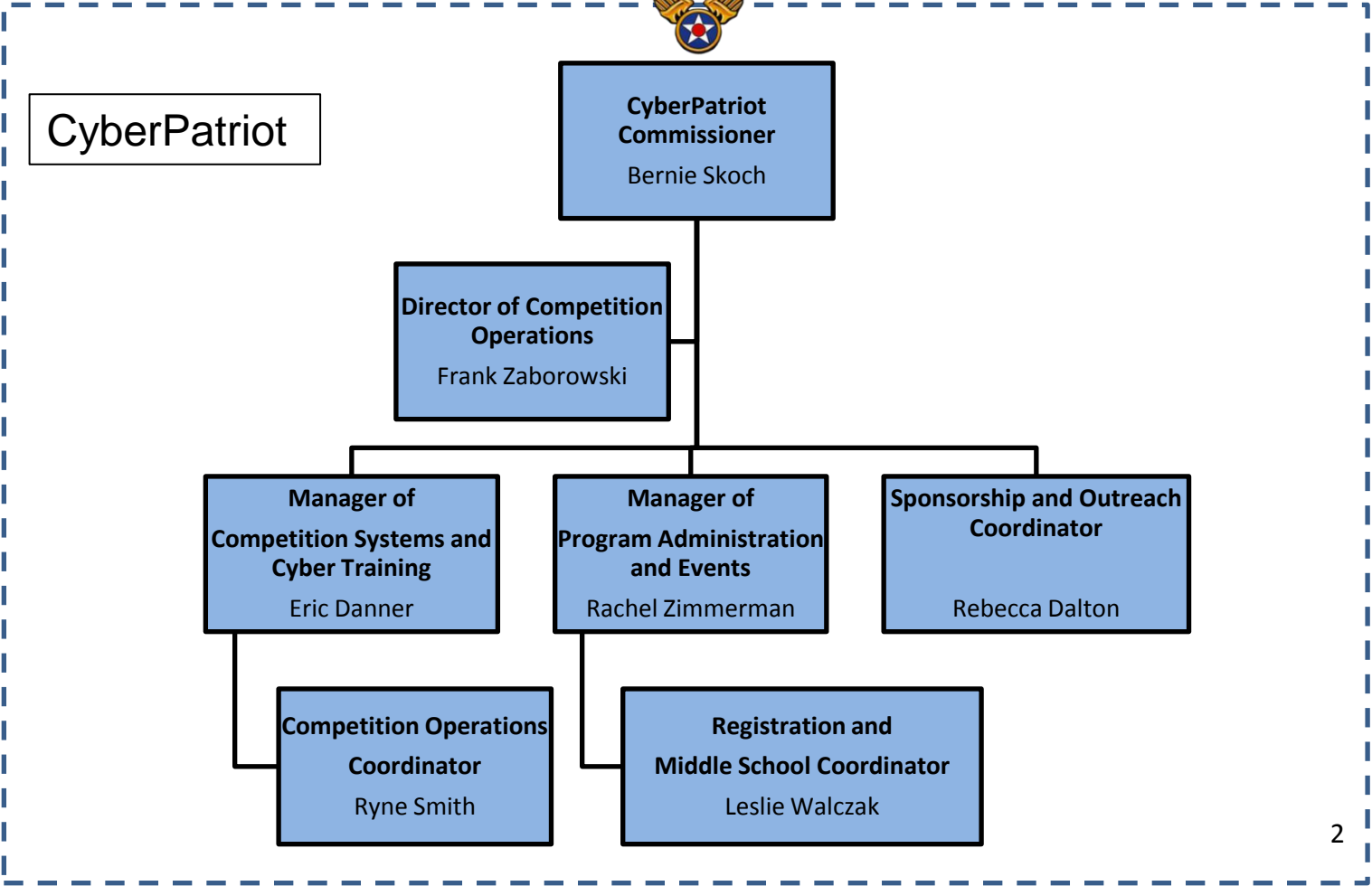
Online  
Coaches' Meetings  
September 10 & 11, 2013





# Organization Chart

**Air Force Association  
AFA**





# Coaches' Role

## The Coach is the Backbone of the Competition

**No team may compete in CyberPatriot until there is first a responsible adult willing to accept the following responsibilities.**

- (1) **Competitor Protection**. The coach is responsible for the protection and safety of their team's competitors while involved in CyberPatriot activities. Access to minor students in a way that protects them, respects parental prerogatives, and follows legal statutes (e.g., Children's Internet Protection Act), is the coach's responsibility. As the "gate keeper" for contact with the competitors, the coach is accountable for the interaction of "mentors or technical advisors" to the competitors.
  
- (2) **Competition Integrity**. Ensuring the integrity of the competition is essential to the fairness of the competition. Once the competition begins, the coach must ensure that their competitors receive no assistance, except between competitors on the same team. The coach upholds the guiding and operating principles of the competition at the team level.
  
- (3) **Official Point of Contact**. The coach is the official point of contact for a team. Official CyberPatriot competition and other correspondence is provided to coaches for further dissemination to their teams. It is key during competition that coaches monitor their e-mail for up-to-date information that competitors will not receive directly. The role of official point of contact cannot be delegated to the mentor.
  
- (4) Abide by the CyberPatriot Coaches' Agreement.



# Rules of the Road

**This WebEx is provided by Cisco Systems**



**Meeting is based around presentation.**

**Presenters will use Audio**

**Participants will use Chat**

**NO private chat rooms**

**Hold questions until the end, so everyone can concentrate on brief**

**Presentation will be posted at [www.uscyberpatriot.org](http://www.uscyberpatriot.org) under the CyberPatriot VI tab/  
CyberPatriot VI Documents**



# CyberPatriot



# Registration



# Registration

The deadline to register as a Coach is October, 10

- Rule change: One coach may now coach up to three teams
  - Each team requires a unique coach registration with a unique email address
  - Competitors are non-transferable between teams
  - [Click here](#) for more information
- Middle school
  - Registration for the Middle School Pilot is now open to all Middle Schools
  - [Click here](#) for more information
- Fee Waiver
  - For each All Service Division team registered at a school we will waive one Open Division team fee



# CyberPatriot



# Outreach



- NCWIT Award for Aspirations in Computing
  - recognizes high school young women for their interest and aptitude in technology.
  - Applications are open 9/15-10/31
  - [www.aspirationsaward.org](http://www.aspirationsaward.org).



@NCWITAIC



# CyberPatriot



# Competition Operations



# CyberPatriot VI Rules Book

## Planned October 1 Release

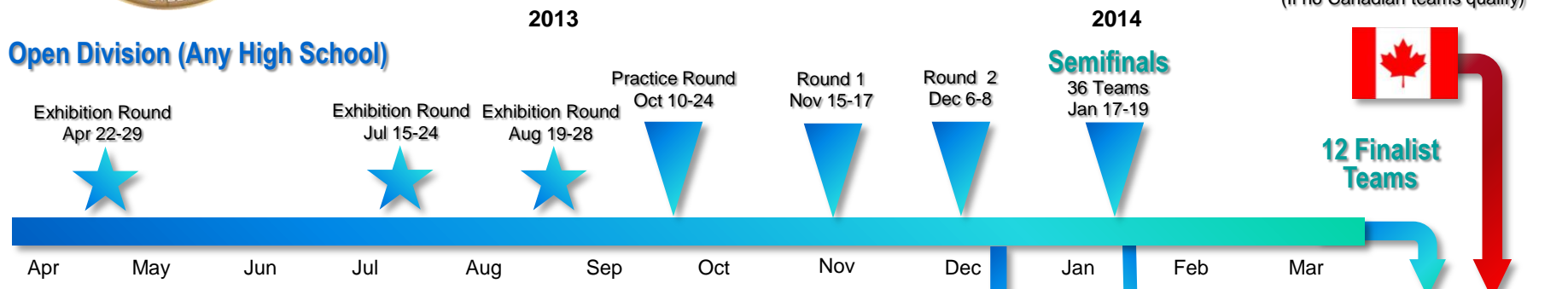
### Rules Changes

- 6-hour competition period for ALL Images and Tasks
- 3 teams per Coach
- MUST connect to scoring server over Internet to begin competition
- Online Scoreboard
- Awards Hierarchy
- Regional Recognition Round
- Middle School Division
- Limited Sunday Competition Window
- Friday Competition Window until 3 am Saturday Eastern Time

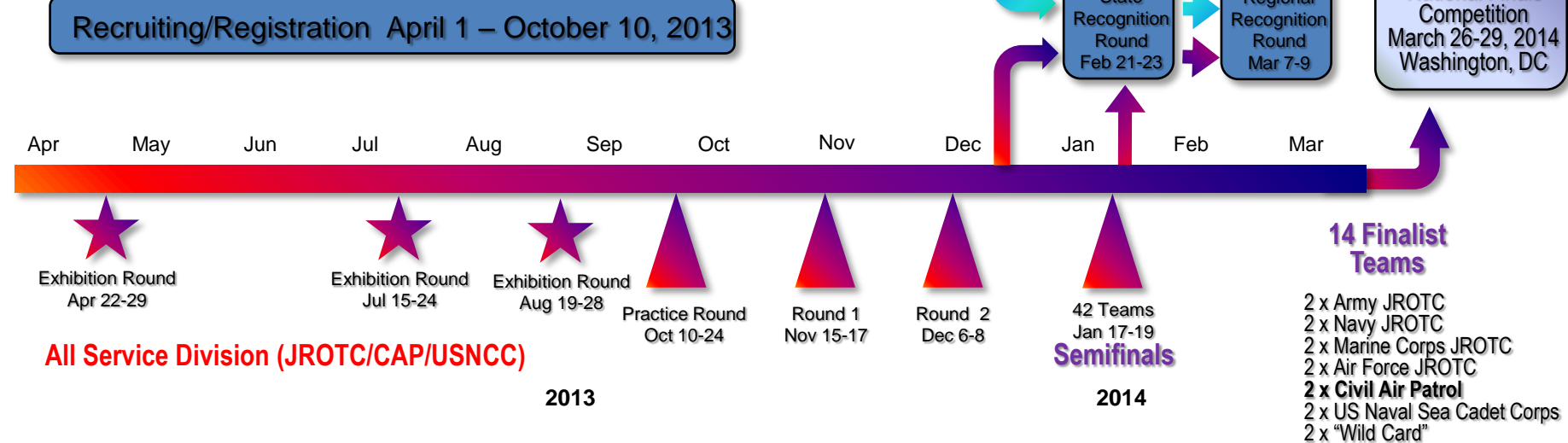


# CP-VI Competition Flow

## Open Division (Any High School)



Recruiting/Registration April 1 – October 10, 2013



CP-VII Recruiting Pre-Registration Jan 1 – Apr 1 2014





# CyberPatriot VI Competition System Schedule

■ CCS

■ CyberNEXS

## Sneak Preview Round

- Sep. 21, 2013

## Practice Round

- Oct. 10 - 24, 2013

## Round 1

- Nov. 15 - 17, 2013
- Backup: Nov. 22 - 24, 2013

## Round 2

- Dec. 6 - 8, 2013
- Backup: Dec. 13 - 15, 2013

Qualification  
Rounds

*All teams  
compete in  
Rounds 1 & 2*

## Semifinals

- Practice: Jan. 9-15, 2014 (Tentative)
- Competition: Jan. 17-19, 2014
- Backup: Jan. 24-26, 2014

## State Recognition Round

- Feb. 21-23, 2014
- Backup: Feb. 28 – Mar. 2, 2014

*All teams compete except National Finalists*

## Regional Recognition Round

- Practice: Feb. 24 – Mar. 6, 2014 (Tentative)
- Competition: Mar. 7 - 9, 2014
- Backup: Mar. 14 - 16, 2014

*Top Division teams in each state compete*

## The National Finals Competition: Mar. 26 - 29, 2014



# Sneak Preview

**September 21, 2013**

**12 Noon – 3 pm Eastern Time**

**(3 Hours)**

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- Open to ALL registered teams
- Competitors do not have to be registered
- Individuals compete from home
- Coaches control images, passwords, and hashes
- WebEx Q&A session 11:30 Eastern Time
- Multiple training sessions during round



# Sneak Preview

- Images will be distributed by Thursday, September 19 to all Coaches and Mentors
- Decryption password and hashes will be sent to all registered Coaches and Mentors just before StartEx on Saturday
  - All users will receive a unique hash – **DIFFERENT FROM QUALIFICATION ROUNDS**
- Scoring feedback will not take place without connection to server

**Sneak Preview Edition of CyberSentinel  
will be released**

**Friday, September 13, 2013**



# CyberPatriot Competition System

Treat as Examination Material

Control



Delete

**Property  
of the**

**Air Force Association**

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sole property of the Air Force Association.  
All rights reserved.

**Do not distribute without permission of the Air Force Association.**



# CyberPatriot Round 0 Image

**Report Generated At: 2013-Sep-09 18:32:31 UTC**

**Approximate Running Time: 00:33:26**

**Current Team ID: 046A926BB3**

**20 out of 60 points received**

**Connection Status: No Errors Detected**

Internet Connectivity Check: OK

CyberPatriot Connection Status: OK

CyberPatriot Score Upload Status: OK

**penalties assessed, for a loss of 0 points:**

**2 out of 6 scored security issues fixed, for a gain of 20 points:**

# CyberPatriot



**Scored Practice Images**

Courtesy of  
**Texas A&M Corpus Christi**



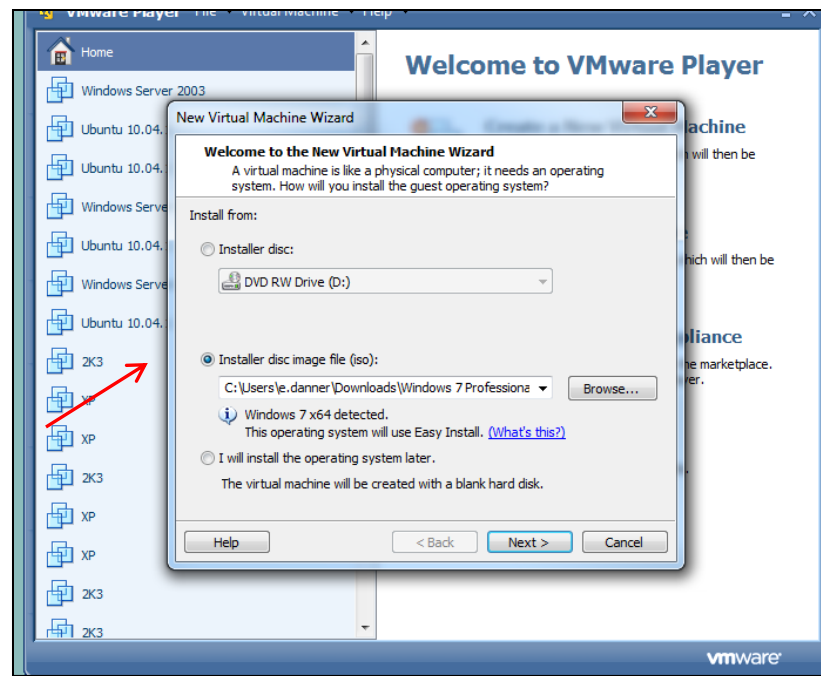


# Scored Practice Images: Part 1

Courtesy of  
**Texas A&M Corpus Christi**

Teams can now build self-scoring Windows practice images. Here's how:

- Use your MSDN credentials to download a Windows 7 or Server 2008 ISO
- Create a new virtual machine in VMware Player

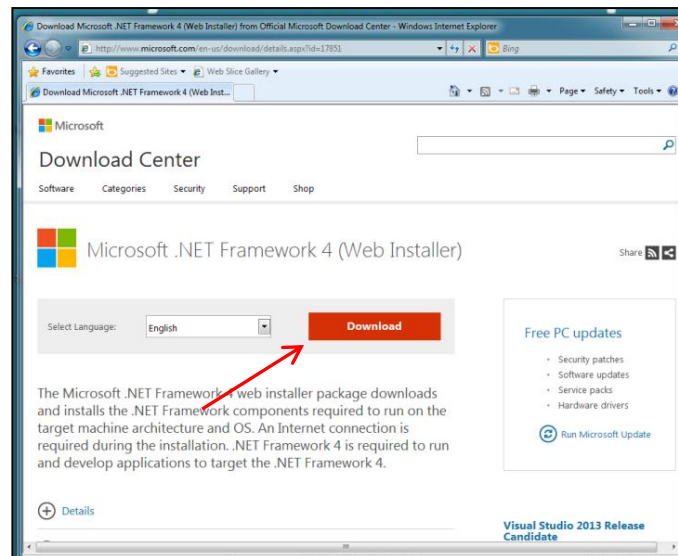




# Scored Practice Images: Part 2

## Courtesy of Texas A&M Corpus Christi

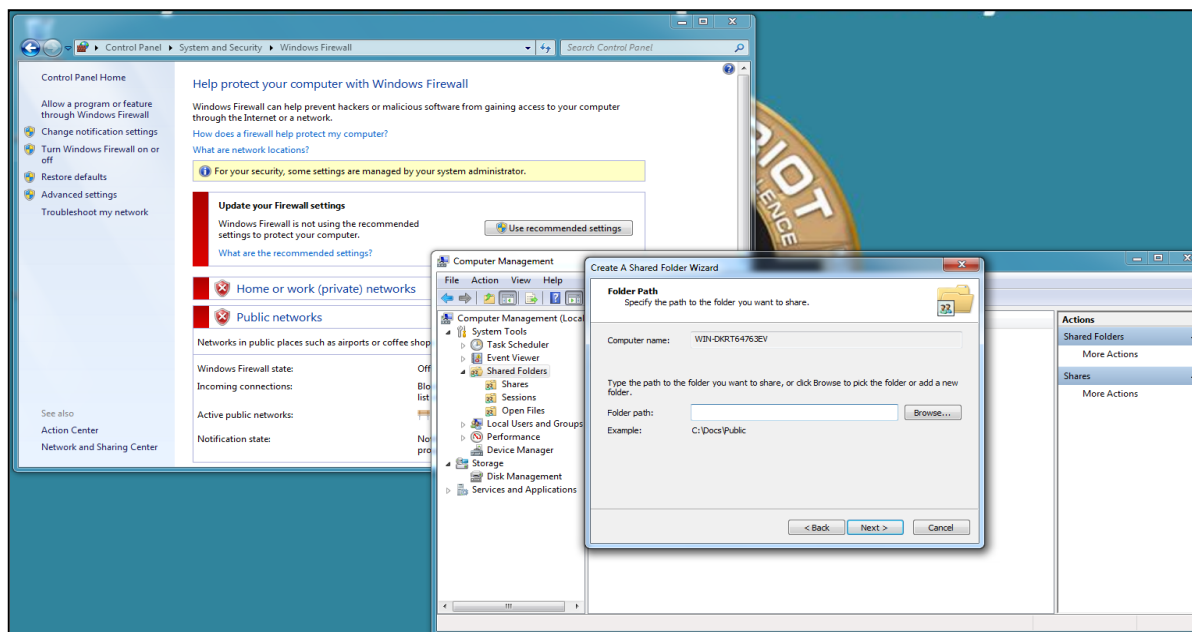
- Go to [www.uscyberpatriot.org](http://www.uscyberpatriot.org) → Documentation → Training Materials
- Download Scoring Engine Tools for Windows 7 and Server 2008
- Extract contents of .7z file (you will need 7zip, available free at [www.7-zip.org](http://www.7-zip.org))
- Copy contents ScoringEngineTools.7z into practice image, extract
- Install .NET Framework 4.0 in image
  - Download from <http://www.microsoft.com/en-us/download/details.aspx?id=17851>





# Scored Practice Images: Part 3

- Prepare the image by adding vulnerabilities, such as:
  - Account and Password policy issues
  - Disabled firewall
  - Unnecessary shares
  - Unnecessary access to system from network
- The full menu of vulnerabilities are in the Front End Scoring Engine
- Note: vulnerabilities selected in the Front End Scoring Engine must correspond exactly to the vulnerabilities in the image in order for them to be scored



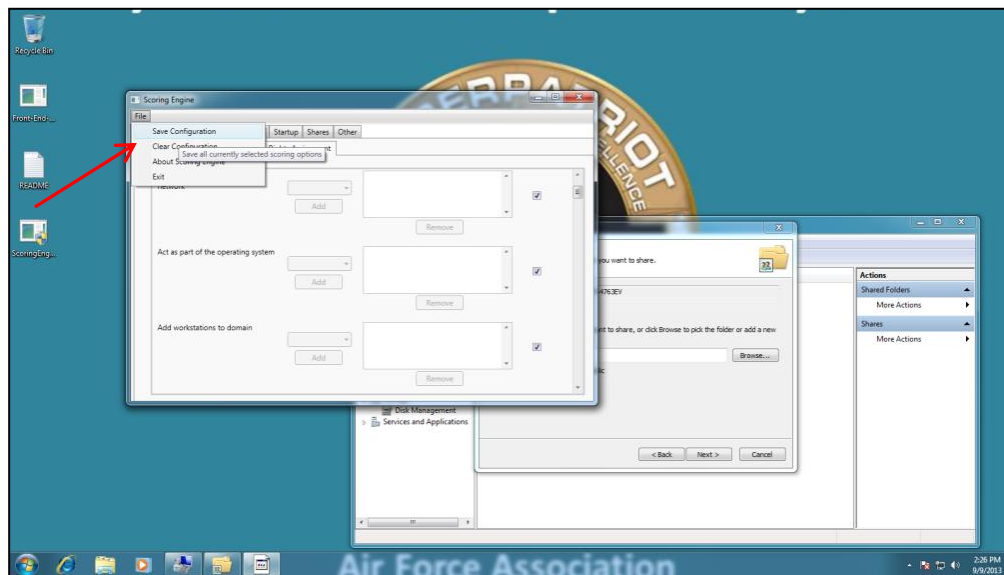
Courtesy of  
Texas A&M  
Corpus Christi





# Scored Practice Images: Part 4

- When you have configured the vulnerabilities, go to File → Save Configuration
- Close the Front End Scoring Engine, delete the Front-End-ScoringEngine.exe from the Scoring Engine Tools folder, and empty Recycle Bin
- Move ScoringEngine.exe from Scoring Engine Tools folder to C:\CyberPatriot Score Report
- Delete Scoring Engine Tools folder and empty Recycle Bin
- Double-click ScoringEngine.exe (allow to run if prompted)

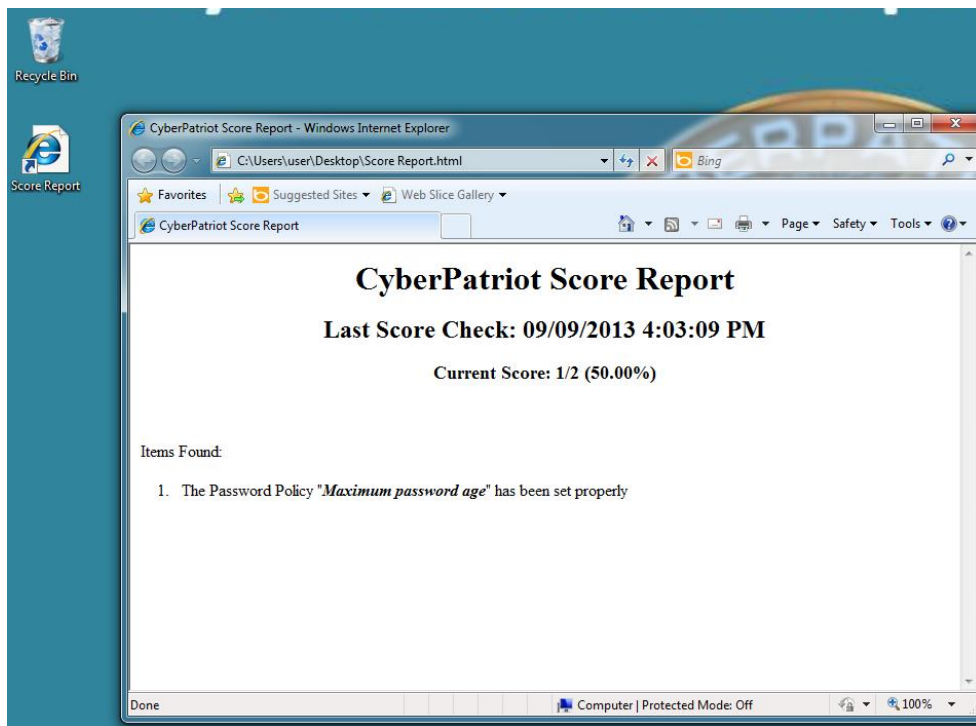


Courtesy of  
Texas A&M  
Corpus Christi



# Scored Practice Images: Part 5

- Once the image preparation process is complete, an HTML shortcut called “Score Report” will appear on the desktop
- Score Report will provide a list of what vulnerabilities have been fixed (of the ones selected in setup)



Courtesy of  
Texas A&M  
Corpus Christi

# CyberPatriot



## Introductory Training



# Web Site

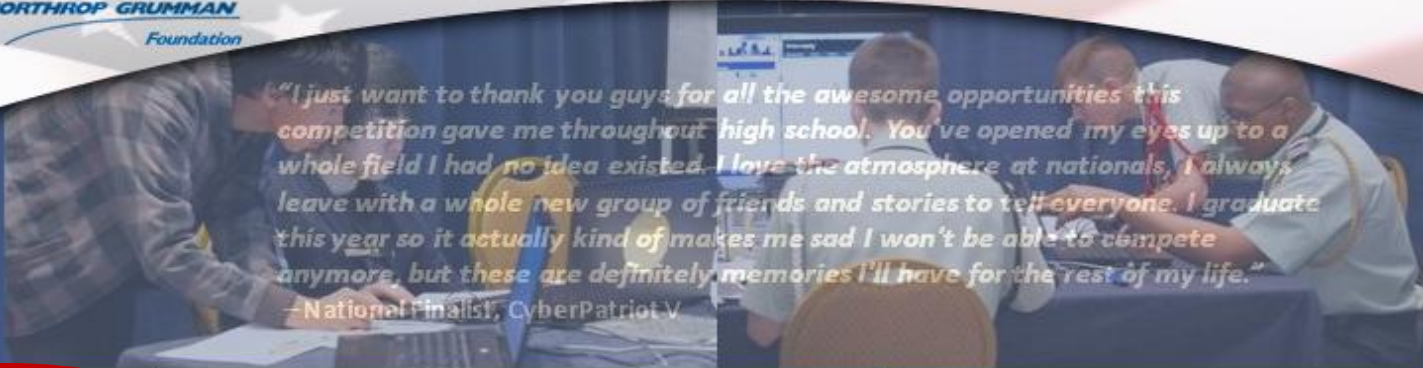


Air Force Association's

## CYBERPATRIOT

National High School Cyber Defense Competition

presented by **NORTHROP GRUMMAN** Foundation



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- Documentation**
- Register here for CyberPatriot VI
- How You Fit

- Training Materials**
- Important Dates
- Preparation for Competition
- CP IV Documents
- CP V Documents
- CP VI Documents

CyberPatriot is the premier high school cyber defense competition created by the Air Force Association to inspire high school students toward careers in cybersecurity or other science, technology, engineering, and mathematics (STEM) disciplines critical to our nation's future.



follow us on [twitter](#)

[Middle School Registration](#)

### Discover CyberPatriot



- General Information Tri-Fold
- Recruitment Video
- Request Recruitment Materials



# Training

- **Module 1: Introduction to Information Security**
- **Module 2: Virtual Machines**
- **Module 3: Windows Operating Systems – Basic Security**
- **Module 4: Threats and Vulnerabilities**
- **Module 5: How to Mitigate**
- **Module 6: Networking**
- **Module 7: Unix Operating Systems**
- **Module 8: Password Security**





# How Does it Work?

The screenshot shows a video player interface. The main content is a desktop background with a blue sky. In the center is the CyberPatriot logo. Below the logo, the text 'Property of the' is visible, and at the bottom, 'Air Force Association' is partially visible. The video player controls at the bottom show a progress bar at 05:02 / 10:39, along with icons for play, volume, closed captions, settings, and full screen.





# *Questions*

# ?