Call of cyber duty: Military academies take on NSA

April 10 2014, by Michael Hill

United States Military Academy cadet Kiefer Ragay stands in a projection of data results, as he talks to fellow cadets at the Cyber Research Center at the United States Military Academy in West Point, N.Y., Wednesday, April 9, 2014. The West Point cadets are fending off cyber attacks this week as part of an exercise involving all the service academies. The annual Cyber Defense Exercise requires teams from the five service academies to create computer networks that can withstand attacks from the National Security Agency and the Department of Defense. (AP Photo/Mel Evans)

If Douglas MacArthur or Ulysses S. Grant went to the U.S. Military Academy today, they might be testing their defensive skills hunched in front of a computer screen.

A team of caffeine-fueled cadets is spending long days this week in a computer lab trying to fend off threats cooked up by experts at the National Security Agency. The annual Cyber Defense Exercise running through Thursday will determine which of the five service academies can create computer networks that can best withstand the four-day barrage.

The 14-year-old exercise lacks the lore of Army-Navy football but not the intensity. Not only does the exercise dovetail into the military's broader strategy of staying ahead of the curve in cyber operations, but the West Point cadets relish the chance to test their computer skills against their peers.

"This is the Army-Navy game for our electrical engineering and computer science departments ... this is our chance to beat the other service academies," said Cadet Jason DeCoursey.

DeCoursey was one of about 30 senior cadets crammed in a windowless computer lab at the academy on Wednesday. The exercise is essentially a high-tech game of capture the flag: The NSA team attempts to capture "tokens" embedded in the academies' networks. The academies for Army, Navy, Air Force, Coast Guard and Merchant Marine compete, and the one that does the best job fending off the barrage of cyber-attacks is declared the winner.

Air Force won last year and is clearly the team cadets here measure themselves against. By midday Wednesday, Air Force was ahead but barely. Army defenses were holding up well after a nerve-wracking breach the day before and cadets were keeping up with the long hours.

Cadet Hayden Tippett said he spent 23 of his 24 waking hours earlier this week in the computer room. He had slept in a nearby room one night using his boots as a pillow.

United States Military Academy cadets watch data on computers at the Cyber Research Center at the United States Military Academy in West Point, N.Y., Wednesday, April 9, 2014. The West Point cadets are fending off cyber attacks this week as part of an exercise involving all the service academies. The annual Cyber Defense Exercise requires teams from the five service academies to create computer networks that can withstand attacks from the National Security Agency and the Department of Defense. (AP Photo/Mel Evans)

"We don't have big backpacks on. We're not walking through the woods. We're sitting behind computers. But it is stressful," said Cadet John Zeidler.

Workers from the NSA stood by a camouflage net curtain at West Point and declined to speak to a reporter. But their presence inspired the cadets, who relished the chance to take on the pros.

"We're playing ball against a major-league team," Zeidler said. "That's why it's so much fun."

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Cadets seemed fueled by the challenge, by a sense of

competitiveness—and a lot of Mountain Dew and Monster energy drinks. The stack of spent cans in a corner—dubbed "caffeine wasteland"—numbered a few hundred by midday Wednesday.

More than bragging rights are at stake.

Some of the cadets want to specialize in cyber operations after they become Army officers next month. And West Point is a 212-year-old institution that is constantly refining and updating how it teaches cyber operations. It is gearing up its new Army Cyber Institute, which aims to become a national resource for research, advice and education in cyber defense and operations.

A United States Military Academy cadet checks computers at the Cyber Research Center at the United States Military Academy in West Point, N.Y., Wednesday, April 9, 2014. The West Point cadets are fending off cyber attacks this week as part of an exercise involving all the service academies. The annual Cyber Defense Exercise requires teams from the five service academies to create

The director of the institute, Col. Gregory Conti, is a 1989 West Point graduate who recalls that as a young lieutenant during the first Gulf War he would stick little pieces of acetate with enemy unit symbols to a battle map with double-stick tape.

"It is changing the nature of warfare and we're trying figure out how to come to grips with that," he said.

The Pentagon has put a growing emphasis on the potential threats.

United States Military Academy cadet Brian Petty, left, watches data on a computers with, fellow cadets, at the Cyber Research Center at the United States Military Academy in West Point, N.Y., Wednesday, April 9, 2014. The West

Point cadets are fending off cyber attacks this week as part of an exercise involving all the service academies. The annual Cyber Defense Exercise requires teams from the five service academies to create computer networks that can withstand attacks from the National Security Agency and the Department of Defense. (AP Photo/Mel Evans)

Last year, Vice Adm. Michael Connor, in charge of the Navy's submarine force, said he was emphasizing the importance of commanders being able to act independently in the event they're cut off from higher authorities during cyberbattle.

Defense Secretary Chuck Hagel, in a speech to Chinese military leaders on Tuesday, called on their country to be more transparent about its cybersecurity programs and said the Pentagon had briefed Chinese government officials about the decisions that go into the military's use of cyber capabilities.

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