cadets and Red Team could operate safely—was critical to maintaining student ownership. The NSA helped us establish identical, first-class networks, but an effective exercise does not require having top-of-the-line equipment. Most organizations can make a capable network with very little funding. We built our first isolated laboratory using leftover and obsolete equipment.

Upon graduation, all USMA cadets become officers in the US Army, and many will be responsible for the security of critical Army information systems. With a firm foundation in the fundamentals of information assurance, these officers will have the intellectual skills needed for the continued self-education that is vital in evolving technical disciplines.

With two more schools participating and with our lessons learned from running the 2001 exercise, we expect the 2002 cyberdefense exercise to be even better. Of course, in an exercise this complex, it is impossible to anticipate all problems; the key is to react quickly in dealing with the problems that do arise.

We encourage other organizations to follow our lead. Information assurance is a topic that is becoming integral to US national security. We can no longer rely solely on our armed forces to defend the nation. Professionals in the commercial and government sectors must do their part to defend our critical information infrastructures from cyberattacks. A competitive exercise such as the one we have described is a first step in strengthening those additional defenses. ■

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