2022 Airport Cybersecurity Training

Overview
This two-day course will provide trainees with basic to intermediate concepts for performing cybersecurity assessments of wireless access applications at airports. Participants will learn techniques for identifying Wi-Fi access points within the airport environment, analysis methods for determining wireless security gaps, and recommendations for improving defenses to defeat potential threats.

By the end of this course, trainees will be able to:
1. Recognize wireless technology concepts.
2. Identify potential attack vectors.
3. Illustrate use of radio frequency (RF) capture tools.
4. Perform real-world data collection.
5. Analyze RF packet data.

Who Should Take This Training?
This course is designed for airport network and security administrators. The following basic skills will be helpful, but are not required to participate:
- Experience in Wi-Fi configurations and basic operations
- Experience in configuring Wi-Fi access points and clients
- Basic understanding of network traffic analysis
- Working knowledge of Linux

How Can I Prepare for This Training?
Each participant will need to supply a laptop with a minimum of 8GB RAM, 2 USB ports and 40GB of free disk space.

The equipment listed below will be provided to participants during the hands-on portion of the training. As this equipment will be returned upon course completion, trainees wishing to purchase similar equipment for use after the course can do so for less than $200.00 from online retailers. Course facilitators will assist participants in setting up purchased equipment.

Equipment (provided as needed)
- Dual-band 2.4 & 5 GHz Wi-Fi USB adapter with RT3572 or RT5572 Chipset, e.g., Alfa AWUS051NH, Panda Wireless PAU09
- Multi-port USB adapter, e.g., Pluggable USB 3.0 3-port Hub
- Texas Instrument CC2531 USB Evaluation Module Kit, 2.4 GHz

Software (provided)
A VMWare virtual machine (VM) will be supplied to the trainees with appropriate software tools installed and configured with the above hardware so that students may run the environment in their installed VMWare Player or Workstation. Currently, MS Windows and Ubuntu flavors of Linux are supported for the VM, while Mac OSX is not supported in the class.