



Module 1 – Introduction to Airports, Administration, and Cybersecurity Fundamentals



Module 1

Introduction to Airports, Administration, and Cybersecurity Fundamentals

This module introduces the world of airport administration and its

relationship with cybersecurity. It will provide a broad overview of the U.S. airport system, exploring its historical evolution, the diverse stakeholders involved (aeronautical users, non-aeronautical users, government entities, the community), and the different categories of airports (commercial service, general aviation, military/joint use). It will also touch upon basic flight operations and the regulatory environment, including airport sponsorship structures and the role of the airport executive. Integrated throughout the module will be an introduction to fundamental cybersecurity principles (Confidentiality, Integrity, Availability), common cyber threats faced by administrative systems like phishing and malware, and an overview of key cybersecurity-related regulations impacting airports.

Lecture Focus

Overview of the airport environment, stakeholders, airport types, basic flight operations, and foundational cybersecurity principles relevant to airport administration.

Cybersecurity Focus

Basic cybersecurity principles (Confidentiality, Integrity, Availability), common threats in administrative systems (phishing, malware, data breaches), overview of regulatory landscape (FAA, TSA).

Course Outcomes & Objectives Alignment

- **Outcome 1:** Demonstrate an understanding of the cybersecurity measures necessary to protect stakeholder data and ensure secure communication in airport administration.
 - **Objective 1.1:** Recall basic data integrity/availability principles.
 - **Objective 1.2:** Describe secure stakeholder communication

importance.

- **Outcome 3:** Analyze the role of governance structures in implementing cybersecurity practices that comply with federal regulations and protect airport management systems.
 - **Objective 3.1:** Identify key federal regulations.
 - **Objective 3.2:** Understand governance role in cybersecurity policy.

CM Module Content

- CM Module 1: Airport Fundamentals (Origin/Evolution, Stakeholders, Airport Categories, Flight Operations)
- CM Module 1: The Regulated Airport (Sponsor Structures, Airport Executive Role, Org Charts, Regulations Overview)

Module 1 – Overview

Web Page



Module 1 – AAAE CM Reading

Web Page



Module 1 – Presentation

PDF document



Module 1 – Podcast

Audio



Module 1 – Study Guide

Web Page



Module 1 – FAQ



Web Page

Important Materials



BBC – The Forum: How
Airports Took Off



[Link](#)

BBC World Service - The
Compass, "Airport Security"



[Link](#)

Behind the Scenes | Basics of
Airport Operations



[Link](#)

FAA - Airport Categories



[Link](#)

TSA – TSA Issues New
Cybersecurity Requirements for
Airport and Aircraft Operators



[Link](#)

JAX Airport – Why is Part 139?
And Why?



[Link](#)

Supplemental Materials



Coursera – What is the CIA
Triad?



[Link](#)

DataGuard – Cyber Security
Threats: All You Need to Know



[Link](#)

ProofPoint – What is Phishing?



[Link](#)

FTC – Understanding the NIST
Cybersecurity Framework



[Link](#)

Naked Science – Airport
Operations: The secret life of
the worlds busiest airport



[Link](#)

FAA – What is Part 139?



[Link](#)

FAA - Airport Statues and Regulations



[Link](#)

FAA - Airport Sponsors and Their Rights



[Link](#)

Wingtalkers - Flight Operations



[Link](#)

IFR vs VFR in Aviation | Understanding the Difference



[Link](#)

Graded Activities

Module 1 - In-Class Discussion



[Assignment](#)

Module 1 - Quiz



[Quiz](#)

Module 1 - Group Discussion



[Assignment](#)

