



Advanced Airport Operations Control Center (AOCC) Training Course

Ref: #AIR6294



Course Introduction / Overview:

The Airport Operations Control Center (AOCC) is the nerve center of any modern airport, a dynamic hub where strategic decisions translate into seamless daily operations. This intensive training course provides a comprehensive exploration of AOCC management, from foundational principles to advanced strategies for optimizing airport performance. We delve into the critical functions that ensure operational efficiency, safety, and passenger satisfaction. The curriculum is designed around the concept of Airport Collaborative Decision Making (A-CDM), fostering an integrated approach to managing airside and landside activities. As discussed by aviation expert Dr. R. I. R. Abeyratne in his works on aviation management, effective airport business relies on the synchronized efforts of all stakeholders, a principle central to this course. Participants will gain practical skills in resource allocation, disruption management, and leveraging technology for superior situational awareness. BIG BEN Training Center has developed this program to empower aviation professionals with the expertise to lead and innovate within the high-stakes environment of an AOCC, ensuring they can manage both routine challenges and unforeseen crises with confidence and precision. This course is the definitive guide to mastering the complexities of airport operations control.

Target Audience / This training course is suitable for:



- Airport Operations Control Center (AOCC) Managers and Supervisors.
- Airline Operations Control Staff.
- Airport Duty Managers.
- Ground Handling Managers and Coordinators.
- Airside Operations Officers.
- Airport Safety and Compliance Personnel.
- Aviation Authority and Regulatory Staff.
- Airport Emergency Planning and Response Teams.
- Aspiring aviation professionals seeking a career in airport operations.

Target Sectors and Industries:

- Aviation and Air Transport.
- Airport Authorities and Operators.
- Airlines and Air Cargo Carriers.
- Ground Handling and Ancillary Service Providers.
- Logistics and Supply Chain Management.
- Governmental bodies, including Civil Aviation Authorities and Airport Security.
- Travel and Tourism.

Target Organizations Departments:

- Airport Operations.
- Ground Handling Services.
- Airside Management and Compliance.
- Safety and Security Management Systems (SMS).
- Airline Station Management.
- Emergency Response and Planning.
- Corporate Strategy and Development.
- Information Technology and Systems Integration.



Course Offerings:

By the end of this course, the participants will have able to:

- Analyze the strategic role and core functions of an AOCC within the airport ecosystem.
- Implement the principles of Airport Collaborative Decision Making (A-CDM) to enhance operational flow.
- Master techniques for efficient allocation and management of airport resources like gates, stands, and personnel.
- Develop and execute robust plans for managing irregular operations (IROPS) and service disruptions.
- Utilize AOCC technologies and information systems for enhanced situational awareness and decision-making.
- Coordinate effectively with all airport stakeholders, including airlines, air traffic control, and ground handlers.
- Apply key performance indicators (KPIs) to measure and improve AOCC and overall airport performance.
- Lead emergency response procedures from the AOCC during crisis situations.
- Evaluate and integrate emerging technologies to future-proof airport operations.

Course Methodology:



The training methodology at BIG BEN Training Center is designed to be immersive, engaging, and highly practical. This course moves beyond traditional lectures to create a dynamic learning environment where participants actively engage with the material. We utilize a blend of expert-led instruction, interactive group discussions, and detailed case study analyses drawn from real-world airport operational scenarios. Participants will work in teams on simulation exercises that challenge their decision-making skills in areas such as resource allocation during peak hours and managing large-scale flight disruptions. These activities are designed to replicate the high-pressure environment of an AOCC, providing a safe space to test strategies and learn from outcomes. Continuous feedback is provided by the facilitator, an experienced aviation professional, to guide learning and development. The program also includes workshops on communication and leadership, ensuring that participants not only understand the technical aspects of AOCC management but also develop the soft skills necessary to lead a high-performing operational team. Our approach ensures that knowledge is not just acquired, but is also readily applicable in the participant's professional role upon completion of the course.

Course Agenda (Course Units):

Unit One: Foundations of the Airport Operations Control Center



- The strategic importance of the AOCC in modern airports.
- Core functions and responsibilities of the AOCC.
- Understanding the key stakeholders and their roles.
- Introduction to Airport Collaborative Decision Making (A-CDM).
- Regulatory frameworks and ICAO standards governing airport operations.
- The organizational structure of an effective AOCC.
- Communication protocols within the AOCC and with external partners.

Unit Two: Core AOCC Processes and Resource Management

- Daily operational planning and flight schedule management.
- Real-time monitoring of airside and landside activities.
- Gate, stand, and check-in counter allocation strategies.
- Turnaround management and coordination.
- Managing passenger and baggage flow effectively.
- Coordination with ground handling and fueling services.
- Workforce management and rostering within the AOCC.

Unit Three: Technology, Systems, and Information Management

- Overview of key AOCC technologies (AODB, FIDS, RMS).
- The role of data integration for a common operational picture.
- Communication systems: voice, data, and digital platforms.
- Surveillance and monitoring tools for airside and terminal operations.
- Leveraging data analytics for predictive operational planning.
- Cybersecurity considerations for AOCC systems.
- Introduction to automation and AI in airport operations.

Unit Four: Disruption, Crisis, and Emergency Management



- Identifying and managing Irregular Operations (IROPS).
- Strategies for handling weather-related disruptions and delays.
- Airport Emergency Response Plan (AERP) activation and the AOCC's role.
- Managing aircraft incidents and accidents.
- Contingency planning for system failures and infrastructure issues.
- Crisis communication strategies for internal and external stakeholders.
- Post-event analysis and continuous improvement processes.

Unit Five: Performance Optimization and the Future of the AOCC

- Defining and tracking Key Performance Indicators (KPIs) for the AOCC.
- Techniques for enhancing operational efficiency and reducing costs.
- Implementing a Safety Management System (SMS) within the AOCC.
- Human factors and fatigue risk management for AOCC staff.
- Leadership, teamwork, and decision-making under pressure.
- The future of the AOCC: digitalization and the smart airport concept.
- Developing a strategic vision for AOCC evolution and growth.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:



Considering the increasing integration of AI and automation, how will the core role of human decision-making and ethical oversight evolve within the AOCC of the future?

What unique qualities does this course offer compared to other courses?

This course distinguishes itself by adopting a holistic, strategic perspective on AOCC management rather than focusing solely on procedural tasks. While other programs may concentrate on the technical operation of specific systems, our curriculum emphasizes the critical thinking, leadership, and collaborative skills required to lead an entire airport ecosystem from its operational core. We move beyond theory by immersing participants in complex, realistic case studies and simulations that mirror the pressures of real-world airport crises, fostering robust decision-making capabilities. The content is deeply rooted in the principles of Airport Collaborative Decision Making (A-CDM), treating it not as an isolated topic but as the central philosophy underpinning all operational processes. Furthermore, the course is forward-looking, dedicating significant time to the future of the AOCC, including the integration of data analytics, AI, and automation. Participants will not only learn to manage the AOCC of today but will also be equipped with the strategic foresight to design and lead the more efficient, resilient, and intelligent AOCC of tomorrow, making this a truly transformative professional development experience.