Advanced Flight Dispatch and OCC Management Training Course

19 - 23 Oct 2026

Madrid

5900 € (Per Person)

Ref: #AVI4425_80479

Course Introduction / Overview:

The role of the Flight Dispatcher and the Operations Control Center (OCC) is the nerve center of any airline, ensuring every flight is safe, efficient, and compliant with stringent international regulations. This comprehensive course provides an in-depth exploration of all facets of flight dispatch and airline operations control, from foundational principles to advanced real-world applications. Participants will delve into critical areas such as flight planning and monitoring, aviation meteorology, aircraft performance, and fuel management. The curriculum is designed to build a robust understanding of both the technical skills and the critical decision-making processes required in a high-pressure OCC environment. Drawing upon established industry knowledge, such as the principles outlined by experts like Gerald N. Cook in works like "Airline Operations and Management", this program emphasizes a holistic approach. BIG BEN Training Center has developed this course to bridge the gap between theoretical knowledge and practical operational competency, preparing participants to manage routine operations and effectively handle non-standard situations and emergencies with confidence and professionalism, thereby upholding the highest standards of aviation safety.

Target Audience / This training course is suitable for:

- Aspiring and current Flight Dispatchers.
- Operations Control Center (OCC) personnel.
- Flight Operations Officers.
- Flight Followers and Movement Controllers.
- Aviation professionals seeking to transition into an operations role.
- Airline managers and supervisors overseeing flight operations.
- Corporate and private jet dispatch personnel.
- Air Traffic Controllers seeking to understand airline operations.

Target Sectors and Industries:

- Commercial Passenger Airlines.
- Air Cargo and Freight Operators.
- Corporate and Business Aviation.
- Charter Flight Companies.
- Governmental aviation agencies.
- Military air transport operations.
- Air Ambulance and Emergency Medical Services.
- Flight planning and aviation support service providers.

Target Organizations Departments:

- Flight Operations.
- Operations Control Center (OCC).
- Ground Operations.
- Safety and Quality Assurance.
- Regulatory Compliance.
- Crew Planning and Scheduling.
- Technical and Engineering Departments.
- Emergency Response Planning.

Course Offerings:

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

- Develop and analyze complex operational flight plans for domestic and international routes.
- Interpret and apply aviation meteorological data (METAR, TAF, SIGMETs) for safe flight planning.
- Perform accurate aircraft weight and balance calculations to ensure regulatory compliance.
- Master fuel planning techniques, including tankering and contingency fuel requirements.
- Navigate and apply international aviation regulations from bodies like ICAO.
- Execute effective flight following procedures and maintain communication with the flight crew.
- Manage irregular operations, including diversions, delays, and in-flight emergencies.
- Apply the principles of Dispatch Resource Management (DRM) for effective teamwork.
- Utilize Safety Management Systems (SMS) within an OCC environment.

Course Methodology:

This training course employs a dynamic and interactive learning methodology designed to foster deep understanding and practical skill development. At BIG BEN Training Center, we believe in learning by doing. The program moves beyond traditional lectures to immerse participants in a realistic operational environment through a blend of instructional techniques. Central to our approach are high-fidelity simulation exercises where participants will manage flight plans, respond to changing weather conditions, and handle simulated in-flight emergencies. These sessions are complemented by in-depth case studies of real-world aviation incidents, allowing for critical analysis of decision-making processes and outcomes. Collaborative group workshops and open discussions encourage peer-to-peer learning and the exchange of diverse perspectives. Expert instructors with extensive industry experience will provide continuous guidance, personalized feedback, and mentorship. This hands-on, problem-solving approach ensures that participants not only learn the theory but also gain the confidence to apply their knowledge effectively in a live Operations Control Center.

Course Agenda (Course Units):

Unit One: Foundations of Flight Dispatch and OCC

- The Role and Responsibilities of the Flight Dispatcher.
- International and National Aviation Regulatory Frameworks.
- Fundamental Principles of Flight and Aerodynamics.
- Overview of Aircraft Systems and Powerplants.
- Introduction to Aviation Weather Theory.
- Core Principles of Air Navigation and Charting.
- The Structure and Function of an Operations Control Center (OCC).

Unit Two: Core Elements of Flight Planning

- Advanced Aviation Meteorology and Weather Product Analysis.
- Decoding METAR, TAF, SIGMETs, and Upper Air Charts.
- Aircraft Weight and Balance Principles and Calculations.
- Aircraft Performance, Limitations, and Runway Analysis.
- Constructing a Domestic Operational Flight Plan.
- Comprehensive Fuel Planning and Management Policies.
- Route Selection and Airway Manual Interpretation.

Unit Three: Advanced and International Operations

- International Flight Planning and Oceanic Procedures.
- Extended Operations (ETOPS/EDTO) Rules and Planning.
- Understanding and Applying NOTAMs, AIP, and Supplements.
- Global Airspace, RVSM, and Navigation Systems.
- Special Considerations for Polar and Remote Area Operations.
- Strategies for Volcanic Ash and Hazardous Weather Avoidance.
- Airline Economics, Cost Index, and Operational Efficiency.

Unit Four: In-Flight Management and Irregular Operations

- Real-time Flight Following and Monitoring Techniques.
- Air Traffic Flow Management (ATFM) and Slot Management.
- Effective Communication Protocols with Flight Crew and ATC.
- Managing In-flight Contingencies and Diversions.
- Emergency Response Planning and Coordination.
- Application of the Minimum Equipment List (MEL) and CDL.
- Post-Flight Debriefing and Operational Analysis.

Unit Five: Human Factors, Safety, and Modern OCC Technology

- Dispatch Resource Management (DRM) and Team Coordination.
- Human Factors, Decision-Making, and Error Management.
- Implementing and Operating within a Safety Management System (SMS).
- Fatigue Risk Management for OCC Personnel.
- The Role of Automation and Technology in Modern Dispatch.
- Introduction to Cybersecurity Threats in Aviation Operations.
- Future Trends and Innovations in Airline Operations Control.

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:

In an era of increasing automation and AI in the cockpit and OCC, how does the fundamental role of human judgment and decision-making for a flight dispatcher evolve to ensure ultimate safety?

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

This course distinguishes itself by offering a holistic and integrated curriculum that extends beyond mere regulatory knowledge and technical procedures. While other programs may focus narrowly on flight plan creation, our approach cultivates a deep-seated understanding of the dispatcher's role as a critical decision-maker and risk manager. We place significant emphasis on developing higher-order cognitive skills through advanced, scenario-based training that mirrors the complexities of a real-world Operations Control Center. The curriculum uniquely integrates Dispatch Resource Management (DRM) and human factors throughout all technical modules, ensuring participants learn not just what to do, but how to think, communicate, and collaborate effectively under pressure. By analyzing complex case studies and engaging in high-fidelity simulations, participants develop the judgment and foresight necessary to manage non-standard situations proactively. The course is designed not to simply train technicians, but to develop astute operational professionals who can balance safety, efficiency, and compliance with an unwavering commitment to operational excellence.