



Advanced Airport Fire and Rescue Operations Leadership Training Course

Ref: #AVI9443



Course Introduction / Overview:

This intensive training course is designed to forge the next generation of leaders in Aircraft Rescue and Firefighting (ARFF). In an environment where every second counts, effective leadership is the critical element that transforms a chaotic incident into a controlled, successful operation. This program moves beyond basic firefighting techniques to instill the strategic command, decision-making, and operational oversight skills essential for leading ARFF teams. Drawing upon principles from leading aviation safety experts like Norman J. Ashford, whose work in "Airport Operations" highlights the intricate systems at play in an aerodrome environment, this course provides a comprehensive framework for managing complex airport emergencies. Participants will delve into the nuances of the Incident Command System (ICS) as applied to aviation incidents, explore advanced tactics for dealing with modern aircraft materials, and master the art of multi-agency coordination. BIG BEN Training Center has developed this curriculum to bridge the gap between technical proficiency and strategic leadership, ensuring graduates are prepared to command with confidence, clarity, and competence during the most demanding airport rescue and fire service operations.

Target Audience / This training course is suitable for:



- Airport Fire Chiefs and Command Staff.
- ARFF Incident Commanders and Team Leaders.
- Senior Airport Firefighters aspiring to leadership roles.
- Airport Operations and Safety Managers.
- Emergency Planners and Coordinators.
- Civil Aviation Authority Safety Inspectors.
- Heads of Airport Emergency Services.

Target Sectors and Industries:

- Aviation and Airport Operations.
- Emergency and Rescue Services.
- Public Safety and Security.
- Governmental and Regulatory Bodies.
- Defense and Military Airbase Operations.
- Air Cargo and Logistics.
- Corporate and Private Aviation.

Target Organizations Departments:

- Fire and Rescue Services.
- Emergency Management and Planning.
- Airport Operations and Airside Safety.
- Health, Safety, and Environment (HSE).
- Security and Compliance Departments.
- Risk Management.
- Corporate Safety and Training Departments.

Course Offerings:



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

- Develop and implement a robust Incident Command System (ICS) for airport emergencies.
- Master advanced strategic and tactical decision-making under high-pressure conditions.
- Lead and coordinate multi-agency responses during large-scale aviation incidents.
- Analyze and mitigate risks associated with modern aircraft, including composite materials and alternative fuels.
- Formulate comprehensive airport emergency plans compliant with ICAO and NFPA standards.
- Conduct effective post-incident analysis and implement corrective actions for continuous improvement.
- Manage crisis communications and stakeholder relations during and after an emergency.
- Enhance team leadership, motivation, and performance within the ARFF service.

Course Methodology:



The training methodology at BIG BEN Training Center is centered on immersive and practical learning to ensure that leadership skills are not just understood but mastered. This course utilizes a blended approach, combining expert-led instruction with dynamic, interactive learning modules. Participants will engage in realistic, scenario-based simulations that replicate the high-stakes environment of an airport emergency, forcing critical thinking and rapid decision-making. Case studies of major global aviation incidents will be analyzed in depth to extract crucial lessons in command and control. Collaborative group workshops and team-based problem-solving exercises will foster communication and coordination skills essential for multi-agency operations. The program emphasizes a continuous feedback loop, with structured debriefs and peer-to-peer evaluations after each practical session. This active learning environment ensures that participants can confidently apply the strategic principles of fire and rescue leadership to real-world operational challenges, transforming theoretical knowledge into practical command capability.

Course Agenda (Course Units):

Unit One: Foundations of ARFF Leadership and Regulatory Frameworks

- Introduction to strategic leadership in airport fire services.
- Understanding ICAO, EASA, and NFPA standards for ARFF operations.
- The psychology of command and decision-making under pressure.
- Roles and responsibilities of the ARFF Incident Commander.
- Legal and ethical considerations in emergency response leadership.
- Developing a command presence and effective communication style.
- Principles of risk management in the airport environment.



Unit Two: Mastering the Incident Command System for Aviation Incidents

- Fundamentals of the Incident Command System (ICS) and its structure.
- Adapting ICS for unique airport incidents like fuel spills and aircraft crashes.
- Establishing command, control, and communications (C3).
- Resource management and logistical planning in a large-scale incident.
- Unified Command and integration with other airport and external agencies.
- Information management and developing an Incident Action Plan (IAP).
- Practical ICS tabletop exercises and simulations.

Unit Three: Advanced Tactical Command and Operational Strategy

- Strategies for managing large-frame aircraft incidents (e.g., A380, B747).
- Tactical considerations for new generation aircraft with composite materials.
- Managing incidents involving hazardous materials and dangerous goods.
- Commanding interior firefighting and mass casualty rescue operations.
- Advanced techniques for large-scale fuel spill and fire suppression.
- Water supply management and foam application strategies.
- Evaluating and adapting tactics during an evolving incident.

Unit Four: Airport Emergency Planning and Multi-Agency Coordination

- Developing and testing a comprehensive Airport Emergency Plan (AEP).
- The role of the ARFF leader in airport-wide emergency preparedness.
- Coordinating with Air Traffic Control (ATC), airport operations, and airlines.
- Liaison with external agencies like police, medical services, and government bodies.
- Crisis communication strategies for media and public information.
- Planning and executing full-scale airport emergency drills.
- Integrating technology and modern communication tools in emergency response.

Unit Five: Post-Incident Management and Leadership Development



- Conducting a thorough post-incident analysis and debriefing.
- Techniques for critical incident stress management for ARFF personnel.
- Developing comprehensive reports and implementing lessons learned.
- Building and sustaining a high-performance ARFF team culture.
- Mentoring future leaders within the fire service.
- Continuous professional development and staying current with industry trends.
- Final leadership challenge simulation and course review.

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:

How does the evolving technology in aircraft design, such as the increased use of composite materials and alternative fuels, challenge traditional airport firefighting leadership strategies and command structures?

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



This course distinguishes itself by focusing intensely on the strategic nexus between tactical firefighting knowledge and executive leadership. While many programs teach firefighting procedures, this curriculum is engineered to cultivate command-level thinking, preparing participants not just to fight fires but to lead complex, multi-agency operations from a strategic command perspective. It moves beyond standard protocols to explore the cognitive and psychological dimensions of high-stakes decision-making, a critical skill for any incident commander. The curriculum is uniquely forward-looking, with dedicated modules on managing incidents involving new-generation aircraft and emerging technologies, ensuring leaders are prepared for the future of aviation, not just its present. Furthermore, the emphasis on post-incident analysis and continuous improvement instills a culture of learning and resilience within the leader's home organization. By integrating principles from established aviation operations literature and focusing on real-world case studies, the course provides a depth of contextual understanding that transforms proficient firefighters into visionary and effective ARFF leaders capable of navigating the most complex airport emergencies with authority and intelligence.