

National Fire Academy FESHE Model Curriculum Aircraft Rescue and Firefighting Management Aviation Fire Officer Emphasis

Reviewed May 2019



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Airport Firefighter

Course Description

This course explores the theories and fundamentals associated with airport rescue firefighting and addresses safety, operations, and agents associated with aircraft rescue and firefighting procedures. It provides an overview of communications, apparatus, tools, and equipment specific to the aerospace emergency service delivery. *Note: Course requirements are met by an Airport Firefighter Certification (IFSAC; ProBoard; ICAO; DoD; FAA)*

Prerequisites

None

Course Outcomes

Upon completion of this course, you will be able to:

1. Define the role and qualifications of the airport firefighter.
2. Discuss airport and aircraft familiarization.
3. Discuss safe practices associated with airport firefighting operations.
4. Describe aircraft rescue and firefighting apparatus and equipment.
5. Identify fire-extinguishing agents associated with aerospace firefighting.
6. Discuss tactical objectives associated with aircraft emergency response.
7. Describe airport emergency planning.
8. Identify hazardous situations associated with aircraft fire rescue and fire suppression activities.

Trait

Increased awareness of airport firefighter operations and safety, to include aviation emergency management incidents

Available Text

IFSTA. (2015). *Aircraft rescue and fire fighting* (6th ed.). International Fire Service Training Association.

Supporting References/Research for Faculty and Students

U.S. Fire Administration Publications: <http://www.usfa.fema.gov/applications/publications>

Applied Research: <http://www.usfa.fema.gov>

Research Reports: <http://www.usfa.fema.gov/research>

Learning Resource Center: <http://www.lrc.fema.gov>

Federal Aviation Administration: <http://www.faa.gov>

National Transportation and Safety Board: <http://www.nts.gov>

Assessments

Academic papers, discussions, projects, quizzes, exams

Point of Contact

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Aircraft Mishaps

Course Description

This course teaches the learner how to locate and use past aircraft accident and mishap data from various government agencies in order to develop relevant lesson plans and training courses for emergency responders. Learning how to research this information will strengthen emergency service agencies involved in aircraft rescue firefighting by giving them the tools and knowledge to develop relevant guidelines, protocols, procedures, and training evolutions based on current mishaps and findings.

Prerequisites

Airport Firefighter Certification (*IFSAC; ProBoard; ICAO; DoD; FAA*)

Course Outcomes

Upon completion of this course, you will be able to:

1. Cite examples of databases pertaining to the aerospace mishaps.
2. Discuss current mishaps within the aviation sector.
3. Describe the investigation process associated with aircraft accidents.
4. Describe how to properly use aviation database information.
5. Report on database findings.

Trait

Increased awareness of aerospace mishap databases and media reports to create guidelines, procedures, and protocols related to aircraft emergency responses

Available Text

Krause, S. (2003). *Aircraft safety: Accident investigations, analyses, and applications*. New York, NY: McGraw-Hill.

Supporting References/Research for Faculty and Students

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Assessments

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Point of Contact

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Aircraft Related Mass Casualty Incidents

Course Description

This course involves the planning, response, mitigation, and management of a mass casualty incident resulting from a crashed aircraft. Includes issues relating to medical treatment, triage, and transportation. It examines how the command structure functions, as well as how operations personnel work on the scene of mass casualty incident.

Prerequisites

Airport Firefighter Certification (*IFSAC; ProBoard; ICAO; DoD; FAA*)

Course Outcomes

Upon completion of this course, you will be able to:

1. Discuss the incident management systems.
2. Discuss the role of command, its structure, and components.
3. Define the operation structures within the emergency response system.
4. Identify hazardous conditions and ways to mitigate situations.

Traits

1. Increased awareness of operations on the scene of an aerospace vehicle mishap involving multiple incidents and victims
2. Increased awareness of the incident management system, command structures, and operation sector roles

Available Text

Christen, H., & Maniscalco, P. (2002). *Mass casualty and high-impact incidents: An operations guide*. Upper Saddle River, NJ: Prentice Hall.

Supporting References/Research for Faculty and Students

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Assessments

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Aviation Terrorism Response

Course Description

This course deals with the threats associated with terrorism and the aviation industry as they relate to the emergency service response. It examines past acts of terror along with present and future threats and their connection to aerospace emergency services planning and response. The course identifies various aspects of aviation security and control in correlation to the emergency responders' responsibilities.

Prerequisites

Airport Firefighter Certification (*IFSAC; ProBoard; ICAO; DoD; FAA*)

Course Outcomes

Upon completion of this course, you will be able to:

1. Discuss the threats towards the aviation industry involving terrorism.
2. Describe the historical components and the extremist groups associated with terrorism.
3. Identify counterterrorism groups and the aspects of preventing terrorist acts.
4. Describe the aspects of aviation security.
5. Review concerns and controls associated with aviation security.

Trait

Increased awareness of terrorist threats and concerns associated with aviation emergency response

Available Text

Sweet, K. (2008). *Aviation and airport security: Terrorism and safety concerns* (2nd ed.). Boca Raton, FL: CRC Press.

Supporting References/Research for Faculty and Students

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Assessments

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Airport Operations for the Emergency Responder

Course Description

This course offers responders an understanding of ground operations, communications, layout, movements, and functions in order to operate effectively within the boundaries of an airport. It discusses the complex, unfamiliar settings responders face associated with daily operations of an airport.

Prerequisites

Airport Firefighter Certification (*IFSAC; ProBoard; ICAO; DoD; FAA*)

Course Outcomes

Upon completion of this course, you will be able to:

1. Discuss specific airport operation systems.
2. Describe the characteristics associated with airport operations.
3. Identify services at airports.
4. Review high-hazard, emergency, and security concerns at airports.
5. Describe airport accesses and movement.
6. Discuss terminal operations.

Trait

Increased awareness of common daily airport operations.

Available Text

Ashford, N., Stanton, M., & Moore, A. (2012). *Airport operations* (2nd ed.). New York, NY: McGraw-Hill.

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