

Section 7037
(October 2002)

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TRANSPORTATION INCIDENTS

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AIRCRAFT INCIDENTS

7037.1

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Generally there are two types of aviation in the United States, civil and military. Civil aviation can be broken down into two sub-types, commercial and general aviation, which are regulated by the Federal Aviation Administration (FAA).

Although aviation has a good safety record relative to the number of flights, accidents and incidents can and do occur. As fire and life safety professionals we need to be adequately prepared to mitigate emergencies involving aircraft.

Applicable standards can be consulted for further information. NFPA 1003 Airport Firefighter Professional Qualifications and NFPA 403 Aircraft Rescue and Firefighting (ARFF) at airports detail specific job performance requirements and tactical deployment objectives for this specialized discipline.

DEFINITIONS

7037.1.1

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Runways: Runways are either paved (concrete or asphalt) or natural (dirt, grass etc.). Runways are designed for aircraft take off and landing.

Taxiways: Taxiways are used to provide access to runways and other parts of the airport.

Ramps: A ramp is a paved or unpaved parking area, usually near some type of building, hangar, or other structure. Aircraft are parked, refueled and passengers enter or exit the aircraft on the ramp.

SAFETY

7037.1.2

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- Utilize full protective clothing and breathing apparatus. If you don't have proximity garments wear structural PPE.
- Be cautious; utilize proper procedures for operating on taxiways and active runways.
- Liaison with and follow direction of airport operations or ARFF personnel.
- Approach civil aviation aircraft from the front, at an angle, if wind and terrain permit.
- Do Not approach military aircraft from the front; explosive ordnance may be on board. Also be aware of ejection seats and canopy systems. Firefighters should not touch or operate controls

that they are not familiar with. Restraint straps and belts can be cut if unfamiliar with the release procedures.

- Beware of propellers, rotors and jet intakes and exhausts.
- Assess any fuel leaks, determine if the aircraft's fuel and electrical systems have been secured and the engine(s) shut down.
- Stay clear of tire sidewall areas that may rupture or explode.
- Remain alert for the presence of hazardous cargo including explosives, radiological, chemical or etioloical agents.

OPERATIONS

7037.1.3

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Protect aircraft fuselage from fire exposure. Create a rescue path with protective fire streams for aircraft occupants.

Utilize aqueous film forming foam (AFFF) or film forming flouorprotein foam (FFFP) if available for knockdown of flammable liquid fires. Ensure compatibility of foam with any dry chemical agents used.

Control runoff from any fuel spills and fire control operations.

Keep any unnecessary personnel away from the incident. Protect the dignity of any crash victims utilize disposable blankets or disaster pouches to protect in place.

Do not remove crash debris or victims unless absolutely critical for rescue operations, any movement should be photographed or documented if possible for reconstruction of the scene by investigators.

HIGHWAY INCIDENTS

7037.2

(October 2002)

Shape, size, markings, placards and other identifying features are important clues to possible use and contents of a vehicle. Shipping papers, cargo manifests, driver statements and other documents, are vital for determining and confirming contents, cargo and unknown hazards. Documents may contain information on the potential severity of the hazard and procedures for mitigation. These documents should be found with the driver, on the driver's seat or in a pouch on the driver's door.

SAFETY

7037.2.1

(October 2002)

- Personnel will wear full safety clothing appropriate for the incident, during highway operations. A minimum of full PPE.
- Position emergency apparatus in a manner to provide protection for on scene personnel during highway emergency operations from oncoming traffic.

- Utilize all necessary and appropriate warning lights and devices.
- Personnel should remain cognizant of traffic and shall exercise caution at all times, during emergency operations. Safety Officer may post a traffic lookout if necessary.
- Personnel should be aware of their surroundings and the topography of the highway on which they are operating. This can affect the flow of flammable liquids and hazardous materials. Visibility of oncoming traffic may also be compromised by the topography.
- Extreme caution should be used during flare / fusee placement, to eliminate potential fires ignited by these devices.
- Personnel must be aware of storm drains, sewer systems, small streams or other means that may allow hazardous material to flow off roadways. Run-off may contaminate wildlands, wetlands or adjacent non-contaminated areas.
- Notify local agencies that may have jurisdiction threatened. A unified command system may be necessary.
- Notify the local agency responsible for environmental hazard abatement.
- Hazardous materials spills of more than 42 gallons must be reported to the State Environmental Agency.

SPECIALIZED EQUIPMENT

7037.2.2

(October 2002)

- Personnel should be familiar with air bag placement, in vehicles so equipped, requiring victim extrication operations.
- Responding personnel should be knowledgeable of alternative fueled vehicles. Propane fueled and electric powered vehicles pose hazards that are unique to those vehicles.
- Propane fueled vehicles have permanently mounted, pressurized container, onboard.
- Electric powered vehicles have multiple batteries resulting in high voltage wiring systems. Personnel should be familiar with these wiring systems and locations prior to using rescue equipment.

RAILROAD INCIDENTS

7037.3

(October 2002)

Railroad incidents normally involve multiple railcars. Railroad incidents may occur in rural areas, away from a water supply and easy access. Railroad incidents may involve several Federal, State and Local agencies, depending on the location, cargo and nature of the incident.

Railcars come in three basic types: non-pressurized, pressurized and specialized railcars. Although they are categorized in this manner, the commodities they carry will determine the use of the railcar.

UPON ARRIVAL

7037.3.1

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- Have ECC notify the Railroad dispatcher of the exact location of the incident and request rail line closure and a railroad representative to respond.
- Request assistance as may be necessary to mitigate the emergency.
- Place a lit red fusee on the tracks (in the center, between the rails) one-half (1/2) mile in each direction of the incident. This will notify on-coming trains to stop. Someone should stand by as a flagman, with fusees, until you are notified that on-coming trains have been stopped or diverted.
- Request law enforcement assistance, if necessary.
- Coordinate with the train conductor, engineer and / or any available railroad personnel at the scene.
- If cars other than the engine are involved, obtain a copy of the shipping papers (these are kept in the lead engine) to determine the nature of the cargo.

SAFETY

7037.3.2

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- Responding personnel shall wear protective clothing in accordance with the emergency situation and Department guidelines.
- Personnel should be aware that diesel electric train engines carry from 100 to 250 gallons of P.C.B. in their generators.
- Some situations involving cargo fires (when the cargo is of a hazardous nature) may dictate evacuation of the immediate and / or surrounding area.

ENGINE FIRES

7037.3.3

(October 2002)

- Coordinate with the Conductor and engineer.
- Use Class C extinguishers on electrical fires.
- Diesel engines carry considerable quantities of diesel fuel. Handle diesel engine fires as you would a combustible liquid fire.
- Full PPE and SCBA's shall be worn.

TANK CAR FIRES AND LEAKS

7037.3.4

(October 2002)

- Identify the product, if possible.
- If hazardous materials are involved, request technical assistance from ChemTrec, use Hazardous Materials Guidebooks. Refer to the shipping papers for additional information (these are kept in the lead engine). USE EXTREME CAUTION.

- Use protective clothing appropriate for the incident. Full PPE and SCBA's minimum.
- For hazardous materials incidents, follow all procedures according to ChemTrec and / or Hazardous Materials Guidebooks.
- Utilize evacuation procedures according to ChemTrec and / or Hazardous Materials Guidebooks.

BOX CAR FIRES

7037.3.5

(October 2002)

- Identify the product or cargo, if possible.
- If a hazardous material is involved, proceed according to guidelines from ChemTrec and / or Hazardous Materials Guidebooks.
- When non-hazardous materials are involved, protect exposures, disconnect the car and separate it from the rest of the train, if possible.
- Cool the exterior of the car and extinguish the fire using approved fire control methods.
- Full Personal Protective Equipment and SCBA's shall be worn.

(see next section)

(see HB Table of Contents)

(see Forms or Forms Samples)