


VDFP General Aviation Firefighting for Structural Firefighters

VIRGINIA DEPARTMENT OF FIRE PROGRAMS
Aviation Firefighting for Structural Firefighters



Chapter 1
General Aviation

GENERAL AVIATION

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Learning Objectives

- Explain the basic classifications of aviation in the United States
- Identify the various types of general aviation aircraft and their usage
- Define the terms "incident" and "accident" as they pertain to aircraft operations
- Identify why some airports have requirements for aircraft rescue and fire fighting (ARFF) while others do not
- List a few general safety concerns when dealing with an emergency involving general aviation aircraft
- Explain why fire department responders cannot view the airport environment the same way as they do a public street

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Introduction

- Thousands of aircraft take to the skies every day
- There are many thousands of airports throughout the world
- Every day there are fatal accidents involving aircraft
- Aircraft incidents can happen anywhere

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What is **General Aviation**?

- Two general type of aviation
 - Military Aviation
 - All flight operations involving the armed forces
 - Civil Aviation
 - All other flying, divided into two more categories:
 - Commercial Aviation
 - » Regularly scheduled air transportation for the public
 - General Aviation
 - » A vast assortment of aircraft types used for pleasure, business, sport, and more..

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What is General Aviation?



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What is General Aviation?



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What is General Aviation?



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What is General Aviation?



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What is General Aviation?



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What is General Aviation?



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What is General Aviation?




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What is General Aviation?



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What is General Aviation?



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Accident vs. Incident

- The National Transportation Safety Board (NTSB) is responsible for investigating aviation related accidents and compiling aviation safety statistics

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Accident vs. Incident


- Accident
 - “an occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such a time as all persons have disembarked, and in which and person suffers death or serious injury as a result of being in or upon the aircraft or by direct contact with the aircraft or anything attached thereto, or in which the aircraft receives substantial damage”

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Accident vs. Incident

- Accident
 - "...in which any person suffers death or serious injury as a result of being in or upon the aircraft or by direct contact with the aircraft or anything attached thereto..."




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Accident vs. Incident

- Incident
 - "an occurrence other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operations"



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Accident vs. Incident

- More incidents occur than accidents
- If called to respond the first priority is threat to life or property
- Local law enforcement will determine if any laws were broken and in most cases will notify the NTSB

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Structural Fire Department Operations Involving GA

- Pilots are trained to first “fly the airplane”
- They depend on skilled, knowledgeable fire & rescue personnel once an accident/incident occurs if they become incapacitated

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Structural Fire Department Operations Involving GA

- Federal Aviation Regulations (FAR) Part 139 requires that airports which serve commercial air carriers have Aircraft Rescue Fire Fighting (ARFF) services at the airport
- Of the over 17,000 General Aviation airports few have fire/rescue personnel and equipment on the property

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Structural Fire Department Operations Involving GA



- Fire Departments with GA facilities in the first due area must be familiar with the airport, aircraft and aviation operations
- Lack of preparation and training increases the chance of legal or civil action being taken against the fire department

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Structural Fire Department Operations Involving GA

- The airport environment is extremely structured
- Different hazards encountered during airfield operations can be deadly to responders

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Structural Fire Department Operations Involving GA

- SAFETY! Firefighters responding to an airport with lights and sirens may believe they have the same right of way that they do on the public streets. Do not expect aircraft to pull over, stop, and yield as if they were cars!

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Structural Fire Department Operations Involving GA

- Airports can have restricted access and control movement of all vehicles, people, and aircraft on airport property



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Summary

- Types of aviation
- GA activity includes pleasure, instruction, and business flying
- While a very safe way to travel, there are still accidents and incidents involving aircraft
- Lack of skill and knowledge to deal effectively with aircraft incidents can be deadly to fire and rescue personnel

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