Introduction to Fire Extinguishers Presentation

Presented to the LAA membership at the January 24, 2024 Annual Meeting by Scott Maguire, retired member of the Society of Fire Protection Engineers, Professional Grade.

Reference: Fire Extinguisher Training.com - Introduction

This presentation can be found online at the location listed above.

This presentation is an introductory course on fire extinguishers is not intended to make anyone a qualified fire fighter.

Highlights of the course include:

The four elements that must be present for a fire to exist are:

Oxygen to sustain combustion,

Heat to raise the material to its ignition temperature,

Fuel to support the combustion and a

Chemical Reaction between the other three elements.

The concept of Fire Prevention is based upon keeping these four elements separate. Eliminate any one of these four items in a fire and the fire will extinguish.

Not all fires are created equal. There are actually five classifications of fires.

Class A fire - are fires composed of ordinary combustibles such as wood, paper, cloth, trash, and plastics. These types of fires leave an ash residue. Remember Class A is for Ash.

Class B fire - are fires of flammable liquids such as gasoline, petroleum oil, and paint.

Class B Fires also include flammable gases such as, propane, and butane. Remember B for barrel of oil.

Class B fires **do not** include fires involving cooking oils and grease.

Class C fires - are fires are fires involving energized electrical equipment such as motors, transformers, and appliances. Remove the power and the Class C fire becomes one of the other classes of fires. Remember C for current (electrical current).

Class D fires - are fires of combustible metals such as potassium, sodium, aluminum and magnesium.

Class K fires - are fires in cooking oils and greases such as animal fats and vegetable fats. Remember K for Kitchen.

Types of Fire Extinguishers:

Water and Foam - Used on Class A fires only.
Carbon Dioxide – Used on Class B and C fires only.
Multipurpose Dry Chemical – Used on Class A, B, and C fires. These are the fire extinguishers in place at various Longboat Arms locations.
Wet Agent – Used on Class K fires only.
Clean Agent - Used on Class B and C fires only.
Dry Powder - Used on Class D fires only.
Water Mist - Used on Class A and C fires only.
Cartridge Operated Dry Chemical - Used on Class A, B, and C fires.

The Rules for Fighting Fires

Just remember the three A's

Activate the building alarm system or notify the fire department by calling 911. Or, have someone else do this for you. This is so that in the event you are overcome by the fire or get trapped by the fire, help is on the way.

**Assist** any persons in immediate danger, or those incapable on there own, to exit the building, without risk to yourself. Saving lives is more important than saving objects.

Only after these two are completed, should you **Attempt** to extinguish the fire.

## Noone needs to be a hero regarding fighting a fire at Longboat Arms. Only attempt to fight a fire if:

the fire is small, there is no toxic smoke present, you have an escape route, you are comfortable using a fire extinguisher, and you are physically able to do so. Otherwise, evacuate the building / location and wait for the professionals to arrive.

## FIRE EXTINGUISHER USE

It is important to know the locations and the types of extinguishers at our property prior to actually using one. At Longboat Arms, they are all Multipurpose Dry Chemical and are for use on Class A, B, and C fires only. At Longboat Arms, these fire extinguishers are located along the building walkways, near the gas grills, at the Maintenance Shop, and inside the Clubhouse. Fire Extinguishers can be heavy.

Take time to read the operating instructions and warnings found on the fire extinguisher label.

When you are ready to use a fire extinguisher to fight a fire, just remember **PASS.** 

Pull the pin

Aim the nozzle

Squeeze the trigger

**Sweep** the nozzle back and forth at the base of the fire.

As the fire extinguisher is discharging and extinguishing the fire, you can slowly approach the fire while still sweeping the nozzle to fully extinguish the fire.

Now test your knowledge by completing the exam at the back of the online course.

If you have any questions regarding this course or any other Fire Protection related questions, please feel free to contact Scott by any means.