Module 3: Fire Shelter

Topic 1: Module Introduction

Module overview

Narration Script: Being prepared is your best way to stay safe. Your goal is to know your Standard Firefighting Orders, LCES, and "Watch Out!" situations backwards and forwards. Then, rely on your equipment, tools, and personal protective equipment. In this topic, you will learn that your fire shelter can save your life if you are overrun or cornered by a fire. Knowing how the shelter is constructed, how it works, and how to tell if the shelter is ready for action will help you keep your cool in the worst of situations. Choosing ideal deployment sites, knowing how to prepare them and how to prepare yourself increases your chance of survivability and lowers your risk of injury if you ever have to deploy your fire shelter. Practicing using a fire shelter is the best way to prepare for possible entrapment situations. Finally, knowing the areas you can deploy your shelter in will help ensure a happy ending if the fire takes a bad turn. This module covers all the "need to knows" about your fire shelter.

Topic 2: Fire Shelter Use, Inspection, and Care

Introduction

One of the most critical pieces of *personal protective equipment* **(PPE) is your** *fire shelter***. The shelter is your last resort—you never want to deploy your fire shelter, but it might save your life if you have to.**

In this topic, we will describe:

- **How the fire shelter works**
- **Fire shelter inspection**
- **Determining fire shelter deployment location**
- **Preparing the area to deploy a fire shelter**
- **Preparing yourself to enter a fire shelter**
- **Deploying the fire shelter**
- **Entrapment procedures**
- **Heat barriers**

Keep reading to get shelter from the storm.

Narration Script: You have trained hard and can repeat your Standard Firefighting Orders and Watch Out situations without a second thought. Every firefighter wants to stay safe and come home alive, but even the best firefighter can get in to trouble on the job. That's why all firefighters and support personnel must carry a fire shelter when operating on or near the fireline. It is not a substitute for common sense, but it is common sense to have one with you and know how to use it in all fire situations.

Fire shelter effectiveness

There are no ifs, ands, or buts about it—*all* *fireline* personnel must carry fire shelters during *all* phases of *fire suppression***. Ensure your fire shelter is as effective as it is designed to be by protecting it from damage and wearing it where it is easily and quickly accessible.**

This means that you should wear the fire shelter in a position on your web gear or fireline pack where you can get it out quickly, even while running. Never keep it inside your pack where it would be hard to get to it in a hurry.

To prevent damage to your shelter, avoid sitting on it, using it as a pillow, or placing heavy objects on it.

Narration Script: At all times, wear your fire shelter where you can easily get to it but not in a place where you may sit on it and cause damage. Consider orienting the shelter pouch so that the flap faces forward instead of up. You can think of this as the "quick draw" position, allowing you to pull the shelter with your opposite hand in an emergency.

Fire shelter construction

The new generation fire shelter consists of two layers:

- **Aluminum foil outer skin laminated to woven silica**
- **Aluminum foil laminated to fiberglass**

The shape of the fire shelter allows you to lie flat against the ground. This exposes less of your body to *radiant heat* **and more to ground cooling. Pressing your face to the ground (and scooping out as much dirt as you can) is the best position to be in to breathe cool, clean air.**

Fire shelters have a low profile to reduce the amount of turbulence and flame contact they are exposed to. The hold-down straps and turned-in skirt around the edges aid you in holding a fire shelter tightly to the ground.

Warning! Limitations of New Generation Shelters

Do not have a false sense of security about the protection fire shelters can provide. Although new generation shelters offer significantly more protection from radiant heat and direct flame, be aware that the shelter cannot protect you in all circumstances. Your highest priority should always be to avoid situations that can lead to entrapment. The new fire shelter is not an excuse to take risks on the fireline.

Even though the new shelter offers improved protection from direct flame, you will improve your chance of survival if you deploy where the shelter will not be exposed to direct flame.

Narration Script: With improved design and materials, new generation fire shelters have improved protection from both radiant heat and direct flame contact when compared to older shelters. The new fire shelter has two layers. The outer layer is aluminum foil laminated to woven silica. The aluminum reflects radiant heat, and the silica slows heat's passage to the inside of the shelter. An inner layer of aluminum laminated to fiberglass prevents heat from re-radiating to the person inside the shelter. When these layers are sewn together, an air gap is created, offering further insulation. The fire shelter's design allows you to lie flat and have your face pressed to the ground where there is more ground cooling and so you can breathe relatively cool, clean air.

How the fire shelter works

The greatest threats firefighters face during an entrapment are burns to the body and inhalation of hot gases that can cause asphyxiation. The fire shelter helps to protect you because the foil outer skin of the fire shelter reflects approximately 95 percent of the *radiant* **heat that reaches it.**

Of the remaining 5 percent of radiant heat:

- **Part is absorbed by the aluminum and fiberglass inner liner.**
- **Part is radiated into the shelter space.**

- **The remaining part is radiated back to the external environment.**

As opposed to radiant heat, energy from *convective* heat (direct flame contact) is rapidly absorbed into the shelter material. Obviously, the risk of direct flame contact should be avoided.

Internal fire shelter temperature levels

The remaining 5 percent of radiant heat gradually heats the inside area of the shelter. With prolonged exposure to a fire, the temperature inside your tent may exceed 150° F (66° C).

However, you can survive temperatures of this level for a prolonged period of time. Just as an example, the temperature in an ordinary dry sauna is around 190° F (88° C).

Delamination of fire shelter

If radiant or convective heat absorbed by the shelter becomes extreme, shelter materials may begin to melt or delaminate. If this occurs, the foil can be torn by turbulent winds. Without the outer layer of aluminum foil, the shelter loses its ability to reflect much of a fire's radiant heat. On new shelters, seams protect the foil layer, and the foil will stop peeling when it reaches a seam.

When layers of the shelter melt or delaminate, keep your movement to a minimum to avoid damage to the foil outer skin—it is more susceptible to damage under these conditions. Do not leave the shelter until you are told to do so by your supervisor!

Fire Shelter's Melting Point

The limiting factor of the shelter's durability is its melting temperature. Aluminum melts at 1,200° F (649° C). In the new generation fire shelters, fiberglass components begin to deteriorate at 1,400° F (760° C), and the silica cloth deteriorates at 2,200° F (1,200° C).

Because flame temperatures in a typical forest fire are around 1,100° F (593° C), with peak temperatures around 1,800° F (982° C), shelters can tolerate some direct flame contact, but they cannot endure for a prolonged period.

Narration Script: When the temperatures start rising, here's what happens to these materials. You don't ever want to see *this* on the fireline! The key to a safe deployment is avoiding direct flame impingement. You do this by choosing an appropriate site clear of combustibles. You'll learn more about deployment a little later in this topic.

Caption: A delaminated fire shelter with layers clearly charred and peeling back from outer aluminum layer.

Gases inside fire shelter

When you are in the shelter for a prolonged period, breathing may become an issue.

When the adhesive that bonds the foil to the fiberglass begins to thermally degrade, it releases carbon dioxide and carbon monoxide. However, the decomposing adhesive is only one-half as toxic as an equivalent amount of wood smoke.

Even when the adhesive totally degrades, the main toxicant in the air is the smoke from the fire.

Fire shelter inspection

Carefully inspect your fire shelter and carrying pouch at the beginning of each fire season and then at least every two weeks during the season. Pay particular attention to abrasion damage on the shelter.

Stop using your shelter if any of the following conditions are found:

- **The storage bag has turned gray, gray stains are visible, or the shelter is not visible inside the bag.**
- **Aluminum particles or debris is visible inside the bag.**
- **Tears exceeding 1/4 in. (6 mm) in length are detected along folded edges.**
- **Dents or punctures in the foil are more than 1 in. (25 mm) wide.**
- **Foil is missing in lengths of 1/2 in. (13 mm) or more.**
- **The shelter has been deployed for any reason.**

Narration Script: To fully protect yourself, your fire shelter must be of an approved type and in good condition. To ensure your fire shelter is in the best possible condition, inspect it on a regular basis. Pay particular attention to abrasion damage on the shelter. When inspecting the shelter, look through the vinyl bag the shelter comes in to look for the signs of abrasion shown here. Do not open the vinyl bag. Also, make sure the shelter has not been previously deployed by making sure the quick-opening strip is unbroken and that the two pull rings are intact.

Caption: A clear plastic fire shelter bag. Inside on the top-right portion of the enclosed fire shelter, a rip is evident in the outer aluminum casing.

Knowledge Check 1

Matching—select the match you choose from the pull down list.

A well-maintained shelter will protect you from radiant and convective heat. Can you tell if your shelter is as ready for action as you are?

Match each situation with the following observations.

1/4 in. tear found in shelter	Ready for fire fighting
Shelter has never been deployed	Ready for fire fighting
No dents or punctures found in shelter	Ready for fire fighting
Debris seen in unopened storage bag	Ready for fire fighting
No foil missing from shelter	Ready for fire fighting
Storage bag has gray stains	Ready for fire fighting

The correct matches are as follows:
1/4 in. tear found in shelter: Remove from use
Shelter has never been deployed: Ready for fire fighting
No dents or punctures found in shelter: Ready for fire fighting
Debris seen in unopened storage bag: Remove from use
No foil missing from shelter: Ready for fire fighting
Storage bag has gray stains: Remove from use

Determining to use fire shelters

The fire shelter is an absolute last resort when everything else has gone wrong.

Fire shelters do not reduce the need for proper scouting, posting *lookouts***, and establishing** *escape routes* **and** *safety zones***. It will usually be your** *crew* **leader's or supervisor's call about when to deploy your shelter, but you have to be able to make the call too.**

Assuming that you have properly inspected your fire shelter at the beginning of your work shift, let's jump into our shelters and learn about:

- **Location determination**
- **Area preparation**
- **Self preparation**
- **Deployment**
- **Entrapment procedures**

You will investigate each of these issues in turn.

Narration Script: Your fire shelter could save your life. On one fire in 1985, the Butte Fire in the Salmon National Forest, 73 firefighters survived a high-intensity crown fire in the Wallace Creek drainage by deploying their fire shelters. Of the 73, only five suffered heat exhaustion and dehydration, requiring overnight hospitalization. The others were uninjured! On the other hand, while fire shelters are extremely valuable pieces of safety equipment, don't get cocky just

because you have one. Don't deploy your fire shelter unless you need it. That means you have exhausted EVERY other possibility to escape from the fire. In most cases, your crew leader or supervisor will decide when it's time to deploy your shelters. But if you get separated from your crew for any reason, you're going to have to make the decision to deploy for yourself.

Determining fire shelter location

The first decision you will have to make regarding the deployment of your fire shelter is where to put it.

There are good, bad, and ugly places to deploy your shelter. Have a look at each scenario in turn.

The Good

Place fire shelters where these are present:

- **Light fuels**
- **Natural firebreaks, such as:**
  - **Creek beds**
  - **Depressions in the ground**
  - **Rock slide areas—rocks should be small enough that your shelter is still able to rest firmly on the ground**
  - **Lee side of ridge tops and hills**
  - **Flat areas on slopes, such as benches or road cuts**
- **Wide control lines, such as dozer lines**
- **Burned areas with no reburn potential**
- **Areas where the flame front will pass quickly**

The Bad

Place fire shelters where these are NOT present:

- **Thick vegetation, such as tall grass, small trees, trees with low branches, or brush**
- **Things that will fall on you, such as trees, logs, and snags**
- **Areas where flame will race up, such as draws, saddles, or chimneys**
- **Roads where traffic can run you over**
- **Rock slide areas where you are not able to keep the edges of the shelter firmly on the ground**

The Ugly

These items should NOT be anywhere near your deployed shelter:

- **Fusees**
- **Gasoline cans**
- **Supply boxes**
- **Packsacks**
- **Other combustible fire fighting gear**

Narration Script: Be sure to recognize the need to deploy your shelter with time enough to spare to get to a deployment area or at least to a relatively "safe" area. Choose a good area to deploy your shelter, not a bad or ugly one.

Preparing the area to deploy a fire shelter

Once you decide on a specific spot for your shelter, clear an area about 4 by 8 ft. (1.2 by 2.4 m) or larger if time allows. Scrape the area of vegetation down to *mineral soil***. You may choose to** *burn out light fuels* **as this may be easier and faster than scraping.**

If the flame front arrives before you can clear the area, with proper training and practice you should be able to get under your shelter in a matter of seconds.

Narration Script: Pick a spot as free of fuels as possible because grass and duff inside a shelter can smolder or ignite and fill your shelter with smoke. Once you've found a good area for your shelter, try to make it even safer if you have time. A clean area also minimizes flame contact with your shelter. Again if you have time, try digging a small depression you can put your face down into to get at the cooler air.

Preparing yourself to enter a fire shelter

As soon as you realize your escape may be compromised, drop any excess gear. Keep only your shelter and tool. Firefighters have died trying to carry all their gear while trying to escape a fire. You can move much faster when you carry only the essentials. Before you deploy your shelter, make sure you take ONLY the items that are absolutely necessary into your shelter.

These essential items include your:

- **Protective clothing, including hard hat and gloves**
- **Portable radio**
- **Water**

Warning! Burn Hazard

Never wet yourself down before or after entering a fire shelter. The moisture greatly increases the likelihood of receiving serious burns.

Narration Script: When you're inside your fire shelter, wearing all your normal protective clothing helps insulate you from conducted heat. Boots, gloves, and helmet are especially important as they hold down the edges of your shelter. You can also use your portable radio to contact others for help and communicate with your crew about when it is safe to leave your shelter. And if you are in the shelter for a long time, you'll want to sip water from your canteen.

Deploying fire shelter in calm conditions

Now that you have chosen your spot, prepared the area, and ditched any unneeded items, it's time to get inside your fire shelter.

Follow the deployment procedures appropriate for the shelters provided by your agency. Wind conditions may affect how you deploy your shelter. Generally, the steps for deploying your shelter in calm conditions are to:

- **Remove shelter from packaging**
- **Open and shake out shelter completely**
- **Stand inside opened shelter**
- **Get into a face-down position with your feet toward the fire**
- **Use your head and extremities to secure the edges of the shelter**
- **Push out the top and sides of shelter to maximize insulating space**

Narration Script: Here are the general steps for deploying the "new generation fire shelter" in calm conditions. After your shelter is out of its protective case, throw your pack and any flammable objects far away from you and others who may be deploying their shelters. Then, remove your shelter from its packaging, and open it completely. For the new generation shelter, do this by pulling the red ring tab to tear the plastic off the shelter and pulling open the handles that extend from the folded shelter. The handles are marked for the firefighter's right and left hands.

Shake out the shelter so it is fully open, holding on tight to avoid losing the shelter in high winds. Then, stand inside the opened shelter, sit down, and roll over into a face-down position with your feet toward the oncoming flames. Be sure the shelter is fully unfolded and not bunched underneath you when you deploy.

Use your extremities to secure the edges of the shelter. The brim of your helmet will hold down one end, and your hands and elbows will hold down the sides. In the new generation shelters, slip your hands up to your elbows into the hold-down straps to help you hold down the sides. Since you are holding down the foot end of the shelter with your boots—the end that is facing the fire front—expect that to be the hottest spot in the shelter.

You must be on the ground and fully in the shelter before the fire front arrives. When you are on the ground, push out the top and sides of the shelter so the interior space is as large as possible. The air between you and the sides of the shelter is excellent insulation.

Deploying fire shelter in windy conditions

Here are suggested steps for deploying your fire shelter in windy conditions:

- **Lie on your back or sit with your head toward the wind**
- **Hold the top of the shelter with your hands**
- **Allow the wind to fill the shelter with air**
- **Insert your boots inside the straps at the bottom of the shelter to secure it**
- **Pull the rest of the shelter down over yourself**

- **Roll over inside the shelter so that you are lying face down**

Narration Script: When it's windy, the deployment procedures may be a bit different. Just like before, take your shelter out of its package and open it. Then, lie down on your back or sit with your head into the wind, hold on to the top of the shelter, and taking advantage of the wind, allow it to fill the shelter with air as you put your boots inside the shelter.

When the bottom of the shelter is secure, pull the rest of the shelter down over you. Then, carefully roll over inside the shelter so that you can lie face down and hold the shelter over you, making sure your feet end up toward the oncoming flames, as you have done before.

Deploying fire shelter in adverse conditions

Pay attention to the procedures we have shown here, because in a real fire, you should be able to deploy your shelter in less than 25 seconds.

Be sure to practice deploying your shelter and get as much hands-on training as possible simulating various conditions:

- **In windy conditions—deploying from the ground may be your best bet and hold on tight**
- **On the run—practice dropping your gear and removing your shelter while escaping simulated fire conditions**
- **From a sitting position—open the shelter, scoot your feet in, and pull it over you**

Try a variety of techniques for these conditions to find the techniques that work best for you.

Narration Script: It's not enough to know how to deploy the shelter in calm and windy conditions because, in the real world, you have to be able to deploy it on the run and from a prone position. You may even have to be able to move your deployed fire shelter to a different location. Follow the manufacturers' instructions for deployment. However, the general principles for deploying all shelters are the same: start by grabbing the hand holds, shaking the shelter fully open, getting your feet inside the shelter, rolling over with your feet toward the flames, and making sure you have a good seal.

Deploying fire shelter when fire is on you

The most adverse condition you may experience is when the fire is on you. If hot embers are raining down on you, your survival depends on deploying your shelter.

Do whatever it takes to quickly deploy your shelter:

- **In a depression**
- **In a road cut**
- **Near a large boulder or dirt berm**
- **In the lowest point possible**

These locations will act as heat barriers. A blast of superheated air will hit you before flames reach you. To avoid the impact:

- **Drop to the ground as quickly as possible, and do whatever it takes to get in your shelter**
- **Find the lowest point possible, and get your face in the dirt**

Narration Script: The temperature is rising, and hot embers are raining down. Your escape route is blocked and ideal safety zones are too far away to reach before the fire front overtakes you. This is the last situation any firefighter wants to be in. But even with careful planning, you might get in to a situation where the fire is on you, and you'll have to deploy your shelter as fast as you can.

Entrapment procedures

Your stay inside your fire shelter could last as much as two hours.

During that time, follow these entrapment procedures to ensure your safety and improve your chances for survival:

- **Use your boots, gloves, and helmet to hold down the edges of your shelter**
- **Sip water from your canteen to stay hydrated**
- **Use your portable radio to stay in contact with others:**
    - **Get support from your crew to resist the desire to exit your shelter**
    - **Move your shelter to a new location if ordered to do so**
    - **Do not leave your shelter until your supervisor gives the order**

Knowledge Check 2

Sequencing—select the number from the pull down list to put the items in the correct sequence.

Are you ready to get into your shelter?

Place the steps for deploying a fire shelter in calm conditions into the correct order.

Push out the top and sides of shelter	1
Stand inside opened shelter	1
Remove shelter from packaging	1
Get into a face-down position with your feet toward the fire	1
Use your head and extremities to secure the edges of the shelter	1
Open and shake out shelter completely	1

The correct order is as follows:
Remove shelter from packaging
Open and shake out shelter completely
Stand inside opened shelter
Get into a face-down position with your feet toward the fire
Use your head and extremities to secure the edges of the shelter
Push out the top and sides of shelter

Heat barriers

When deployment sites have become compromised, other heat barrier options include:

- **Natural and constructed areas**
- **Substantial structures**
- **Engines**
- **Heavy equipment**

We'll cover each potential shelter in turn.

Warning! And here's a warning to see where and where *not* to put deployment sites. Never deploy your shelter in areas where the topography lends itself to faster fire spread, such as slopes, saddles, chutes, or drainages.

Determine the size of the area needed for a deployment site by its fuel types, its location relative to topographic features, observed fire behavior, and number of personnel the deployment site needs to accommodate.

Narration Script: Depending on the situation and the resources available, the larger the deployment site, the better it is. High winds, steep slopes, or heavy fuel loads may increase the area needed for a deployment site.

Natural and constructed areas as deployment sites

A few of the natural areas you can use as a deployment site include:

- **Green meadows**
- **Naturally barren areas, such as rock slides or cliffs**
- **Streams or other bodies of water**
- **Fully burned-out areas (the** *black***)**

When no natural deployment zones are at hand, you can construct one by scraping away *surface fuels* **down to mineral soil. To construct a deployment site:**

- **Use mechanized equipment in areas with** *heavy fuels*
- **Use hand tools in areas with light fuels**
- **Consider burning out a deployment site, but keep the additional safety concerns in mind**

Narration Script: If the worst happens, make sure you can get to a suitable deployment site. Suitable natural areas include green meadows or areas of bare ground. You can also use bodies of water, but you must consider the possibility of people drowning. Burned-over areas make some of the best deployment sites once they are cooled sufficiently if the area is large enough to accommodate personnel and if firefighters can get into it without having to pass through the flame front. If fuels are light, the black cools rather quickly. If fuels are heavy, it may take much longer. If you have to construct your own deployment site, you may need to have mechanized equipment on hand. You can also create a deployment site by burning an area out. Be very careful with this method because burning out can create additional safety problems such as drawing the fire to your location more rapidly or putting other firefighters at risk.

Substantial structures as heat barriers

You may also be able to take refuge in any substantial structure. You can also burn out around the structure to reduce nearby fuel loads.

If you use a structure as a heat barrier, be aware of the following:

- **Construction materials**
- **Electrical, chemical, and other hazards including burning vinyl siding**
- **The ground floor near an exit is the ideal refuge location**

Even if the structure ignites and is eventually lost to the fire, it can provide a refuge for you long enough for the vegetation fire to burn past before you have to exit the structure.

Narration Script: You should always be prepared enough to use the escape route to get to a safety zone. However, if other means escape you, you can use a home, barn, or almost any substantial structure as a heat barrier. Be aware, this is AN option but not the BEST option to ensure your safety. Even if the structure ignites and eventually burns to the ground, it MAY protect you long enough for the vegetation fire to burn past, allowing you to run into the black. That would be something to tell the grandkids.

Engines as heat barriers

If you are about to be overrun by an intense and fast-moving wildland fire, another last resort is to take refuge in the cab of an engine. Bear in mind, temperatures in the engine cab will be much higher than at ground level.

Other engine cab hazards include:

- **Shattered windows**
- **Ruptured hydraulic lines**
- **Toxic smoke from burning plastics**

Be aware that newer engines use a considerable amount of fiberglass and plastic in body construction. These synthetic materials may ignite easily and force you to abandon the engine sooner than you might want to.

Narration Script: Another option but not the BEST option to ensure your safety is to take refuge in the cab of an engine.

Making the engine safe

If you find yourself having to use an engine as a heat barrier, follow these guidelines:

- **Position the engine near the least amount of vegetation and away from chutes or drainages**
- **Request airdrops**
- **Leave the engine in road gear, with the motor running, and in neutral or park**
- **Do not lock engine cab doors**
- **Protect yourself from burns and smoke:**
    - **Do not take a charged hoseline into the cab**
    - **Close all vents, roll up windows, and cover the inside of windows and the windshield with fire shelters**
    - **Use SCBA when smoke reaches the vehicle**
    - **Partially discharge spare SCBA cylinders inside the cab to provide positive pressure and help prevent smoke from intruding**
    - **Crouch below the window line**
    - **Stay in the cab**

Narration Script: If, heaven forbid, you are forced to take shelter in an engine as a last resort, follow these guidelines. First, watch where you position the vehicle, and request airdrops on your location if possible. Leave the engine in road gear with the motor running at a high idle. This prevents the engine from stalling due to oxygen deficiency and also keeps the option of a rapid escape available to you if the opportunity arises. And keep the engine in neutral or park. Do not lock engine cab doors as this may slow your escape or prevent a firefighter outside from getting into the cab.

Once you are inside the cab, stay there and take steps to protect yourself from heat and smoke. Do not take a charged hoseline into the cab with you. This would provide an opening for smoke

and hot embers to enter the cab, and the water could give you steam burns. Fully close all vents, roll up the windows, and cover the inside of the windows and windshield with fire shelters.

If you have SCBA, use it to protect yourself from exterior smoke and any off-gassing from melting plastic components inside the cab. You can also partially discharge any spare SCBA cylinders inside the cab to provide positive pressure and help prevent smoke from getting in. And if possible, crouch below the window line to reduce the effects of radiant heat. Stay in the cab until it is safe to leave. Even if the motor stalls (usually due to oxygen deficiency) or the engine catches fire, the cab will offer you the best protection.

Heavy equipment heat barrier

Your heavy equipment can do more than clear fuels. The slow-moving equipment might not provide a quick escape, but it can be used as a heat barrier in light fuels.

If you need to use heavy equipment as a heat barrier:

- **Keep a distance from the equipment while it is still operating**
- **Construct a berm if there is time; then deploy behind it**
- **Keep the blade facing the fire**
- **Avoid taking refuge in the cab**
- **Be aware of hazards like broken glass and toxic fumes**

Summary

Congratulations, you've learned about one of your most important pieces of PPE. In this topic, we covered:

- **How the fire shelter works**
- **Fire shelter inspection**
- **Determining fire shelter deployment location**
- **Preparing the area to deploy a fire shelter**
- **Preparing yourself to enter a fire shelter**
- **Deploying the fire shelter**
- **Entrapment procedures**
- **Heat barriers**

Remember, the fire shelter is always your last resort. It is your responsibility to know and observe all Standard Firefighting Orders, "Watch Out!" situations, and LCES so that you can avoid having to deploy your shelter in the first place.

Narration Script: Being prepared is half the fight. Your common sense and knowledge of all the fire orders and safety reminders can help you survive situations no firefighter wants to get into. If you ever get trapped in a fire, you know where and how your fire shelter works best, and how to take care of it so it can take care of you.