



## Top 10 Excuses for Not Using Foam/CAFS

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I've used foam/compressed-air foam systems (CAFS) on numerous fires, because it's an effective, efficient and safe firefighting agent. But some people disagree with my position. I've heard just about every excuse there is for why firefighters and fire departments don't use foam/CAFS. Here's my "top 10 list" of the most common excuses I've heard. Do any of these sound familiar to you? If so, you may want to give foam/CAFS a second look.

### **10. Foam contaminates the scene for fire investigators.**

This misconception stems from a lack of understanding of the properties and uses of Class A foam. With a properly applied interior CAFS attack, very little foam will remain after the fire to obstruct the investigators' view of the fire scene. Class A foam concentrates are hydrocarbon based, so it would seem logical that foam application would contaminate the scene; however, if fire departments can provide a sample of the foam solution to the crime lab, along with the other samples being submitted for analysis, any hydrocarbon residue left by the foam can be ruled out.

### **9. We've always used water.**

This is the classic case of "200 years of tradition unimpeded by progress." Using this logic, we would still be using buckets to fight fire, and there would have never been any progression to horse-drawn pumps and then to motorized apparatus. Class A foam makes water more efficient, providing more firefighting capability from the same volume of water. Remember: Technology is constantly evolving, as are foam/CAFS and its applications. Those interested in seeing the fire service become safer and more effective will follow suit.

## **8. We have lots of personnel.**

CAFS does not replace personnel. A structure fire is a personnel-intensive operation; however, foam has the ability to absorb heat much more quickly and can pull carbon particles out of the atmosphere, knocking down the fire throughout the structure in a shorter timeframe. So, using CAFS actually allows first-in engine companies to do more in the first few minutes of an incident, which as we all know, directly affect the next few hours. Consequently, engine companies are back in service sooner.

## **7. CAFS is a maintenance nightmare.**

CAFS does add two more pumps, one for foam and one for air, and their related components. More moving parts does mean more service; however, the service required for the system is minimal. It simply includes fluid and filter changes, strainer service, and in some cases, belt adjustment. Maintenance issues occur primarily from lack of use. As with any mechanical equipment, if the system is run regularly, issues will be minimal. The worst thing you can do with any piece of equipment, including CAFS, is not use it for a long time, and then expect it to perform on an emergency scene.

## **6. CAFS is too expensive.**

It's true, CAFS is expensive – adding CAFS, which includes a foam proportioner and an air compressor to a pumper, typically costs \$30,000 to \$40,000. However, adding CAFS shouldn't be considered an expense, it should be considered an investment. Think about it: The average cost of a brand-new structural pumper is about \$350,000. Adding CAFS will add about 10% to the price tag. But it will increase firefighting capability by two to three times or 200% to 300%. In short, CAFS is a logical investment.

## **5. CAFS is too complicated to use.**

The early forms of CAFS were complicated and not user-friendly, but the systems have evolved and today, they're simple to operate. They add minimal steps to pump panel operations and can provide a consistent product every time. In reality, there are far more steps involved in simply getting water out of the pump than there are to add the foam and air to make CAFS. We do many far more complex operations on a daily basis in the fire service, such as checking and donning an SCBA, starting an IV or entering an incident report into our computers.

## **4. We have lots of water.**

Does having an abundance of a particular resource justify wasting it? Considering today's economic climate, it will only benefit us and our communities to conserve resources. Using water excessively can also cause extensive damage. I recently spoke with a man who had an attic fire in

his home. The fire caused roughly \$50,000 damage. The total damage to his home from the fire and the water damage was \$225,000.

### **3. Foam is too expensive.**

This misconception typically stems from experience with Class B foams. Class B concentrates cost between \$20 and \$30 per gallon. They are used at 3% or 6%. At 3%, three gallons of concentrate will create 100 gallons of foam solution. When multiplied by the volume of solution needed for the incident, the cost can skyrocket. Class A concentrates, however, are less expensive, in the \$12 to \$15 range. With CAFS, Class A foam is used at 0.3%, which means that three gallons of concentrate will create 1,000 gallons of foam solution. Considering the minimal volumes of water typically needed for a CAFS attack on a structure fire, the concentrate used will be measured in ounces, not gallons, and the total cost will be minimal.

### **2. CAFS take the fun out of firefighting.**

There is certainly a thrill when the tones go off with a report of a structure fire. The surge of adrenaline we get with it is part of the reason we love to be in the fire service; however, safety trumps fun. And the line between safety and injury or worse can run pretty thin. Should we really avoid using a technology that more quickly and efficiently extinguishes the fire so that we can better enjoy the firefight? I'm certain our citizens would be appalled by this idea.

**And the number one reason** I've heard as to why fire departments don't use CAFS: My firefighters won't use it. I've heard this from numerous chief officers over the years.

My response: If your department commits to purchasing the technology, providing the training and developing the SOGs for its use, why would you tolerate someone refusing to use it? Do you also allow them to choose whether or not they will wear their PPE or use their SCBA?

**Think about it – and stay safe.**