

## **WHY DO WE DO THAT?**

03/01/2005

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Often, the right thing to do is not the interesting or exciting thing. Frequently, it results in firefighters' standing by in a position and not being put to work unless something unusual or bad happens. This does not suit most firefighters. We want a piece of whatever is going on. We are proud of what we do and want to show how well we can do it.

One such position is that of a nozzleman at an auto accident. The nozzleman knows that he won't be used unless a fire suddenly breaks out in the wrecked cars. Even if he has performed this task a number of times, he probably has never had to open his charged line to protect firefighters and victims in the vehicle from a sudden eruption of flames.

### **NOZZLE AT VEHICLE EXTRICATION**

At vehicle extrications, one firefighter is assigned to the nozzle position and is cautioned to remain on the line and not to become involved with the extrication. Why must the nozzle position be staffed at these incidents? Would not this firefighter be better used to assist in extrication, to stop traffic, or to provide medical assistance to the injured?

It is boring standing in the street and holding a charged line while everyone else is assisting with extrication, stopping traffic, providing medical assistance, or doing some other more interesting and seemingly more worthwhile task. Although not an exciting position, a nozzleman is essential at an extrication. When you respond to a vehicular accident with victims trapped in a damaged vehicle, everyone wants to help with the rescue or to position themselves to see all of the action. That is all well and good. But at these incidents, the nozzle position is a crucial safety precaution; this position must be attentively staffed for the duration of the extrication operation.

At every operation involving a trapped motorist or firefighters operating within the damaged vehicle, a hoseline should be stretched, charged, and staffed by a firefighter who remains at the ready until the victim and all firefighters are out of the vehicle.

In a collision, both vehicles are damaged. Often, the extrication effort itself causes additional damage, which frequently results in the release of flammable automotive fluids, including gasoline. Leaking gasoline coupled with an electrical discharge from the vehicle or a spark from the extrication effort could ignite the leaking gasoline and injure those in or near the vehicle. Once ignition occurs, there is no time to run back and pick up the hoseline to protect the victim and firefighters in or near the vehicle. To be effective and to protect them, the nozzleman must be at the ready, holding a charged line, and be prepared to quickly open and operate it for the protection of all.

If not enough firefighters are present to ensure scene safety by placing cones and flares, directing traffic away from the scene, safely extricating and treating victims, and staffing a protective charged hoseline, then get more help. All of the mentioned tasks must be done to ensure that all at the scene are kept safe during the operation.

As an added measure of safety, you might want to consider having a dry chemical extinguisher handy just in case the gasoline does ignite. It will make short work of a gasoline fire. Having both a nozzleman and an extinguisher firefighter ready will increase the margin of safety for firefighters and victims. If personnel resources do not permit the assignment of the additional safety firefighter, at least have the extinguisher placed in a handy spot where any firefighter or the officer can pick it up and use it should the need arise. Better yet, get enough people on the scene to cover all of the required positions.

### **CAR FIRES**

We are told not to rush up close to a burning car with our hoseline but to stand back and use the reach of our stream, and not to attack car fires from the front or rear. Why not?

I hear some of you asking, "Are you kidding? We always do that! What is the problem?" Well, there are a few problems.

We have rightly learned to use the reach of our streams on structural fires where collapse is a possibility. By doing so, we are keeping ourselves out of the collapse zone and out of harm's way. This same principle should be applied to car fires because there are a lot of ways we can be hurt by being close to a car fire.

An exploding tire will result in flying radial belts and burning rubber being blown from the car. Batteries produce hydrogen and contain sulfuric acid. An exploding battery presents a projectile hazard as well as that of being sprayed with acid. A failing gas tank will put firefighters near the vehicle in a puddle of gasoline and within the vapor cloud, the ignition of which could be deadly. Fuel-injected cars, even when the ignition is turned off, still contain pressurized gasoline in the fuel lines. The rupture of one would project atomized fuel into the air. Ignition would place firefighters in a cloud of burning gasoline.

Today's cars are made of plastics and other synthetic materials, and when they burn, they produce a witch's brew of harmful smoke. Operating in and breathing in this smoke is just plain stupid. Hydraulic pistons are integral parts of the bumper system, and the hood and hatchback systems use pistons to make opening them easier. The bumper pistons can become compressed in an accident only to suddenly let loose without warning as firefighters manipulate the wreckage to extricate victims. The result could be that the piston becomes a projectile, shooting out of the vehicle with enough force to seriously injure the firefighter. It can come out by itself as a projectile or attached to the bumper, causing one end of the bumper to swing like a scythe, hitting unsuspecting firefighters' legs. The hatch and hood pistons can become airborne, putting at risk anyone in the vicinity of the front or rear of the vehicle. All of these pistons can also be launched as a result of an impinging fire.

Today's autos contain magnesium parts. Magnesium fires accelerate explosively when water is applied. The result could be disastrous to a firefighter poking his head into a car while applying water inadvertently onto a magnesium auto part. Magnesium fires are difficult to extinguish with water and require copious amounts of water to effect extinguishment. The correct extinguishing agent for magnesium is a special powder that many of us do not carry. Expect brilliant white explosions when using water as an extinguishing agent for magnesium. Stand back, and avert your eyes from the blinding flashes.

For all of the hazards mentioned and a few not mentioned, the correct safety procedure is to stand back with a hoseline and to use the reach of your stream to darken down the fire. Once it is darkened down, approach the vehicle cautiously from the sides to complete extinguishment. Wear SCBA, as the wind may shift at any time, putting you into the toxic smoke.

## **SEARCH AT A VEHICULAR ACCIDENT**

At a vehicular accident, we make a good search of the vehicle and of the area surrounding the vehicle. Why?

Vehicular accidents often result in tremendous forces being applied to the vehicles and people involved. These forces sometimes result in the occupants' being thrown from their vehicles. Victims have been found overhead in trees, underneath one of the involved vehicles, hidden on the front seat floor under the dashboard, some distance away in bushes or over a fence, as well as in many other unlikely locations. In some cases, only a systematic search of the area will locate all of the victims.

If there are any survivors, try to determine from them who was with them in the vehicle. Is everyone accounted for? Did someone self-evacuate? Did a helpful passerby remove a victim and rush him to the hospital? Did the accident include several impacts, resulting in a victim's being thrown from the car some distance from the vehicle's final resting place?

At one accident, two victims were found in a vehicle on the side of a highway. The roadside was covered by heavy brush. Neither victim admitted to being the driver. They claimed a third party was driving. A search was conducted with no success. Part of the search was conducted using the thermal imaging camera from a position over the brush in the aerial platform basket. It, too, was unsuccessful. The mystery was solved by the police who, on arrival, pointed out that it was a stolen car and the two victims were suspects. In all likelihood, one of them was the driver and there was no third victim.

Make a good search for victims at car fires, too. You might think that a victim in a car will be easy to find. That may not be the case if the fire has been intense. Dousing a body with gasoline in the back seat of a car and igniting it is one method used to cover up a murder. It can be hard to recognize the remains as human after the body and car

have been burning for some time. You will have to get up close and personal to distinguish human remains from the burnt debris left by the seats and other items in the car. This is especially true if it is nighttime and the car fire is in some remote unlighted area.

Don't forget to check the trunk. We have all seen enough episodes of "The Sopranos" to know why.

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