Robert A. Wells, District Claim Agent for Norfolk and Western Railway Co. in Louisville, has been active in Operation Lifesaver since 1980 and became a member of the Kentucky State Council in 1985. Born and raised in St. Louis, Missouri, he began his railroad career at age 17, working summers with the Norfolk and Western Railway Company. Later, he worked as a switchman for the Terminal Railroad Association of St. Louis. He also has worked as claim agent for the Norfolk and Western.

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MORNING SESSION
Friday, October 20, 1989

Robert A. Wells, Chairman
Kentucky Operations Lifesaver

ACCIDENT PREVENTION AT RAIL GRADE CROSSINGS

What I am going to talk about may be a little different than what you normally hear at transportation forums; however, I feel it is very important. You were told that my present position is district claim agent for Norfolk Southern Corporation (Southern Railway Company). My job is investigating accidents. I find out what causes these accidents that we're all concerned about. There is one part of my job I detest. I'm the individual from the railroad who visits the families of those injured or killed in these accidents. You don't know what the word "hard" means until you have to do that. I guess it's for this reason that I first became involved in Operation Lifesaver.

Operation Lifesaver is a safety coalition of federal and state highway departments, departments of education, state and local police agencies, railroads, railroad suppliers, and engineers. It is people from all walks of life who care about safety at highway grade crossings. Operation Lifesaver began in 1972 in Idaho. A gentleman working with a railway company took a look at the number of accidents and fatalities occurring at highway grade crossings in that state. He decided to get together with state and local people to try and do something about bringing the numbers down. That is how Operation Lifesaver was born, and it was immediately successful. In the first year, Idaho reduced the number of fatalities by 46 percent.

Operation Lifesaver has since spread to 49 states. It's very active in all the states and is becoming more active as we go along. In Kentucky, Operation Lifesaver began in 1981 and has grown since that time. Operation Lifesaver is a nonprofit organization made up of volunteers who seek to educate the public about hazards that exist at highway grade crossings. Put simply, Operation Lifesaver is a continuous public information and education program to help prevent and reduce the number of crashes, injuries, and
fatalities that occur at the more than 300,000 public and private grade crossings in the United States.

To give you some idea of the numbers we're talking about, the state of Kentucky has 3,315 public grade crossings, 944 in urban areas and 2,371 in rural areas. Only 1,210 of these crossings have active warning devices, which means they are equipped with flashing red lights and/or gates. In addition to public crossings, we have 3,506 private crossings. This is a lot of crossings in a state the size of Kentucky with such few railroads. We're lucky in that regard. Some neighboring states, including Indiana, Ohio, and Tennessee have upwards of 20,000 crossings. So, we have a problem here, but lucky for us it's not as great as in some of the other states.

We prefer to use the word "crashes" rather than accidents because we don't feel these are accidents at highway grade crossings. Sometimes a car runs into a train (more often then you think) and sometimes a train hits a car, so we refer to them as crashes. In Kentucky, there have been 6,025 recorded crashes of which there were 2,417 injuries and 652 deaths. That may not sound like much compared to the number of highway fatalities. But it is significant. Even more significant is that an individual is three times more likely to die in a vehicle-train collision than in a collision involving two vehicles.

Kentucky had 144 accidents, 65 injuries, and 13 fatalities in 1987. These figures moved me. That was the year I took over as coordinator and my first duty was to bring down these numbers. We more than doubled the number of Operation Lifesaver presentations made throughout the state and concentrated on getting more people involved in the program. As a result, in 1988 we were down to 124 crashes, 61 injuries, and, more importantly, only three fatalities. This represented a 77 percent decrease in the number of fatalities from 1987 to 1988, so we felt it was due in large part to our efforts at Operation Lifesaver.

This was the most dramatic decrease in the United States and has drawn attention from people in the National Operation Lifesaver Program and from coordinators all over the country. It is by getting the word out that you have this kind of success. So far we've been lucky. Once you reach this level of success it's even more difficult to stay there and keep the numbers from increasing. We're doing a fairly good job this year. Right now we have only preliminary statistics from the Federal Railroad Administration, but those figures show we've reduced the number of crashes to 70, with 34 injuries, which is nearly half the number of injuries. Unfortunately, there is an additional fatality this year so we have four. I'm not happy about this at all. You have to work to reduce the number of crashes before you can work to totally wipe out fatalities.

Most people don't understand the significance of trains. For years and years throughout the history of this country, railroads have been a vital part of helping us grow. Everything moves by rail (we'd like to put more commodities on rail and take some of the trucks off the highway to help you out), but most people think railroads have died out. While railroads are not moving the number of people they did in the past, there is more freight on rails now than at any other time in our history. So, we're out there. The railroads have some kind of impact on all of us and they stir emotions in us. I know you have seen little kids waving to the crewmen on the train; trains are
part of America. A few weeks ago we ran a steam excursion train from Lexington to Chattanooga and it was packed. You couldn't get another person on it and there was a waiting list for tickets.

What most people don't understand is that operating a train is not like operating an automobile. The average automobile traveling at 55 miles an hour can stop at about 200 feet. The average freight train traveling at 55 miles an hour takes a mile and a half to stop. From the time an engineer sees a dangerous situation and goes to emergency brake application which locks every brake on his train, there is still a delay of over 15 seconds before he reduces his speed by one mile per hour. A comparison is made using an aluminum soda can. Your automobile running over a soda can is comparable to a locomotive pulling 100 freight cars hitting an automobile. Its devastating. Most people think the problem here is that trains travel too fast. However, almost all accidents occur involving trains going less than 35 mph, so that's not the problem. You're going to get the same impact from a huge train on a little car, no matter what the speed is. As I said, an individual is three times more likely to die in a train-vehicle accident than if the same vehicle is involved in an accident with another vehicle.

So what does Operation Lifesaver do? Well, our program consist of education, enforcement, and engineering—the activities you are concerned with.

Education

We feel education must begin at the grass roots level; we need to start educating people when they're in grade school. So, a good part of our program involves going to grade schools, middle schools, and high schools and making presentations about highway grade crossing safety. We spend most of our time doing this, but that's not where we end. We educate bus drivers and hazardous material truck operators. We also talk to civic organizations and address people like yourselves. We'll talk to anybody who will listen because we're committed to a program that we know works. Most of the accidents I investigate are due to driver inattention and complacency. You face it in automobile accidents and we face it in train-car accidents. Unless we educate the public about the problems and hazards that exist, we're not going to stop them.

Enforcement

Enforcement is an area Operation Lifesaver neglected for too long. We have finally gotten through, and now have the interest and cooperation of state and local police agencies. We haven't asked them to do anything new; we just want them to enforce the rail-grade crossings laws already in existence. It is illegal to go through a flashing red light at a crossing. That red light has the same message as a flashing red light on a highway: Stop! Those gates that come down are not there to provide an obstacle course for drivers. They are meant to stop people from going onto the crossing. Yet, 58 percent of all crossing accidents occur at crossings that are protected with active warning devices. Again, active warning devices are flashing lights and/or gates. Fifty-eight percent of the accidents happen at such crossings and only one-
third of all public crossings are protected with crossing protection. So, the answer isn’t in crossings protection. You can put them up, but unless people adhere to the warning it’s not going to help.

We have gotten the police involved. They are out there. Just this past week, the Lexington television stations carried a program in which we have been involved, called “Trooper on the Train.” We’re putting law enforcement people in the cabs of locomotives. By using radio contact with units on the ground, they are getting the violators. They radio ahead to troopers and police officers in cars about drivers who are going around lowered gates (and creating near misses) and those who run through flashing red lights in front of the trains. They are being caught and cited. If we can’t get their attention through education, we’ll get their attention through their wallets. People tend to listen when they have to pay and it is a whole lot easier to pay with your wallet than with your life.

Engineering

Last, but not least, is engineering. Great strides are being made every day by people like yourselves to better enhance the engineering aspects of grade crossings. Through your efforts and the efforts of people concerned with the engineering aspects—active warning devices, crossing surfaces, and approaches to railroad crossings—we are making crossings safer. People often tend to think they have to watch crossings because they’ve damaged a muffler or torn up their tires on a crossing that was in terrible repair. Through engineering improvements we’re going to take this excuse away from people. They’re not going to have to worry about tearing up their car at a crossing. They will only have to be concerned with watching out for trains because the trains just can’t stop. The motor vehicles can.

Through the efforts of Operation Lifesaver (maybe it is selfishness on my part), I hope to see the number of accidents continue to decrease. I don’t want to have to visit the families of other people killed or injured in grade crossing accidents.

I would like to answer any questions you may have.

Question

What about malfunctioning signals (train isn’t there but the signals are operating)?

Answer:

It would be difficult to tell you about the intricacies of the railroad signals, but I will tell you this. They are on a failsafe system; I’m not going to tell you they never malfunction, they do. But when they do malfunction, they malfunction in their most restrictive mode, and that is, the gates come down or the flashers will operate. No, I’m not going to say you should sit there all day and wait for it. I will say that unless a police officer or railroad official comes along and does something to deactivate that signal or raise those gates, a school bus is going to stay there. If they can see that the way is clear,
then I would say, nine times out of 10, people are going to go around the gate. There's no way to stop that or prevent it. And, I'm not saying that you should, I am just saying that before you do, make sure it is clear and there are no trains coming on the track.

Question:

Is DUI a problem? (My suggestion is to post a sign at railroad crossings asking drivers to write down the license number of anyone seen violating crossing signals and give a special phone number where the driver could call and report the offender.

Answer:

The railroad has the "near-miss program." The train crew are trained to watch for people who do violate the grade-crossing laws. Obviously, you can't have a police officer sit at every crossing every hour of the day. But, our crew immediately reports (by radio to our dispatchers) any violators they see go around gates, or go through flashing red lights in very close proximity to the train. We can notify local police of the description of those vehicles. We then follow up and contact those people and advise them of what they did and ask them to please watch it in the future. If it is a trucking company, we ask to come to their company and put on an Operation Lifesaver presentation to the drivers so we can keep this from happening to other drivers. There are two things railroad engineers dread more than anything else in this world: to hit a school bus and to hit a gasoline truck. If they hit a gas truck, they are history; if they hit a school bus, they'll never forget it, they'll have to live with it. And even though it isn't a law in the state of Kentucky for school buses to stop at grade crossings, it is in their bylaws that they have to stop as a requirement of their training. Bus drivers have been fired when we go to the authorities and tell them about near-misses for violating those laws.

Question:

About how many accidents are DUI?

Answer:

The Federal Railroad Administration does not keep statistics on DUI at present. I will tell you from my own experience in the accidents I've investigated, I would say probably 35-40 percent are alcohol related.

I recently investigated an almost head-on accident at 1:00 a.m. in the Louisville area. The road and the track were at such angles that the driver was almost headed right into the path of the oncoming train. The first thing I saw was the automobile involved, the whole right side of the 1983 Ford Thunderbird was wiped out, it was just gone. I went around to the front of the locomotive to the police car sitting there. I asked to which hospital the driver was taken. The officer said, "He's in the back seat of my police cruiser. After you finish talking to him, I'm arresting him for DUI." The man had one little scratch on his head, that was all. Anyone else might have been killed.

DUI is a problem but to what extent, I do not know.
Question:
If some group wanted to make a presentation, how far would you go from Louisville?

Answer:
We are very, very interested in putting on presentations to anyone who will listen to us at any time. I have presenters who go throughout the state putting on Operations Lifesaver presentations. My phone number is (502) 635-5657.

Question:
Are you able to do anything about ballasts continuing to be added at crossings and causing tracks to become elevated?

Answer:
That is a problem railroads have finally started to address. It has been brought to my attention several times in Louisville because we have some crossings that at one time started out level with the road and now they are about three feet above the roadway. As the ballast is increased, the height of the track is raised, the approaches are greater to the crossing, and it does create a problem. The railroads are trying to figure ways to maintain the consistency that we need to support the heavy freight that is moved over those rails, but at the same time, keep it in line with the existing roads.

Question:
Instead of one oscillating headlight, can you use two oscillating headlights to help the vehicle drivers?

Answer:
Well, railroads do not have oscillating headlights anymore. There is one, and sometimes, two (depending upon the locomotive) stationary headlights. The studies that have been done on headlights, found that the one headlight is as effective as the two headlights. Some of the older locomotives do have two, most of the newer ones have only one. There are no oscillating headlights anymore; they are all stationary. We found that really didn’t have an impact on recognition of the train.