8/8/13 Print

Please stick to reporting the facts.

Dean Francuch

I stand by what I said and will gladly explain why. A train derailment has a great deal in common with a person jumping out of an airplane. Both involve kinetic energy which results when something is moving and the amount of kinetic energy is based on something's weight and the speed it is moving. A person jumping out of an airplane will travel at over 100 miles per hour. But if that person uses a parachute and lands in an open field the chances are good that person will not be injured. Jumping out of an airplane is not necessarily deadly. If a person jumps out of an airplane without a parachute, that won't kill them. What will kill them is the collision with the ground at over 100 miles per hour.

When a train is out of control, a derailment acts like a parachute. A derailed train once it is on the ground will literally come grinding to a halt much faster and in a shorter distance than if the train was in full emergency braking. By doing so the kinetic energy of the train is rapidly dissipated. Derailments are well known in the rail industry as a safety feature of railroading. Most derailments don't result in injury or death. The problems come if a derailed train collides with something before stopping. In a collision an object stops suddenly with the full impact of its kinetic energy. This can be very destructive.

If we look at the July train disaster in Spain the train derailed just before it collided with the retaining wall. The front locomotive of the train didn't collide with the wall and only derailed after in was pulled over by the rest of the train. The train's operator much to his regret survived the derailment with fairly minor injuries. The train hit this wall at such force that several of the cars were broken off of the train. One car flew so high in the air that it landed on the road behind the wall that the train hit. In addition diesel fuel from the rear locomotive spilled and caught fire which added to the casualties. If this accident had happened in open country and not in a town the train would have derailed. But it would likely run up the slope of a hill; dirt is softer than concrete and the train would have likely slid along a slope instead of slamming against an upright wall. NB

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about:blank 11/12

8/8/13 Print

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