

FINAL Kentucky FACE 94-045-01

Date: 9 August 1994

Subject: Part-Time Farmer Dies After Pick-up Truck Overturns

SUMMARY

A 52-year-old part-time farmer was killed when a pick-up truck overturned and crushed him. The victim, along with a neighbor (the witness), was loading the neighbor's tractor on a flatbed trailer to transport it to the victim's tobacco field for plowing. The trailer, attached to the pick-up truck, was parked on a gradual downward slope in preparation for tractor loading. The victim was standing on the front of the trailer while the tractor was being driven onto the trailer by the witness. Before the tractor was completely on the trailer, the truck and trailer began to roll down the slope. When the victim saw what was happening, he jumped from the trailer and ran toward the driver side door in an attempt to stop the truck. He opened the door of the moving truck and tried to reach the brake. The right front wheel of the truck rolled up a hill bordering the road causing the truck to overturn and crush the victim. The victim died from traumatic suffocation. The Kentucky FACE investigator concluded that, in order to prevent similar occurrences, farmers and equipment operators should:

- Use tail end support jacks to stabilize trailers during loading and unloading operations
- Use chocks to prevent vehicle movement
- Equip trailers with adjustable height support posts
- Evaluate the terrain prior to beginning a procedure

INTRODUCTION

On May 23, 1994, a 52-year-old part-time farmer died when he was crushed by an overturned pick-up truck. On May 24, the Kentucky FACE investigator read of the fatality in the newspaper. On June 6, 1994, two weeks following the incident, the FACE investigator, accompanied by a Traumatic Farm Injury Surveillance in Kentucky (TFISK) registered nurse, traveled to the scene. The witness, the county coroner, a neighbor, and the victim's widow were interviewed. The scene, tractor, trailer and truck were photographed. Photographs taken by the deputy coroner were also reviewed.

The victim, serving his second term as county jailer, also worked as a part-time farmer maintaining an 87 acre farm about 6 miles from town. He raised tobacco and 30 head of cattle. He had lived and worked on the farm for 15 years after retiring from the Federal Bureau of Alcohol, Tobacco and Firearms. He had borrowed the neighbor's tractor several times in the past and had used similar procedures to transfer the tractor to his farm, approximately 2.5 miles away. The victim had not had any previous farm injuries and was considered to be a farm safety advocate. He had owned the 1993 Chevrolet 1500 pick-up truck for 10 months. This was the first time this particular truck was used in this procedure.

INVESTIGATION

The victim and his neighbor were preparing to load the 1976 International Harvester Farmall 140 tractor onto a double axle 8' x 20' 38" high flat bed trailer at 5:00 pm the day of the incident. The victim was to transport the witness and his tractor to victim's farm where the witness was to plow recently planted tobacco fields. This procedure had been used previously so that the neighbor would not have to drive the 2.5 miles on public roadways. The truck and trailer were parked on a gravel, single lane road with a nine degree downward slope. Along the right side of the road was a brush filled earthen bank four feet high sloping 45 degrees downward toward the road. The afternoon was warm and dry. The victim was about an hour late for the scheduled pick up and transfer of the tractor.

At about 5:10 pm the victim arrived at the neighbor's farm to transfer the tractor (plows attached) to plow two tobacco patches. He parked the 1993 Chevrolet four wheel drive automatic with trailer attached and turned the engine off. The truck was headed down hill. The truck was in 'park'. The emergency brake was not set. On the right of the truck was an earthen bank. The victim positioned himself on the trailer in order to guide the Farmall 140 tractor onto the trailer. The trailer supports were not down. No chocks were used at the wheels. As the witness began to drive the tractor onto the trailer, the truck and trailer began to roll down the sloping gravel road. Noticing the trailer move, the victim jumped off the trailer and ran to the driver side door in order to stop the vehicle. The truck, steering wheel locked, headed for the bank on the right side of the road. It rolled 65 feet and turned over onto the victim before he was able to get in and apply the brake. The truck came to rest on its side with its front angled across the road pinning the victim under the truck's left side. The bed of the truck, just behind the driver side door, smashed the victim's lungs. It appears the force of the trailer pushing the truck up the bank caused the truck to roll over.

The neighbor stopped the tractor and ran to the victim. Realizing he needed help, (the Farmall 140 was too small to right the truck), the witness went to a neighboring farm to summon help. The 55 year old witness with emphysema ran about 3 tenths of a mile to use the neighbor's phone. The EMS was notified. Fire department personnel arrived at the scene at 5:58 pm. Noting no pulse, respirations or blood pressure, the coroner was notified and arrived at the scene at 6:22 pm. The coroner pronounced the victim dead and estimated time of death at 5:41 pm.

CAUSE OF DEATH

The coroner listed the cause of death as traumatic suffocation due to truck overturn. An autopsy was not performed.

RECOMMENDATIONS/DISCUSSION

Recommendation #1: The trailer supports (stabilizers) should be used when loading and unloading equipment.

Discussion #1: The tail end support jacks were not used in this case. Evidence at the scene suggests that the rear end of the truck was lifted off the ground by the weight of the tractor as it went onto the trailer. This freed the front truck wheels to roll. If the tail end jack were engaged,

this would transfer the weight to the ground directly below the tractor. As it happened, the weight was transferred by the fulcrum of the trailer wheels to the truck hitch. This lifting action allowed the truck to roll forward.

Upon inspection of the trailer, it was noted that the support jacks were operable. However, they lacked the adjustability to account for variations in surface terrain. The support jacks should have variable height positions to allow for their use in areas that are not flat.

With the weight of the tractor on the rear of the trailer the bed of the pick-up was lifted. This would not be the case with support jacks.

Recommendation #2: Chocks should be used to prevent vehicle roll.

Discussion #2: Neither the trailer nor the truck had chocks in front of the wheels. With the sloping grade, chocks should have been in place prior to loading the tractor. This may have prevented the forward motion of the truck.

Recommendation #3: Trailers should be equipped with multiple height adjustment stabilizers or fixed on ramp boards with angle brackets to transfer the load directly downward.

Discussion #3: The trailer did not have multiple adjustment jack posts. Had there been various height settings possible, the victim may have been able to stabilize the rear end of the trailer on the uneven gravel thus preventing the lifting action of the weight of the tractor. A better alternative would be movable ramps equipped with permanent angle brackets which come into contact with the ground when they are in use.

Recommendation #4: The terrain should be evaluated prior to starting any operation.

Discussion #4: The victim, who was late for the pick up, did not fully evaluate the situation and conditions or anticipate the truck roll. Careful consideration of the terrain may have resulted in trying to load the tractor at a different place on the farm.