

TEXAS DEPARTMENT OF PUBLIC SAFETY

STATE CRASH TEAM RECONSTRUCTION

INVESTIGATION

SYNOPSIS

The State Crash Reconstruction Team was activated to reconstruct a crash which occurred in Austin County on IH 10, 1.9 miles east of San Felipe, Texas. The date of the crash was August 8, 2004. The crash involved a 2000 GMC Yukon Denali driven by Hubbard Scott Caven III. The second vehicle involved was a 1994 Honda Civic driven by Brittany Joy Cune. The third vehicle was a 1998 Honda Civic driven by Angela Marie Sparks. The fourth vehicle involved was a 1997 Ford pickup operated by Dawn Marie Pawlowski. The Yukon was traveling eastbound on IH 10. The other three vehicles involved: Honda (Cune), Honda (Sparks) and Ford (Pawlowski) were traveling west on IH 10. The Yukon encountered slowing traffic due to a curvature of the roadway and attempted to apply heavy braking as did other vehicles in the eastbound lanes. Due to defective brakes, the Yukon was unable to effectively reduce its speed. The Yukon went into a yaw and entered the center median where the vehicle began to skid sideways. Upon reaching the westbound lanes, the Yukon began a right to left roll as it entered the lanes. The Yukon rolled over the top of the Honda (Cune). The driver of the Honda (Cune) was killed instantly. The Honda (Cune) continued westbound, leaving the right side of the roadway where it became hidden by the foliage. The Yukon continued its side to side rollover and landed on the hood of the Honda (Sparks) which was traveling in the inside lane. The occupants of the Honda (Sparks and passenger, Shalena Hodges) received non-incapacitating injuries and their vehicle came to rest in the inside lane. The Ford was traveling west in the inside lane. The Ford braked and made an evasive lane change to the outside lane but was unable to avoid striking the Yukon. The Ford spun approximately 180 degrees as it slid off the right side of the roadway where it came to rest in the right median facing east. The driver of the Ford (Pawlowski) reported a possible injury. The passenger (Taylor Doucette) was not injured in the crash. The Yukon came to rest in the westbound, outside lane facing east. The driver (Caven) was killed as a result of the crash. The passenger (William Finnegan) was transported from the scene and later succumbed to his injuries.

INVESTIGATION

1. On 02/11/09, Sergeant Richard Jacobs was requested to utilize the State Crash Team to reconstruct a crash that occurred in Austin County on August 8, 2004. The crash had previously been reconstructed by the District 2C Crash Reconstruction Team. The chief of the Texas Highway Patrol made this request based on new compelling evidence provided by the Caven family after civil litigation.
2. On 02/24/09, the State Crash Reconstruction Team consisting of Captain Casey Goetz, Sergeant Paul Adkins, Sergeant Richard Jacobs, Corporal Keith

Olive, and Trooper James Jones met in Austin. Corporal Keith Olive and Trooper James Jones met with Joseph Herman in Austin, Texas. Herman was a friend of Scott Caven and was traveling approximately two cars behind him as the crash occurred. Corporal Olive and Trooper Jones questioned Herman as to his recollection of the events of the crash as well as the two days' events prior to the crash. Herman reiterated his previous statements and provided no new information. (Refer to Chapter 6, 6.3.)

3. On 02/25/09, members of the State Crash Team met with the Caven family and their legal representatives, Jesus Garcia and Charlie Parker. It was explained that the Caven family had recently settled with Brake Check, Inc. During depositions taken, experts for Brake Check, Inc. had conceded the fact that the Caven vehicle had been incorrectly repaired causing the brakes to be defective or deficient. (Refer to Chandler deposition, Chapter 6, 6.14 and Rosenbluth deposition, Chapter 6, 6.17) The Cavens perceived this revelation would provide evidence their son, Scott Caven, was not speeding as reported in the District 2C reconstruction.
4. The State Team was provided with all of the depositions and legal files relating to the civil suit filed by the Cavens against Brake Check, Inc. The team spent the rest of the day examining these files.
5. The Team also met with Trooper Randy Stavinoha, the original investigator of the crash. Trooper Stavinoha provided the team with his recollection of the original crash investigation and his interviews with witnesses at the scene.
6. Sergeant Jacobs and Corporal Olive met with Rand and Patti Berney at their home on the evening of February 25, 2009. The Berneys reiterated their statements that Caven was traveling at or below the posted speed at the time of the crash. The Berneys were not asked to provide an additional written statement since their recollection of the events had previously been documented in two written statements and two sworn depositions. (Refer to Berney depositions, Chapter 6, 6.1 and 6.2)
7. The team wanted an opportunity to physically inspect the vehicle and was able to locate it at Lalo's Auto Salvage in San Antonio. It was learned the motor, transmission and rear end had been removed for salvage which made an inspection of the vehicle irrelevant.

COMPUTATIONS

1. Skid tests were run at the scene of the crash on August 16, 2004 by Sergeant John Tucker. The results of which are incorporated in this report. (See attachment in Tab 5 of the 2C Reconstruction located in Chapter 7) Based on these tests, the drag factor of the eastbound lanes was determined to be .74.

2. While it is always preferable to measure a yaw mark at the original scene due to the accuracy called for in the measurement of the middle ordinate, it was not a possibility in this case due to the age of the crash. Sergeant Paul Adkins was able to measure a yaw mark made by the Caven vehicle from the scale diagram provided by the 2C Crash Reconstruction team using a CAD program. The chord was measured at 200.573 feet and the middle ordinate was measured to be 10.971 feet. Based on the calculations performed with these measurements, Caven's speed was calculated at 71 MPH. Since these measurements were taken from a scale diagram and could be considered inaccurate, the middle ordinate was varied by 1 foot from 11.971 to 9.971 respectively. This produced a speed variation of 68 to 75 MPH. This range of speeds is in agreement with witnesses to the crash.

EVALUATION

There were several depositions which provided information valuable to the team. While they are included in this notebook, a synopsis of their contents is as follows in no particular order:

Karl T. Hartwig, Ph.D. testified to the fact the bleeder valve on the Caven vehicle had been over tightened causing it to shear off resulting in an inability to properly "bleed" the brake lines of air, resulting in a deficiency in the brakes ability to stop the vehicle. He was able to duplicate this in more than one test. (Refer to Chapter 6, 6.23)

Jerry G. Wallingford, P.E. testified that he measured the brakes on the GMC Yukon and found the right rear was so out of tolerance that it would have a significant effect on the vehicle's ability to stop. (Refer to Chapter 6, 6.12)

Joe Herman testified he had been traveling behind Caven and had not been speeding. He further testified that he had been exchanging text messages with Caven while they were driving. (Refer to Chapter 6, 6.3)

Rand and Patti Berney testified they had been traveling behind the Caven vehicle and stated traffic was heavy and they had been driving no faster than 75 MPH. (Refer to Chapter 6, 6.1 and 6.2)

Hubbard Scott Caven, Jr. testified as to the time-line of the repairs made to his son's Yukon prior to the crash. (Refer to Chapter 6, 6.24)

Frederick H. Chandler (Retained by Brake Check) testified the Caven vehicle should not have left the Brake Check shop in the condition that it left in. (Refer to Chapter 6, 6.14)

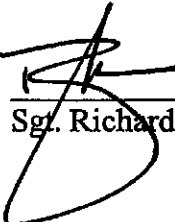
William Rosenbluth (Retained by Brake Check) testified the Caven vehicle should not have left the Brake Check shop in the condition that it left in. (Refer to Chapter 6, 6.17)

CONCLUSIONS

The State Crash Reconstruction Team was able to conclude Scott Caven was traveling east on Interstate 10. Due to the curvature in the roadway, the heavy traffic started to compress and slow down. As the vehicles began slowing, numerous vehicles in both eastbound lanes were forced to take abrupt evasive actions. Many drivers had to take evasive maneuvers and apply panic braking in order to prevent a chain-reaction type crash. During this process, Scott Caven, driving the 2000 Yukon Denali, changed lanes from the inside lane to the outside lane and attempted hard braking. Based on the information received by the team, it is our belief the brakes of the Yukon failed to effectively reduce the Yukon's speed. Caven, realizing he couldn't stop, evasively maneuvered his vehicle left in order to avoid striking vehicles that had already slowed or possibly stopped in front of him. As he turned hard to the left, the Yukon went into a counter clockwise yaw and entered the center median. At this point, Caven had lost control of the vehicle. The Yukon entered the westbound lanes where it collided with three separate vehicles.

The team also determined, based on the testimony of witnesses, Caven had been actively text messaging his friend while driving. While cell phone use can be a distraction in the vehicle, Caven's evasive actions were those expected of a normal and prudent person and not those of a distracted driver in a similar situation.

Speed, was discounted from this crash, as all other vehicles in front of and behind Caven, who were traveling at approximately the same speed, were able to maneuver to a safe position. The team concluded that had Caven had properly working brakes, he would have been able to avoid this crash.



Sgt. Richard Jacobs, State Team Leader