

VEHICLE OPERATIONS *and* ACCIDENT RESPONSE

The Lessons Learned Center recently obtained the input and expertise of certified accident reconstructionist Mark T. Bailey. Mr. Bailey is certified by the Accreditation Commission for Traffic Accident Reconstruction (ACTAR) and has among his credentials over 20 years experience with one of the largest U.S. Government fleet operators. This is the last of a series of articles the Lessons Learned Center has presented to foster the best practices relative to vehicle operations in the wildland fire community.

According to Mark Bailey, there are two critical means by which to identify and institute safety improvements in wildland fire vehicle operations. The first is the institution of a proactive prevention approach that includes standardized vehicle type-specific operator training and second timely and quality post-accident data collection especially of short-lived evidence.

Specialized Training

Bailey cited the vehicles normally associated with the wildland fire community such as engines, water tenders, utility body trucks, sport utility vehicles, pickup trucks, and extended body 15 passenger vans as the ones for which a type-specific minimum amount of specialized operator training is beneficial and should be provided.

Bailey further stated that these vehicles do not generally fall within the requirements for a Commercial Driver's License (CDL) endorsement. However, their high center of gravity or unique handling characteristics, especially under conditions of use in the wildland fire community, warrants that their operators be recipients of an ongoing program of initial and refresher training.

For a new operator of these vehicle types, he recommends a graduated supervised program of training to develop the needed level of proficiency. He believes initial training should conclude with a realistic road test that requires a practical demonstration of operator proficiency that is monitored and evaluated by trained vehicle type-specific driving instructors. The road test conditions should include narrow dirt and gravel mountainous roads and highway operation of fully loaded vehicles.

Practical training resources are available such as through the National Highway Transportation Safety Administration (NHTSA). As an example, they have published guidelines to reduce the risk of rollovers in 15 passenger vans. The Bureau of Land Management (BLM) has adopted these guidelines. The guidelines include assigning only those with experience in these types of vans as unsupervised operators. The guidelines also discuss the removal of the rear seat and properly screening the rear area of the van to provide a small storage space that separates cargo from passengers. Finally, the NHTSA recommends using the roof racks for lightweight items only. To view the entire NHTSA

15 passenger van safety guideline click on <http://www.nhtsa.dot.gov/Hot/15PassVans/index.htm>.

Response Kit

In the event of an accident, Bailey stressed the benefit derived from a standard accident response kit that is developed and placed in each vehicle to include an at scene checklist. This would aid the systematic gathering of basic post-accident data. The sealed plastic bag type kit he described would include a disposable camera and be kept in each vehicle to record the accident scene before vehicles are moved and if practical, before the scene is otherwise disturbed. Bailey also suggested that a more advanced kit should be provided to responding supervisors. This response kit should have a SLR 35 mm camera, multiple rolls of various speed film, and the means to measure and more fully diagram the accident scene.

These kits and their cameras would provide two benefits, according to Bailey. Short-lived evidence such as tire markings on dirt, gravel or even paved roads can then be readily documented before they are erased by traffic or weather. The pictures can often be used later by an accident reconstructionist. The information facilitates subsequent technical analysis of what factors led to an accident and the development of focused and specific preventative training using actual occurrences as examples. Secondly, Bailey stated that high quality initial documentation of the accident scene and subsequent investigation follow up be combined with a reconstructionist expert testimony to aid agency success in tort claim adjudication.

Mr. Bailey mentioned how this two-prong approach was applied by one U.S. Government agency in a motor vehicle accident case he prepared. It resulted in a probable payout of a multimillion dollar tort claim actually being settled during the trial for a fraction of what the Government had at one point offered the plaintiff in pretrial settlement discussions. The U.S. Attorney's Office ability to impeach the plaintiff's expert witness-alleged causation of events that led to the collision was a key factor. The depth of this post accident investigation recovered short-lived evidence that is usually unavailable for reconstruction purposes. This evidence, when it was properly examined and evaluated, showed the collision did not occur in the sequence the plaintiff alleged, and that another defendant bore the primary responsibility for the accident. The agency was also able to show, based on recovery of this short-lived evidence, that the local police agency had placed the wrong private vehicle occupant as the vehicle operator in this fatal collision. ★

Mr. Bailey can be contacted through the Lessons Learned Center at <http://www.wildfirelessons.net/ContactInfo.htm>.