

THE ASSOCIATION

Indiana Association of Certified Accident Investigators
www.iacai.com



Digital Photography Seminar Recently Held in Greenfield

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As is the credo of the mailman, "Neither rain, nor sleet, nor snow..." so was that of the attendees to the Association's winter seminar on Digital Photography, held on December 5, 2007 in Greenfield. Those heading to Hancock County found themselves traveling in hostile road conditions, with ice/sleet/snow being the highlight of the morning trip. Even the instructor for the class, IACAI member and resident expert Steve Neese, was not immune from traveling from the Region to teach the class! All and all, though, we had a very impressive turnout for the class; those attending were not disappointed, either.

Steve began the in-service by explaining the importance of taking photographs and the relevancy of the photographs taken. "Don't take photographs just to take photographs," Steve said. "Get a game plan together." Steve then explained the need to take pictures using the camera's flash, all of the time. Flash is used to "fill in" areas that are normally shadowed by sun, lights, etc. Evidence normally hidden by this are now exposed by the flash, creating a more beneficial photograph. Photographs

should also be shot so that the vehicle or item being photographed is "squared off" versus a "newspaper" type photograph. Squaring the photographs helps in more accurately assessing damage to the vehicles and placing

The nomenclature of the digital camera was reviewed and the confusion regarding the mega-pixel size was laid to rest. Steve explained that when it comes to digital cameras, the size of the mega-pixels have more to do with



Steve Neese, of Neese and Assoc., explains the importance of using fill flash when taking photographs.

evidence at the scene. Steve also explained that the photographs should show everything - all of your skidmarks, for example. Those taking photographs should learn to use the entire viewfinder, and not just the center of the viewfinder.

the quality and clarity of the resulting photograph. An example given is: Using the average 2 mega-pixel sized camera will yield photographs which would be acceptable up to 4"x6" in size.

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NHTSA Issues Consumer Advisory On Ford Products

A NHTSA Press Release

The National Highway Traffic Safety Administration urged owners of certain un-repaired Ford, Lincoln, and Mercury SUVs, pickup trucks, vans, and certain passenger cars that contain a safety defect to bring their vehicles to dealer repair shops immediately to have their cruise control switches disconnected. Many dealers will perform this as a "drive through" service so owners do not have to leave their vehicles at the dealership or schedule an appointment in advance.

Failure to have the switch disconnected could lead to a vehicle fire, whether or not the key is in the ignition and whether or not owners use the

cruise control system.

The safety agency said the fire danger is present regardless of the age of the vehicle and could even occur while the vehicle is parked and unattended. Several dwelling fires have been attributed to the problem.

NHTSA said it is issuing the consumer advisory due to concerns that many owners have yet to respond to multiple safety defect recall notifications involving 9.6 million registered vehicles. It said that approximately five million vehicles have been repaired so far, leaving some five million passenger cars and light trucks with the faulty switches intact, and in danger of catching fire.

Ford and NHTSA urged all owners of recalled vehicles that have not been repaired to bring their vehicles to dealers as soon as possible to have the faulty switches disconnected as an interim safety measure. Ford is in the process of re-notifying the owners of the SUVs and other light trucks concerning the importance of having the switch disconnected. The interim fix will eliminate the risk of fire while affected Ford and Mercury owners are waiting for final repairs from the company, NHTSA said.

Below are the involved vehicles listed in the recall notice:

Vehicles involved in the NHTSA Consumer Advisory include:

1993 - 2004 Ford F150 Pickup
 1993 - 1999 Ford F250 Pickup (Gasoline engine)
 1993 - 1996 Ford Bronco
 1994 - 1996 Ford Econoline Van
 1997 - 2002 Ford Expedition
 1998 - 2002 Lincoln Navigator
 1998 - 2002 Ford Ranger Pickup
 1992 - 1998 Ford Crown Victoria, Mercury Grand Marquis, and Lincoln Town Car
 1993 - 1998 Lincoln Mark VIII
 1993 - 1995 Ford Taurus SHO with automatic transmission
 1994 Mercury Capri
 1998 - 2001 Ford Explorer and Mercury Mountaineer
 2001 - 2002 Ford Explorer Sport and Explorer Sport Trac
 1992 - 1993 and 1997 - 2003 Ford E-150 - 350 gasoline or natural gas vehicles
 2002 Ford E-550 gasoline engine vehicles
 1996 - 2003 Ford E-450 gasoline or natural gas vehicles
 1994 - 2002 Ford F250 through F450 super duty trucks (gasoline engines)
 2000 - 2002 Ford Excursion (gasoline engine)
 2003 Ford F250 - F550 Super Duty, Ford Excursion
 1995 - 2002 Ford F53 Motor home chassis
 2002 - 2003 Lincoln Blackwood

Members of the association who have investigated vehicle crashes with fire or vehicle fires are encouraged to review the above list to see if this may be a contributing factor.

"Failure to have the switch disconnected could lead to a vehicle fire, whether or not the key is in the on position or whether or not the owners use the cruise control system"

More about: Digital Photography Seminar

(Continued from page #1)

Creating a larger photograph than the 4x6" would result in distortion or "pixelization." Another example would be using a camera with a 5 mega-pixel size. This camera would be able to produce a quality photograph to a maximum size of 8" x 10" before distortion would begin to show. Obviously, the bigger the mega-pixel is in your camera, the better quality the photograph is, and the larger the photograph can be reproduced. However, Steve cautioned attendees about going crazy on the pixel per inch size. He compared ASA film speeds and the digital camera's pixel sizes. In film cameras, the larger the ASA number, the more sensitive the film is, resulting in better, clearer photographs. When it comes to digital cameras however, the bigger the pixel per inch size, the less sensitive to light the camera is. This creates "noise" on the photograph - a more grainy overall picture. A second component which influences the quality of the photograph in a digital camera is the size of the light sensor in the cam-

era. The bigger the sensor is in the camera, the lower the number of pixels per inch and ultimately, the better the photograph. None the less, for law enforcement purposes, Steve recommended purchasing the biggest mega-pixel camera available.

Attendees to the program were encouraged to bring their digital cameras. Those that did were able to put them to good use during the in-service. There were several exercises which provided attendees with practical demonstrations of how to take good photographs and in different environments, including low light and snow environments. Additionally, attendees were provided with props to take photographs with, both normally and with fill flash to demonstrate the differences. The results using the fill flash were hard to argue! During the night shoot exercise, Steve cautioned attendees about shooting where reflective material is present. A reflective coat was brought out and attendees were encouraged to photograph the coat in low light conditions. After reviewing the obviously

distorted photographs, Steve suggested shooting the photos at an angle rather than straight (90 degrees) on. Taking photographs slightly off-set will capture most of the detail without being washed out.

Painting your crash scenes with light was also discussed and demonstrated in class. This is another great tool to use, which can be used with digital cameras.

Finally, Steve reviewed proper procedures for storing digital photographs. While CDs are fine for storing the photos, they should not be written on with black bold-point permanent ink markers. The marker ink will deteriorate the CD over a period of time. Use fine point markers or markers / labels specifically made for CDs.

Thanks to Steve Neese for risking life and limb to come and put on a very interesting and educational program. I know that I will not take photographs the same way any more!

Dave McElhaney, IACAI Secretary



Traffic Facts:
Since 2004, No driver involved in a traffic crash has been fatally injured as a direct result of the airbag being deployed.
Source: NHTSA

Crash Investigation Training Info:

IPTM:

4/7-18 At Scene Traffic Crash/Traffic Homicide Invest.
 Cost: \$825 Jacksonville, FL
 6/2-8 Energy Methods & Damage Analysis
 Cost: \$695 Jacksonville, FL

Northwestern U. Center for Public Safety:

3/31-4/4 Basic Physics & Math Workshop
 Cost: \$900 Evanston, IL
 4/7-11 Vehicle Dynamics
 Cost: \$900 Evanston, IL

Local Training:

The Indiana Criminal Justice Institute also offers Traffic Crash Investigation Training. For more info, visit ICJI at: www.in.gov/cji/traffic/training/ or contact: Dan Jeffries, ICJI @ 317-232-0021



US DOT Announces Upgraded Roof Strength Proposal

NHTSA Press Release 01-08

The US Department of Transportation issued a modification of its proposed new roof crush standard to request public input on whether both sides of a vehicle roof should be tested and meet minimum forces.

If adopted, the two-sided testing would require manufacturers to design vehicle roofs that withstand at least 2.5 times the weight of the vehicle on both sides of the roof as an alternative to testing just one side. A proposal, announced in August 2005, would require auto makers to build vehicle roofs to withstand a force equal to 2.5 times the vehicle weight, as applied only to one side. The proposed roof strengthening would apply to vehicles weighing up to 10,000 pounds. "Rollover crashes are among the most violent events on American highways, and although they constitute a relatively small number of overall crashes, they account for a disproportionate

number of deaths - approximately 10,000 a year," said Transportation Secretary Mary E. Peters. "This proposal will build on our efforts to improve vehicle safety, will save lives and will protect people from injury," she added.

Secretary Peters noted that the amended roof crush proposal is part of a comprehensive program to reduce rollover fatalities and injuries, and includes mandating new technologies such as Electronic Stability Control which can save an estimated 9600 lives a year, as well as stronger door locks. She also noted that using seat belts remains the most effective way to prevent fatalities and injuries in all types of crashes, including rollovers.

Nicole Nason, administrator of the National Highway Traffic Safety Administration, said that the earlier roof crush proposal was being amended because extensive research con-

ducted since August of 2005 indicates that the double-sided testing procedure is now a viable alternative approach to improve vehicle roof strength. "We want the benefit of public comments on whether the one-sided or two-sided procedure would be the wisest approach to save lives and protect people from serious injury due to contact with collapsed roofs," Nason said. She noted that NHTSA was releasing all of the testing the agency has done since August 2005, including a series of one- and two-sided test results as part of the supplemental proposal.

She added that the agency would seek comment over the coming 45 days before making a final decision. The agency plans to issue a final rule by the summer of 2008.

The proposal can be viewed through the NHTSA web site.

Additional Info:

According to the most recent Traffic Safety Facts manual released by the National Highway Traffic Safety Administration, 21.6% of all fatal motor vehicle crashes. In proportion, this amount is 4 times as high to the proportion in injury crashes (5.3%) and 15 times as high to the proportion of property damage crashes (1.4%). Sport utility vehicles made up the highest class of motor vehicle experiencing rollovers.

IACAI Skill Review



This edition of the IACAI Skill Review has to do with Time/Distance calculations!!
The answers will be in the next issue of the Association. Enjoy!!

1. If a vehicle decelerates from 100 ft/sec for 2.3 sec at a rate of 20 ft/sec/sec, what is the distance traveled?
 - a. 100 ft
 - b. 120 ft
 - c. 177 ft
 - d. 220 ft

2. If a vehicle decelerates over a distance of 75 feet from a velocity of 60 mph for 5 seconds, what is the vehicle's acceleration rate?
 - a. -6.5 ft/sec/sec
 - b. -4.6 ft/sec/sec
 - c. -29.2 ft/sec/sec
 - d. -17.71 ft/sec/sec

3. A vehicle decelerates to a stop from a speed of 60 mph with a drag factor of 0.50. What is the distance required for the vehicle to stop?
 - a. 290 ft
 - b. 240 ft
 - c. 88 ft
 - d. 120 ft

4. A pedestrian is walking at a velocity of 4 ft/sec. He travels a distance of 20 feet. What is the time required?
 - a. 14 sec
 - b. 5 sec
 - c. 7.7 sec
 - d. 19 sec

5. A vehicle slows from 60 mph to 30 mph with a drag factor of 0.70. What is the time required to do this?
 - a. 2.03 sec
 - b. 1.2 sec
 - c. 1.96 sec
 - d. 2.4 sec

Answers to last

issues' Skill

Review:

1. b
2. d
3. d
4. c
5. E



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Seminar Announcement

*The Indiana Association of Certified Accident In-
vestigators will be sponsoring a seminar on*

“Case Preparation For Crash Investiga- tors/Power Point For Crash Investigation”

March 19, 2008 0900-1500 hrs

Huntington County Sheriff's Department

332 East State Street

Huntington, IN 46750

Instructor: Kip Shuter, David McElhaney

This seminar will address issues the Crash Investigator may face while putting together a criminal traffic crash case for prosecution, and demonstrate how the PowerPoint program may be useful for your case presentation.

Cost: \$50 for IACAI members; \$75 for non-members

No advanced registration is required.

Registration begins at 08:30am

Please plan to attend!!

Questions regarding this seminar may be directed to IACAI
President Don Harris

email: donhar232@aol.com

The Association is published quarterly as a service to members of the Indiana Association of Certified Accident Investigators. Articles submitted are the responsibility of the author; the IACAI assumes no responsibility as to an article's content.