



THE ASSOCIATION

FEBRUARY 2012

CHEVY VOLTS POSE NO GREATER FIRE RISK THAN OTHER VEHICLES

NHTSA Press Release January 2012

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The National Highway Traffic Safety Administration (NHTSA) released the following statement regarding the conclusion of its safety defect investigation into the post-crash fire risk of Chevy Volts.

The NHTSA closed its safety defect investigation into the potential risk of Chevy Volts that have been involved in a serious crash. Opened on November 25, 2011, the agency's investigation has concluded that no discernable defect trend exists and that the vehicle modifications recently developed by General Motors reduce the potential for battery intrusion resulting from side impacts.

NHTSA remains unaware of any real-world crashes that have resulted in a battery-related fire involving a Chevy Volt or any other elec-

tric vehicle. NHTSA continues to believe that electric vehicles show great promise as a safe and fuel-efficient option for American drivers. However, as the reports released in conjunction with the closure of the investigation today indicate, fires following NHTSA crash tests of the vehicle and its battery components - and the innovative nature of this emerging technology - led the agency to take the unusual step of opening a safety defect investigation in the absence of data from real-world incidents.

Based on the available data, NHTSA does not believe that Chevy Volts or other electric vehicles pose a greater risk of fire than gasoline-powered vehicles. Generally all vehicles have some risk of fire in the event of a serious crash. However, electric vehicles have specific

attributes that should be made clear to consumers, the emergency response community, and tow truck operators and storage facilities. Recognizing these considerations, NHTSA has developed interim guidance - with the assistance of the National Fire Protection Association, the Department of Energy, and others - to increase awareness and identify appropriate safety measures for these groups. The agency expects this guidance will help inform the ongoing work by NFPA, DOE, and vehicle manufacturers to educate the emergency response community, law enforcement officers, and others about electric vehicles.

For more information on the Volt Investigation and others, visit:

[Www.SaferCar.gov](http://www.SaferCar.gov)



Out-going IACAI President Don Harris is shown receiving a plaque in appreciation of over 20 years of service by In-coming IACAI President Kip Shuter at Decembers' Board of Director's meeting. Don, along with Mooresville Officer David Minardo, started the organization in 1990 as a way to unite the various crash investigators and reconstructionists throughout the state of Indiana and to provide education and support to those officers in this field. Since it's inception, the IACAI has grown to over 250 members and has sponsored over 80+ training seminars. IACAI members cover a diverse area of the State of Indiana. We also have members in Illinois, Michigan, Ohio, Alabama, Georgia, and Maryland.

MEET IACAI'S NEW PRESIDENT: KIP SHUTER



Kip Shuter is a 26-year veteran of the Warsaw Police Department. Moving to the Warsaw area from La Porte to attend college for a criminal justice degree in the early 80's, Kip utilized his background as a news photographer and firefighter to secure a job with Warsaw

PD. Officer Shuter worked the street for 17 years, rising to the level of shift commander for both second and day shifts, respectively. In 2005, Shuter was elevated to the rank of Lieutenant and became the patrol division commander for Warsaw PD. Lt. Shuter currently serves as the public information officer, fleet administrator, grant administrator, and training coordinator. Lt. Shuter specializes in crash investigation and traffic safety issues. He is a team leader for the Kosciusko County-wide Fatal Alcohol Crash Team (FACT). Lt. Shuter also serves as the coordinator for Indiana Criminal Justice Institute programs, such as Operation Pull Over, Big City/County Seat Belt Enforcement, DUI Taskforce, Fatal Alcohol Crash Team, and Aggressive Driving Enforcement.

Lt. Shuter began his specialty in crash investigation in 1989. Shuter has received advanced training in numerous courses through both the Northwestern University Center for Public Safety (NUCPS) and the Institute of Police Technology and Management (IPTM). Lt. Shuter holds certificates in At-Scene Crash Investigation, Technical Crash Investigation, Vehicle Dynamics, Traffic Crash Reconstruction 1 & 2, Heavy Vehicle Crash Reconstruction, Computerized Traffic Crash Reconstruction, Leaving the Scene and Pedestrian Crash Reconstruction, Motorcycle Traffic Crash Reconstruction, Applied Physics for Traffic Crash Investigators, Crash Data Retrieval Technician and Analyst, Advanced Applications in Traffic Crash Investigation, iWitness Photogrammetry, and many others. Since 1992, Lt. Shuter has served as the Northern Indiana director for the Indiana Association of Certified Accident Investigators. In 2010, Shuter took over as Vice-President of the association. Lt. Shuter owns and operates a traffic crash reconstruction consultation business, investigating crashes for insurance companies and attorneys. Shuter has testified as an expert in numerous

criminal and civil cases all over Indiana and also Ohio.

Shuter has been involved in community service serving as a firefighter with the Winona Lake Fire Department, for which he is now retired. Shuter served for over 20 years in all capacities with the fire service, including fire chief. He previously held certification as a first class firefighter and level II-III fire instructor with the State of Indiana.

Lt. Shuter previously served on a state panel implementing a previous version of the Indiana Officer's Standard Crash Report. Currently, Lt. Shuter oversees the Automated Reporting Information Exchange System (ARIES) crash reporting and the Electronic Citation and Warning System (eCWS) programs for Warsaw PD. On several occasions, he has testified in front of the National Highway Transportation Safety Administration (NHTSA) regarding crash records assessment on the local level for Indiana.

Lt. Shuter has instructed hundreds of police officers from all over Indiana as a primary instructor in crash investigation at the Indiana Law Enforcement Academy in Plainfield, Indiana. Besides instructing with the basic course crash practicum, Lt. Shuter has taught the topics of; mapping and measuring, physical facts from the roadway and vehicles, speed determination, and template to basic students. Lt. Shuter has also dedicated several hundreds of hours of crash investigation instruction and training through the South Bend Regional Police Academy and the Indiana Association of Certified Accident Investigators.

From 1999 to present, Lt. Shuter serves as Warsaw's traffic safety administrator. Appointed by the mayor, Lt. Shuter oversees a panel of local citizens and city leaders who meet to make traffic safety decisions and recommendations for the city. Lt. Shuter coordinates and implements traffic safety programs and is responsible for all traffic related issues, including traffic signage, roadway design, and parking. Lt. Shuter successfully completed courses in traffic engineering through NUCPS. In his capacity as traffic safety administrator, Lt. Shuter has testified in several Indiana House and Senate committees on issues of red light running.



WARNING!! THIS WILL BE THE LAST IACAI NEWSLETTER YOU WILL GET!



As we all know, one of the benefits of membership in any organization is its newsletter, magazine, etc. Our association's benefit is the IACAI's newsletter, the *Association*. Unfortunately, the cost of producing and mailing out the newsletter remains expensive and is not expected to get any cheaper in the near future.

Also, no organization that I'm aware of likes to lose members. Our association has over 250 members on the books - not bad for an organization who's focus is on a specific area of exper-

tise. Unfortunately, membership fees are not agreeing with membership numbers. After much discussion at December's Board of Director's meeting, the IACAI's board of directors decided that those members who have not renewed membership in the IACAI will be placed on an inactive status and will no longer receive the newsletter effective with the May/June 2012 issue of the *Association*.

In addition, members who do not renew will no longer qualify for reduced prices at

training seminars.

It's unfair to expect the current membership to support those members who refuse to renew or do not wish to renew membership. Membership is a choice, and those who choose to be members should get the benefits.

Members who wish to renew that have not as of yet still have time. Please send your 2012 membership dues of just \$35 to:

IACAI
PO Box 1566
Warsaw, IN 46581-1566

ACCIDENT INVESTIGATION TRAINING

IPTM <http://www.iptm.org/Schedule.aspx> **NUCPS** http://nucps.northwestern.edu/course/crs_list.asp

3/19-30/2012 \$895	Advanced Traffic Crash Invest. Franklin, TN	3/26-4/6/2012 \$975	Crash Invest. II Evanston, IL
4/2-6/2012 \$725	Human Factors Jacksonville, FL	4/9-13/2012 \$775	Vehicle Dynamics Evanston, IL
5/7-11/2012 \$725	Energy Methods & Damage Jacksonville, FL	4/23 - 5/4/2012 \$1050	Traffic Crash Recon I Evanston, IL
5/14-25/2012 \$895	Advanced Traffic Crash Invest. Flint, MI	5/7-5/11/2012 \$850	Traffic Crash Recon II Evanston, IL
6/11-15/2012 \$825	Occupant Kinematics Jacksonville, FL	5/10-11/2012 \$275	CDR Technician I & II Evanston, IL
6/11-15/2012 \$795	Pedestrian/Bicycle Crash Invest. Jacksonville, FL	5/21-25/2012 \$625	CDR Analyst Course Evanston, IL

To Register, visit the website or call: 904-620-4786

To Register, visit the website or call: 800-323-4011

MEET IACAI'S VICE PRESIDENT: PHIL NOTT



Phil Nott started early in his career in emergency services. At the age of 15, Phil joined the Fort Wayne Police Department Explorer program, which was a branch of the Boy Scouts. After graduating from high school in 1985,

Phil completed an EMT class and began working as a volunteer medic on the New Haven EMS. During this time, Phil also started dispatching for the New Haven Police Department part-time, and also started driving wrecker part-time for Robinson's Wrecker Service out of New Haven. Driving wrecker gave Phil his first exposure to crash investigation, as he was often called upon to assist with his finely honed skills he had developed in the years of working construction to assist in fatal investigations. In other words, he held the dumb end of the tape for officers. In 1988, Phil began working full-time at the Allen County Jail, but soon transferred into Communications as a dispatcher. Phil eventually became a Civilian Communications Supervisor and the SWAT dispatcher.

As a part of dispatching for SWAT, Phil would be called on to handle all radio communications for any SWAT call, in or out of county. In the late summer of 1993, Allen County's SWAT Team was called to assist the Steuben County Sheriff's Office with a high-risk warrant service. Phil was dispatched with the team, traveling to Angola to assist with Communications on-site. After the SWAT Team completed the warrant service, the Steuben County Sheriff was giving the Team a tour of the new jail when he stated that he had a deputy slot open, and asked if anyone wanted a job. Phil applied, and was hired as a

deputy for the Steuben County Sheriff's Office in December of 1993.

Phil is now an 18 year veteran of the Steuben County Sheriff's Office. Nott has served as a Sergeant in the Patrol Division for 15 years now.

Phil is an ILEA General Instructor, SFST Instructor, and assisted in implementing the Special Response Tactical Team for the department, serving as the assistant team leader for 5 years. Phil has also been involved in beta testing with the ARIES program for over 5 years, and sits on the Crash Report Assessment Committee for the State of Indiana.

Phil began specialized training in traffic crashes in 1995, completing Accident I, II, and III through the South Bend Training Academy. Kip Shuter was actually one of the instructors that Phil had. Phil continued his training at Northwestern University Center for Public Safety with Vehicle Dynamics, Traffic Crash Reconstruction 1 and 2. Phil also completed training through the Institute of Police Technology and Management in Human Behavior, Motorcycle Crash Investigation, Event Data Recording, and Energy Methods and Damage Analysis in Crash Investigation. Phil has also continually attends in-service training of various topics in crash investigation. Phil has also become an instructor for Accident I, II, and III, and Crime and Crash Scene Measurement and Diagramming at the South Bend Police Academy.

Currently, Phil is in the process of becoming a member of the Homeland Security District 3 Response Task Force for the All Hazard Incident Management Team. Phil is also receiving training in AMBER Child Abduction Response Team, where he will serve as the Operations Commander for any missing child investigations. Phil was also instrumental in implementing laptop computers in the patrol cars, and is still the administrator of that program.

Did you know? Contrary to what you may have been told in science class in high school, there is no accurate answer to the age-old question of "how much force does it take to break a human bone?" The reason for that is that there are so many different variables when considering this problem, including bone density, bone flexibility, age of the individual, the load capability of the bone, just to name a few. Because of these variables, each bone in an individuals' body will behave differently and will therefore, act differently to whatever force is applied to it.

Source: Research Paper, Bone Strength: Current Concepts, by Charles H. Turner.

IACAI SKILLS

This issue of IACAI Skills has more to do with Human Factors in Crash Reconstruction.

1. True / False The duration and complexity of events in a motor vehicle collision are well within the capability of the human nervous system.
2. True / False People cannot do two auditory tasks at the same time.
3. True / False Humans can perceive information, whether true or false, and intergrate this information into memory.
4. True / False Once an event occurs and is recorded in the human mind, that event may be forgotten but cannot be altered unintentionally.
5. True / False Drivers tend to fixate more on edge lines when negotiating curves.
6. True / False Speed advisory signs on curves provide considerable benefit over curve signs only.
7. True / False Motorcyclists tend to look closer to other vehicles than their own when operating on a roadway.
8. True / False Perception of speed generally stays the same whether day or night.
9. True / False Drivers tend to out-drive their headlamps at speeds approaching 50 mph.
10. True / False Visual acuity decreases beginning around age 40.
11. True / False Drivers are often less confident about their driving abilities than they are skillful.
12. True / False Daytime running lights (DRL's) are less than effective at reducing the "looked but didn't see" phenomenon.
13. True / False The angle of a windshield can have an effect on the amount of light coming into a vehicle.
14. True / False The majority of cell-phone collisions are frontal or head-on collisions.
15. True / False A motor vehicle collision is more likely to occur on a grade than on a level road surface.



Answers from last issue:

1. True
2. False
3. False
4. False
5. False
6. True
7. A
8. C
9. B
10. False

The answers will appear in the next issue of The Association.



VEHICLE CRASH INJURY PRIMER: TRAUMATIC PELVIC INJURIES

By David McElhane, TAR



One of the more potentially debilitating injuries a driver or occupant can sustain in a motor vehicle collision or rollover is that of a Traumatic Pelvic Injury. Motor vehicle crashes account for nearly 57% of all pelvic related injuries reported, while pedestrian and motorcycle-related injuries account for 18% and 9%, respectfully.¹

While victims of motor vehicle crashes can sustain virtually any sort of injury in any number of ways, the most common types of crashes involved with traumatic pelvic injuries include head-on, right angle and rollover crashes.

Before I address the issue at hand, a little anatomy lesson is in order. The pelvis is a strong, bony ring structure which supports most of the body's weight. It supports our internal organs, gives us the ability to sit and to stand up and provides a degree of protection to our major blood vessels and nerves which run to and from our legs. The pelvis itself is comprised of three bones; the sacrum (the back bone which the spinal column attaches to), and two groups of bones known as the innominate bones. The pelvic ring is formed by the connection of the sacrum to the innominate bones at the sacraliliac joint (back) and the symphysis pubis (pubic bone, front). There are several very strong ligaments which help tie things together to keep it as one package. There is a large hole on either side of the pelvis where the head of the femur attaches. This is the hip joint. The head of the femur is often referred to as the hip bone. This joint is what allows us to move our legs and to stand. Inside the pelvis, there are several major blood vessels which twist and weave their way from the chest/abdomen to the lower legs. Also, there are some pretty serious nerves which run down through there as well. In addition, there are organs such as the bladder, prostate, and vagina that are protected within the pelvic ring.

When investigating a motor vehicle crash involving an occupant (driver or passenger) who sustains a pelvic fracture, take the time to look at how this could have occurred. Was it due to an

improperly worn safety restraint? An ejection? Compression of the pelvic girdle? This information may not seem of great value to you, but it is of tremendous value to the physician or surgeon who is treating the individual.

Physicians treating pelvic fractures/injuries consider the mechanism of injury when making a diagnosis. Vector forces are often considered. In the case of a traumatic pelvic injury, one of three different types of Vector forces may have come into play. The first type of vector force is called the Lateral Compression vector force. This type of pelvic injury is the most common and commonly occurs as the result of a right-angle motor vehicle crash or car/pedestrian crash. Pelvic and/or hip injuries often occur.

The second type of vector force injury is called the Anterior/Posterior vector force injury. This type of vector force causes complete and total disruption of the ligaments supporting the pelvic ring and can cause the pelvic ring to split into two halves, much like opening a book. In fact, the term used to describe an Anterior/Posterior vector force injury is an "Open Book" fracture. The common modality for this type of fracture is from an ejection, say from a motorcycle, or rollover, as the legs are forcibly spread apart. This type of injury can be very devastating and can result in serious if not fatal injuries as many blood vessels, nerves and organs can be injured as a result.

The last type of vector force injury is called a Vertical Shear vector force injury. This is usually caused when a person jumps from a great height and lands on an extended lower extremity. The impact forces the bones upward and disrupts the ligaments in the pelvic girdle. Another version of this type of injury is when an improperly worn safety restraint allows the occupant to slide forward where their knees make contact with the knee bolster on the dashboard, forcing the femur rearward.

Investigators should also consider interior objects which might cause pelvic injuries, including: center consoles, interior door handles/arm rests, or even another unrestrained occupant.

¹*Orthopedic Nursing*, Volume 25, Number 4, by Lydia Kobziff, MS, BSN, BS, RN of the University of Maryland Medical System, Shock Trauma, Baltimore, MD

²Failing & McGanity, 1992; Heetveld, Harris, Schlaphoff & Sugrue, 2004



IACAI TRAINING ANNOUNCEMENT

Seminar Announcement

The Indiana Association of Certified Accident Investigators will be sponsoring a seminar on

"Advanced Crash Scene Photography"

Wednesday, March 28, 2012 0900-1500 hrs

at the

Greenwood Police Department Training Center

736 Loews Blvd

Greenwood, IN 46142

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

No advanced registration is required.

Registration begins at 08:30am

Questions regarding this seminar may be directed to IACAI

President Kip Shuter

email: kipss@warsawpd.org

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