

# THE ASSOCIATION

Indiana Association of Certified Accident Investigators  
www.iacai.com



## With The Turn Of A Key...

I grew up in what I consider to be the end of an era, when being allowed to get one's driver's license was a reward from your parents for acceptable behavior and academic performance. Then, what if I actually wanted to drive Mom or Dad's vehicles? First, I had to keep a high enough GPA for Dad to get a discount on his insurance, do chores or get a job to earn money for gas, or driving was out of the question. Second, there was that reward thing again and it had to be earned.

Why did our parents make driving a car something to be earned and not something we had a right to do, whereas kids these days have come to expect it? I believe that in addition to there usually only being one or two vehicles in a family then, it for the same reasons as it should be done today; motor vehicle crashes are the number one cause of death in the 15-20 year age group and our parents actually did know something. Even by the time I started driving, in the late 70's, car crashes were the leading cause of death in that age group. I can only imagine how, even though I knew I was perfectly ok at all times, my parents must have been terrified each time I turned the key and took off in the pick-up truck (yes, I

am a country boy stuck in a city life).

This has come to relevance for me now because I have a son who will be old enough to drive soon, and I see first hand what happens too many of our youth in a vehicle. Courtesy of the ICJI, here are some sobering statistics about youth and vehicles:

- Of the 5,323,027 licensed drivers in Indiana, 310,607 (6%) were between the ages of 15-20.
- 135 of the 321 young drivers age 15-20 involved in a car crash were killed.
- Young male driver fatalities age 15-20 (54) were higher than the Young female driver fatalities (35).
- Of the young drivers (16-19) involved in fatal crashes who were tested for alcohol, 28.2% were legally intoxicated (BAC of 0.08 g/dl or above) at the time of the crash.
- Of all 15-17 year old drivers involved in fatal crashes, 15 percent happened during curfew hours.
- 14 percent (179) of the 1,235 drivers involved in fatal car crashes were age 15-20.
- While only 6% of all licensed drivers were be-

tween the ages of 15-20, this age group accounted for 17% of all fatal single vehicle crashes.

- Of the 73 young drivers killed in a collision for which restraint use was known, 44 were not restrained (60%).

Nationally, the statistics are as follows (FY 2006):

- Motor vehicle crashes are the leading cause of death for 15-20 year olds.
- 12.6% of all drivers involved in fatal crashes were between 15 and 20 years old.
- 326 motorcycle operators 15-20 years old were killed and an additional 9,000 were injured.
- 23% of the young drivers (15-20 years old) who were killed in crashes were legally intoxicated (0.08% BAC g/dl or higher) at the time of the crash.
- An estimated 24,560 lives have been saved since 1975 due to minimum drinking age laws.

We all probably can remember statistics like this being presented to us in "be careful and use you head" sermons

(Continued Page# 3, Col.1)

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### Inside this issue:

With The Turn Of A Key	1
Road Flare Visibility	2
IACAI Respository	4
A Deadly Game	5
Training/Schools	5
2007 IACAI Seminar Announcement	6



# Road Flare Visibility

In July of 1998, I assisted in a fatal crash investigation on the toll road in Lagrange County. Trooper Dave Deuter was on a traffic stop along the berm of the road and was killed by a truck driver that sideswiped both the patrol and violators vehicle. Since this and other similar crashes, I have been concerned about scene safety, and what can be done to protect ourselves better while investigating crashes.

Recently I came across a study that was conducted by the Pennsylvania Transportation Institute of Penn State University, and was commissioned by Orion Safety Products, which is the manufacturer of roadside flares. All testing was conducted at night on I99 in Pennsylvania which is a four lane divided highway.

A police car and a simulated disabled vehicle were parked on the berm of the

highway at nighttime. The following four scenarios were used in the study to collect the data:

1. Baseline – no vehicles, no flares
2. Disabled vehicle and Police Car present with no flares
3. Disabled vehicle and Police Car present with flares
4. Disabled vehicle with flares but no Police Car

Four different flare patterns were used in the testing:

1. Three flares 5 paces apart.
2. Three flares 10 paces apart.
3. Six flares 5 paces apart.
4. Six flares 10 paces apart.

All flares were set up in a diagonal pattern on the berm behind the police car, with the flare closest to the police car along the roadway edge, and

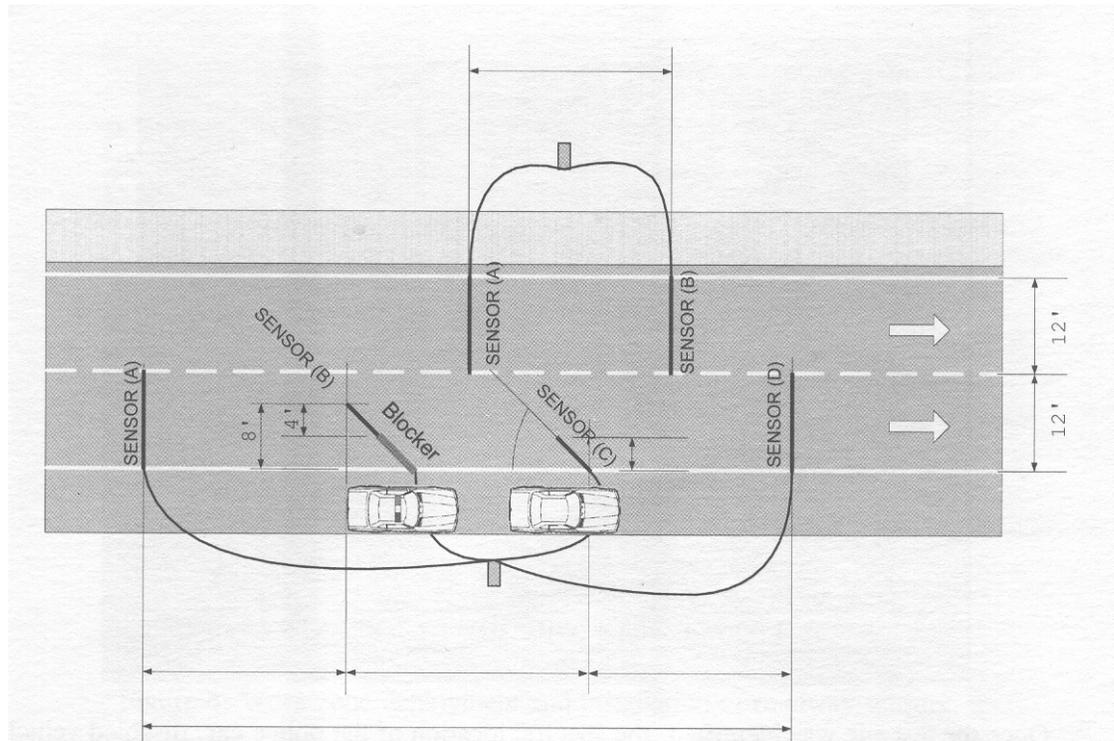
the farthest flare from the police car along the shoulder edge. All other flares were set up in-line between these two flares.

The following diagram shows how sensors were set up in the roadway to detect speed, lane usage, and lateral separation (distance between parked vehicles and passing vehicles in driving lane) using all the scenarios listed above.

The study produced the following conclusions:

1. Police presence with flare deployment will generate the greatest impact and largest safety zone:
  - a. The speed of passing vehicles was reduced 16.2% (5.1% improvement over a police car with no flares deployed)

(Continued on Page 4, Col 1.)



Taken from STUDY REGARDING EMERGENCY ROAD FLARE EFFECTIVENESS IN ENHANCING THE "SAFETY ZONE"

## More About: With The Turn Of A Key

from Mom and Dad in our early days of driving and being teens, we all said "yah-yah, I know, I'll be careful", then took off fast as we could tuning the radio and making sure we looked cool.

On the opposite side of the ICJI statistics indicating how dangerous combining cars and teens is, is that physiologically speaking, they should be the *safest* drivers. This is the age when the most important human elements of driving are at their best. Things such as motor skills, vision, hearing and thought processing and reactions are at their peak. It's the "common sense" factor that seems to be missing at that age. What is that old saying, "old enough to know better, young enough not to care?" After all, we were *all* immortal at that age, weren't we? We all have a few of those "Wow! How did I survive that?" memories, don't we?

Ok, where is this leading? Here is where it is leading. We members of the I.A.C.A.I. (and crash investigators in general) are really in a potentially powerful position to help change these statistics. We see the end result of reckless youth abandon, the lack of responsibility defensive attitude (defensive driving) behind the wheel, engineering and safety deficiencies etc. The I.A.C.A.I. is one of sev-

eral respected professional motor vehicle traffic safety oriented organizations that can use its knowledge and influence to strive to reduce the fatalities and injuries inflicted upon the youth of today.

In the foreseeable future, the number of vehicles and young drivers on the roadways will only increase, which increases the chances of 2 objects carrying people trying to occupy the same space at the same time or of inexperience causing the loss of control of a vehicle and ending in grief.

We are also up against a time when, instead of youth's driving being a privilege, parents today often can't wait until their children are old enough to drive to lessen the burden on the parent's themselves whether it be to lesson the tight after school schedules or (as is too often the case) to get the kids "out of their hair". Unlike the days of old, each youth seems to have their own car.

I am proud that this also the time that the Association has decided to go down the road of involvement in traffic safety issues. The precise route is varied and there are a lot of options. We (the Association) has many choices, legislative, school involvement, becoming involved in safety engineering

aspects of vehicles and roadways, working with parent groups. There are many, many options.

Legislative we can lend support to potentially life saving laws and regulations. In the schools, we could work to improve "driver's education" programs. This is one of my biggest pet peeves. As far as I am concerned, all most of the "approved" driver's education programs do is teach how to start, stop and us your turn signal. No practical knowledge of vehicle dynamics is effectively taught.

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I realize that this will take even more commitment on our already full commitment platter and I know that when it comes to teens, "you can take them to the water, but you can't make them drink" applies, but I think the youth is worth the effort.

Loren Hansford, Central Director, IACAI



**"... This is the age when the most important human elements of driving are at their best..."**



## More about: Road Flare Visibility

Continued From Page 2:

b. 95.7 % of passing traffic changed lanes (5.3% improvement over a police car with no flares deployed).

c. An additional 32.2 inches of lateral room between the parked vehicles and passing vehicles was gained (9.8 additional inches over a police car with no flares deployed).

2. Six flares placed at 5 paces apart produced the safest results.
3. Police presence with flare deployment also generated the largest impact of passing trucks.
4. Flares deployed without

police presence will still have a dramatic affect on passing traffic.

a. Was nearly as effective as with a police car with emergency lights activated but no flares deployed in reducing speed and lane changing of passing traffic.

b. Was more effective at creating lateral separation between parked vehicles and passing vehicles.

The full report can be read online at <http://www.orionsignals.com/pdf/ORION%20FINAL%20REPORT2.pdf>

Now, obviously nobody would take the time to set up a flare pattern over a traffic stop; however, taking a few seconds to set up flares while working a crash may be enough to bring you home at the end of your shift!

Phil Nott, North Director

*Information taken from the STUDY REGARDING EMERGENCY ROAD FLARE EFFECTIVENESS IN ENHANCING THE "SAFETY ZONE", prepared for Orion Safety Products by the Pennsylvania Transportation Institute, Pennsylvania State University.*

"What I would like to propose at our next IACAI Board of Directors meeting is that the organization go one step further and become as repository for information ..."

## From Mike Beck, Central Director

**B**ack-in-the-day, when the Indiana Association of Certified Accident Investigators was formed, the idea behind this organization was to provide training for Vehicle Crash Investigators. Over the years, we as an organization have tried to provide quality basic and advanced training to law enforcement officers in all parts of the state of Indiana.

What I would like to propose at our next IACAI Board of Directors meeting is that the organization go one step further and become as repository for information on members that have completed any Advanced Vehicle Crash Training. The reason I would like to see this information available to IACAI members is over the last couple of years I have been receiving

more and more telephone calls and emails from officers on the street that are looking for another officer in their area that could help them vehicle crashes that need more than basic investigation. These calls have included, questions on who was the closes Vehicle Crash Reconstructions' to them, or who was the closest VRC that might have a specialty field, i.e. Commercial Vehicles, Motorcycles, Crash Data Retrieval capabilities, Laser Measuring Devices, and computer programs such as, Win-crash, Crash Zone, Auto sketch, CAD Diagramming.

I think this data base would be very helpful to all members of IACAI and to non members that need assistance. This could give the officer in the field that has

only had Basic Crash Investigation and needs help with a more complex crash, access to a VCR or a VCR with a specialty field.

I would like to start obtaining information from the IACAI members with a questionnaire that would go out in the mail with the 2008 dues letter. With this said, I need your impute on the pros and cons of this project and give me advise on what information you would like to see or be provided in that data base.

Lt. Mike Beck – ILEA  
Central Director –IACAI

You can email Mike at: [mbeck@ilea.in.gov](mailto:mbeck@ilea.in.gov)

# A Deadly Game



**H**as anyone out there heard of, or played, for that matter, the game, "Paranoia?" No, I'm not talking about taking drugs or drinking until you see spiders as big as a house. This, as I recently learned, is a high school game being played by our newest drivers. Its probably not even being tracked by NHTSA, either. I learned of this game from a recent crash I was called to investigate involving a single car crash that ejected two high school students, leaving both with head injuries and one in critical condition for

some time.

I can't really comment on the case as this time as I have just finished the investigation and the prosecutor is considering charges against the driver. What I can say about this is what I've learned about the game.

The game consists of students who either want to or are dared to, compete to see who is the most claustrophobic. The contestants climb into the trunk through the back seat access or conventionally, and are locked in.

The driver is encouraged to swerve or do what he/she can

to make the contestants want to give up. In this case, the two riders were ejected through the trunk lid - taking the trunk lid clean off the vehicle!

I'm fortunate in the fact that I did find charges that may work in this case and that the prosecutor is willing to look the case over. What is disheartening is that the driver is only 16 and isn't understanding the consequences real well - after all, insurance is paying for the injuries....

David McElhaney, Secretary

## Golfer Killed After Cart Plunges 75 Ft Off Cliff

By: The Associated Press

FALLBROOK, CA (AP) A 65 y/o golfer died Tuesday (5/22) after his golf cart plunged 75 ft off a cliff and crashed into a road below, authorities said. The man teed off with three friends on the second hole of the Pala Mesa Resort Golf Course in northern San Diego County around 10:00am and

then got into his cart. The vehicle veered off the concrete pathway, traveled down a 25 foot embankment and went over the edge of a cliff, said California Highway Patrol spokesman Tom Kerns. The recently retired real estate agent from Irvine was ejected shortly before the cart

hit the road beneath the cliff and died on impact, Kerns said. His name was not immediately released. No one else was involved in the crash. Investigators will inspect the golf cart for mechanical failures, Kerns said.

## Northwestern CPS, IPTM Training Schedules Announced

### Northwestern University Center for Public Safety: TX: 847-491-5476

Accident Investigation I	Evanston, IL
9/10-21/07	\$1200
Accident Investigation II	Evanston, IL
9/24-10/5/07	\$1200
Basic Physics Workshop	Evanston, IL
10/8-12/07	\$900
Vehicle Dynamics	Evanston, IL
10/15-19/07	\$900
TAR I	Evanston, IL
10/22-11/2/07	\$1300

### Institute of Police Technology & Management: TX: 904-620-4786

At Scene Traffic Crash Inv.	St. Petersburg, FL
7/16-27/07	\$825
Advanced Traffic Crash Inv	Jacksonville, FL
9/24-10/5/07	\$825
Applied Physics Workshop	Jacksonville, FL
10/15-19/07	\$625
Advanced Commercial Veh	Albany, NY
08/20-24/07	\$625
Crash Zone	Jacksonville, FL
11/5-9/07	\$695



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## **Seminar Announcement**

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

### **“Vehicle Forensics”**

June 27, 2007 0900-1500 hrs

West LaFayette Police Department

711 W. Navajo Drive

West LaFayette, IN 46901

Instructors: Dr. Patrick Jones, Forensics Lab

Director, Purdue University

This seminar will blood recovery & presumptive testing, as well as patterned injuries and trace evidence.

Cost: \$25 for IACAI members; \$50 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](mailto: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.