

**REGISTRATION INFORMATION**

Name \_\_\_\_\_  
Agency \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_  
Zip \_\_\_\_\_ Phone \_\_\_\_\_  
FAX \_\_\_\_\_ e-mail \_\_\_\_\_

**Registration fee:**

**Check which school you will be attending:**

- Vehicle Dynamics Cost: \$400
- Accident Reconstruction Cost: \$800

**Training Site for both schools:**

Cleveland Metroparks Ranger Headqtrs.  
4600 Valley Parkway  
Fairview Park, Ohio 44126  
(across from "Big Met Golf Course")



**4 WAYS TO REGISTER**

On Line: www.ncpi-ohio.com  
Mail: Northcoast Polytechnic Institute  
Attn: William D. Healy, Director  
6688 Steinbeck Court  
North Ridgeville, Oh 44039  
Phone (440) 353-0796  
e-mail: info@ncpi-ohio.com  
Fax: (440) 353-0797

Attn: Mr. William D. Healy, Director  
6688 Steinbeck Court  
North Ridgeville, Oh 44039  
Phone: (440) 353-0796  
Fax (440) 353-0797  
e-mail: info@ncpi-ohio.com  
WEB: www.ncpi-ohio.com

Web: www.ncpi-ohio.com



**Vehicle Dynamics**

**May 21-25, 2012**

**Cost: \$400**

**Hosted by:**

**Cleveland Metropark  
Ranger Dept**

**and**

**Accident**

**Reconstruction**

**Sept 10-21, 2012**

**Cost: \$800**

**Hosted by:**

**Cleveland Metropark  
Ranger Dept**

**Instructed by INTROTECH  
Accident Reconstruction**

**8:00 AM -4:30 PM each day**

## About the courses:

### “Vehicle Dynamics”



This 5 day course is designed for an experienced law enforcement officer who has had previous training in basic and advanced accident investigation. The student should be familiar with the concept of basic speed calculations, radius of curve calculations, critical speed, scale drawings, damage analysis, principle direction of force (thrust), damage measurement, traffic templates and coefficient of friction. Dynamics is a branch of engineering that uses a high level of analytical capability. It is the branch of mechanics that deals with the motion of bodies under the action of forces. This course will include a basic study of dynamics including the concepts of space, time, acceleration, mass, force, Newton’s laws of motion, vector and scalar quantities. In addition, training will be provided on energy, basic momentum, coefficient of friction, acceleration and deceleration of vehicles, measuring and correctly documenting vehicle tire marks, and project work for students to complete during the week.

### “Accident Reconstruction”



This 10 day course is designed for an experienced law enforcement officer who has had previous training in basic and advanced accident investigation. The student should be familiar with basic speed calculations, radius of curve calculations, critical speed, scale drawings, damage analysis, principle direction of force (thrust), damage measurement, traffic templates and coefficient of friction.

Although reconstruction typically requires advanced mathematical calculations and a basic understanding of physics, it is much more than that. Reconstruction is a process of correctly analyzing data and evidence and then thinking about what it means. Topics will include mechanics, dynamics, airborne equations, vehicle and occupant behavior in accidents, articulated vehicles, trigonometry, motorcycle accident reconstruction, pedestrian accident reconstruction, night time visibility experiments, and conservation of linear momentum. Numerous case studies will be analyzed to arrive at reasonably accurate opinions.

## About the instructors:

**IHenry P. Lipian**

**ACTAR #83– Lieutenant USCGR (RET.)**

Mr. Lipian had over thirty (30) years of investigative and law enforcement experience in the United States Coast Guard, Ohio State Highway Patrol and the Hunting Valley Police Department. Mr. Lipian is the President of INTROTECH Accident Reconstruction Services Inc. and has served as an accident reconstructionist for the past 15 years.

**James B. Crawford**

**ACTAR #1030 – Captain USCG (RET.)**

Mr. Crawford is a retired Captain from the U. S. Coast Guard with a Masters Degree in Aeronautical Engineering. He has graduated from specialized accident investigation and reconstruction schools from the University of Southern California, the University of California, the University of North Florida and Society of Automotive Engineers. His specialty is train and motorcycle crash reconstruction.

**Dale Dent: ACTAR Accredited (#853)**

**Deputy Lorain Co SO (RET)**

He is a former Sheriff’s Deputy from Lorain County Ohio and Manatee County Florida. He has graduated from schools at Northwestern Traffic Institute. The University of North Florida, Texas A&M University and others. His specialty is commercial vehicle crash reconstruction

**Choya R. Hawn - ACTAR #1592**

**Trooper Ohio State Highway Patrol (RET)**

Mr. Hawn had over 26 years of experience as a field trooper and crash investigator with the Ohio State Highway Patrol. Mr. Hawn has received training from Collision Safety Institute (C.S.I.) and the Institute of Police Technology and Management (I.P.T.M.) in the collection and analysis of event data from airbag, power-train and roll-over modules.