



## Tire Forensics

By Michelin Tire Corporation

February 8th, 9th, 10th and 11th, 2000

A one-day course offered four times!

8:30 a.m. to 5:00 p.m.



University of California, Riverside Extension  
1200 University Ave., Riverside, California

CA2RS, in association with the University of California, Riverside, presents **Tire Forensics** by **Michelin Tire Corporation**.

Engineers from Michelin out of Greenville, SC will instruct in the types of tires in use, types of manufacturing processes, information available from a tire, types of tire defects, and recognition of blow-outs and failures versus abuse. They will be complimenting their lecture with several displays and examples of the topics discussed.

This popular class is highly demanded and not often offered on the west coast. And, per a special request from Michelin, CHP MAIT Investigators and CHP Training Officers are especially encouraged to attend.

Each day is limited to a capacity of 40 students. Training is **FREE** to CA2RS members, and guests may also attend one CA2RS meeting free

of charge prior to applying for membership to CA2RS. POST Plan IV travel reimbursement certification is pending.

For further information and/or to reserve a space in the class, contact CA2RS Headquarters before January 7, 2000.

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### R.S.V.P.

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### YOUR CA2RS BINDER

If you have been a CA2RS member for more than 3 months and have not received your CA2RS BINDER, you must let CA2RS Headquarters know if you are planning to attend the Michelin training so that your binder will be made available to you. Extra binders will not be available.

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### SCHEDULE OF EVENTS

**December 1999**

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

**January 2000**

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

10-14: Computer Assisted Diagramming Class by Los Medanos College.  
Information: (925) 439-2185 ext 242.

18-20: Reconstruction of Vehicle Rollover in Sacramento  
- 21 ACTAR CEUs. Instructor: Donald J. Basham  
Information: (530) 389-8250

24-28: Intermediate Traffic Investigation by Los Medanos College.  
Information: (925) 439-2185 ext. 242

**February 2000**

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29				

Jan 31 - Feb 11: Advanced Accident Investigation by Los Medanos College.  
Information: (925) 439-2185 ext. 242.

15-17: Advanced Skidmark Analysis in Sacramento - 21 ACTAR CEUs. Instructor: Donald J. Basham  
Information: (530) 389-8250

**March 2000**

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Feb 28 - Mar 10: Traffic Accident Reconstruction by Los Medanos College.  
Information: (925) 439-2185 ext. 242.

**April 2000**

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

3-7: Intermediate Traffic Accident Investigation by Los Medanos College.  
Information: (925) 439-2185 ext. 242.

19: Next CA2RS Quarterly meeting, hosted in Northern California, location, training topic and times TBA.

**Future Classes**

5/1/00 - 5/5/00: Speed Determination by Crush by University of California, Riverside.  
Register: (909) 787-4105.

5/8/00 - 5/12/00: Human Vehicle Environment (HVE) 2D in San Diego by Engineering Dynamics.  
Information: (503) 644-4500.

5/29/00 - 6/2/00: Intermediate Traffic Accident Investigation by Los Medanos College.  
Information: (925) 439-2185 ext. 242.

6/5/00 - 6/16/00: Advanced Traffic Accident Investigation by Los Medanos College.  
Information: (925) 439-2185 ext. 242.

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**BLURBS FROM THE BOARD**

**Board of Directors**

CHAIR Kevin Cassidy - San Jose Police Department

VICE CHAIR Gordon Gray - Stockton Police Department

DIRECTORS AT LARGE AI Sutcliffe - San Jose Police Department

Jim Willette - Mountain View Police Department  
Kent Autrand - Stockton Police Department  
Kerry Berg - Kerry A. Berg & Associates, Inc.  
Daniel Trudell - ARS

Well, the dust is finally steeling from our Fall Conference. It was hard to tell how successful it would be as we worked "on the inside". But, from the feedback we've received, it seems as if everyone thought it was well worth their time and money. Now comes the job of planning for the next one.

Speaking of the next conference, the current thought is that we will be holding it again at the same location. It appears that we were treated well at the Hilton and that the accommodations were well received. Since we've only got one conference under our belt, we didn't want to go changing too many things about the second one just yet. The topic of the conference is in the planning stages and we're welcome to suggestions from the membership as to what you'd like to see.

As for future conferences and meetings, as our Southern California membership grows, the meeting schedule of CA2RS will likely change as well. Although nothing is set in stone at this time, the eventual aim of the organization will likely be to have separate Southern and Northern California quarterly meetings. These meetings would, of course, be open to all members and would allow for a greater number of meetings locally accessible to the members. These meetings would be supplemented by a Fall Conference, which would rotate between a Southern California and Northern California location.

Since this meeting schedule is not currently a reality, it was time for CA2RS to reward its Southern California membership for their patience. The January quarterly meeting, being held in February due to schedule conflicts, will be held in Riverside. Not only will this meeting be beneficial to the Southern California members, it will help to build our membership base in that area.

Regarding the CA2RS finances, it seems as if we are doing well at this time. There was a deficit following our Fall Conference, but was made up for by utilizing monies from our membership fund. It is anticipated that, with greater attendance and some streamlining of costs at future conferences, this deficit will not be a problem.

Other topics around the board meeting table...

Welcome to newly-elected Vice Chair Gordon Gray of the Stockton PD. He was voted-in during elections held at the Fall Conference. Our thanks to departing Vice Chair Duane Tannock from Palo Alto PD for his service over the past year and a half. Welcome also to newly-elected Board Member Kent Autrand from the Stockton PD, and a welcome back to Board Members Jim Willette from Mountain View PD and Al Sutcliffe from San Jose PD. They were re-elected to new 2-year board terms. Lastly, thanks to departing Board Member Rudy Degger for his invaluable service to the board and the organization. He has, however, agreed to remain involved in the organization as the CA2RS representative to the ACTAR Governing Board of Directors and as the Treasurer.

The CA2RS website on ARC is taking shape and will be used extensively for disseminating information and newsletters to our membership. If you have an e-mail address that we do not have as part of our files, and you'd like to help cut costs, forward it to us so that we can notify you of CA2RS-related information and avoid mailing a hardcopy newsletter to you.

As always, the Board welcomes any suggestions for future meetings or ways to improve the organization.

Kevin Cassidy  
CA2RS Chair

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#### **CA2RS ADMINISTRATIVE CONTACTS**

Jennifer Johnson or Nancy Degger  
CA2RS Headquarters  
3650 Mt. Diablo Blvd., Lafayette, CA 94549  
Bus. (925) 284-7739 | Fax (925) 283-8916 | E-mail: [ca2rs@ca2rs.com](mailto:ca2rs@ca2rs.com)

## Just a reminder

If there is any information you would like changed, added, or deleted from your mailing address, please contact CA2RS Headquarters immediately. If any member would like to request a separate Treasurer's Report, please contact CA2RS Headquarters.

## Contribute to the newsletter

If you would like information to appear in the newsletter (i.e., class/training information, articles, etc.) you must submit your materials to Jennifer. For deadlines please call (925) 284-7739 or e-mail at [ca2rs@ca2rs.com](mailto:ca2rs@ca2rs.com).

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## POINT OF REST

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### Hit or Miss

A truck driver frequently traveled through a small town where there was a courthouse at the side of the road. Of course, there were always lawyers walking along the road. The truck driver made it a practice to hit any pedestrian lawyers with his truck as he sped by.

One day, he spotted a priest walking along the road and stopped to give him a ride. A little further along, as he approached the town, he spotted a lawyer walking along the side of the road.

Automatically, he veered his truck towards the lawyer, but...then he remembered his passenger. He swerved back to the center, but he heard a "whump," and in the rearview mirror he spotted the lawyer rolling across the field.

He turned to the priest and said, "Father, I'm sure that I missed that lawyer."

And the priest replied, "That's okay, my son, I got him with the door."

- from the internet

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### Quick Driving and Quick Wit

A fellow bought a new Mercedes and was out on the interstate for a nice evening drive. The top was down, the breeze was blowing through what was left of his hair and he decided to open her up. As the needle jumped up to 80 mph, he suddenly saw flashing red and blue lights behind him.

"There's no way they can catch a Mercedes," he thought to himself and opened her up further. The needle hit 90, 100.... Then the reality of the situation hit him. "What the hell and I doing?" he thought and pulled over.

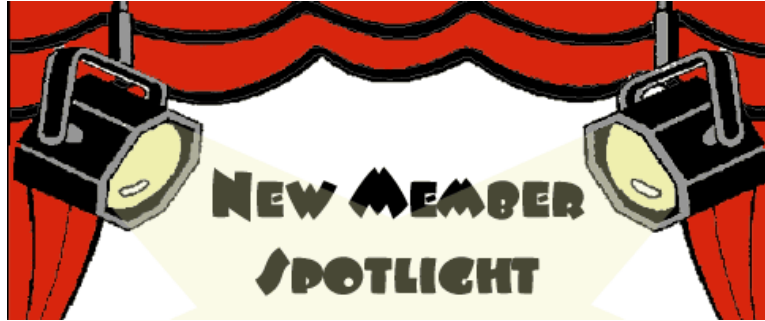
The cop came up to him, took his license without a word and examined it and the car. "It's been a long day, this is the end of my shift and it's Friday the 13th. I don't feel like more paperwork, so if you can give me an excuse for your driving that I haven't heard before, you can go."

The guy thinks for a second and says, "Last week my wife ran off with a cop. I was afraid you were trying to give her back."

"Have a nice weekend," said the officer.

- from the internet

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*Please welcome our newest members to CA<sup>2</sup>RS*

**Donald Basham** - D.J. Basham & Company  
**Clark Corbin** - Corbin Accident Reconstruction  
**Donna Dobbs** - Westminster Police Department  
**Mike Fischer** - San Leandro Police Department  
**Steven Guderian** - Professional Collision Analysis  
**Seth Holt** - West Sacramento Police Department  
**Mike Kelley** - Ontario Police Department  
**Robert E. Mahoney** - Robert Mahoney & Associates, Inc.  
**Donald McNair** - Rohner Park Department of Public Safety  
**Willard Moebest** - California Highway Patrol  
**David Renfroe, PhD, PE** - Renfroe Engineering, Inc.  
**Tim Reust** - Accident Science  
**C.D. Ritchie, D.C.** - DBA Chiro Care & Rehab  
**Ron Rohde** - Rohde Designs  
**Ken Savano** - Petaluma Police Department  
**Randy Severe** - Accident Investigation Service  
**Pat Stadler** - Stadler Reconstruction  
**James Youden** - Westminster Police Department

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### TEST YOUR SKILL

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1. A car leaves 247 feet of locked-wheels skids on a roadway that has a positive grade of 5%. You examine the vehicle and determine that the brakes are only 80% efficient. If given a drag factor of 0.75, what is the initial speed of the vehicle assuming it slid to a stop?
2. Use the following post-impact condition of a 1998 Ford Mustang Cobra to determine the resultant drag factor. The right front wheel is caged by the impact resulting in a coefficient of friction of 0.70, the left front wheel is free rolling (0.01), and each of the rear wheels are free rolling (0.15), it weighs 3354 pounds and 58% of the weight distributed on the front wheels. If the Mustang travels essentially straight for 53 feet after the impact, what was its post impact speed? Why is the coefficient of friction different of the free rolling front and rear wheels?
3. Use the six-point equation and the following damage profile measurements to determine the energy consumed by damaging the front of a 1987 Chevrolet Camaro. The crush measurements in inches were: 20, 25, 24, 24, 23 and 21. The Camaro weighs 3100 pounds, damage width is 73 inches, the stiffness coefficients, A and B, are 212 and 63 respectively, and the attack angle is 0 degrees. What is the Barrier Equivalent Velocity (BEV), assuming a mass reduction factor of 1.0?

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### ACTAR SCHEDULE OF ACCREDITATION EXAMINATIONS

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DATE	DEADLINE	LOCATION
Date TBD in April 2000 - Sunday	TBD	Jacksonville, Florida
May 21, 2000 - Sunday	May 1, 2000	Eau Calire, Wisconsin
September 24, 2000 - Sunday	September 1, 2000	Riverside, Texas

**For Application, Questions or Comments contact:**

Al Baxter - Administrator

PO Box 5436, Hudson, FL 34674

1-800-809-3818

Also see the ACTAR web site: <http://www.actar.org>**ACTAR Examination Fees**NON-MEMBER FEE

Application: \$175.00

Exam: \$75.00

**Total: \$250.00**MEMBER FEE

Application: \$150.00

Exam: \$50.00

**Total: \$200.00 - You save \$50!!!**

*Member fees are applicable to individuals who are currently members of a participating organization of ACTAR, the Accreditation Commission for Traffic Accident Reconstruction. CA2RS is a participating organization of ACTAR.*

[Back to Top](#)**CA<sup>2</sup>RS New Website**<http://www.accidentreconstruction.com/caars>

**The ARC Network** is now hosting the new website for CA2RS.

The website will post information on upcoming CA2RS events, general information on the organization and membership, discussion from members and our newsletter.

Visit the website any time you need to check the upcoming events schedule for quarterly meetings and training events.

The "Discussion" section of the website is password-protected for members-only-access. This section is provided for members to post comments and questions for other members to respond to or supplement. This section is especially useful to post information and/or questions you would like the majority of the membership to see.

Our newsletter will also be posted in another password-protected section for members only. After all, this is a benefit of your membership! Old newsletters will also be archived on the website.

Many of our members are choosing to view the newsletter on the website as opposed to receiving a hard copy via U.S. mail. This helps eliminate unnecessary mailing costs, and in turn, helps to keep membership fees down. If you would like to participate in this effort, please supply CA2RS Headquarters with your e-mail address. You will then be notified via e-mail anytime new events or newsletters are posted.

[Back to Top](#)**WORLD RECONSTRUCTION EXPOSITION 2000**

**Are you ready for the largest Combined Conference of non-profit AI/AR organizations ever held?!**

September 24-29, 2000  
College Station, Texas USA  
Hosted by: TAARS  
Co-Sponsored by:  
ASPACI | CA2RS | CATAIR | FARO | IAARS | IATAI | ITAI  
M(a)ATAI | M(i)ATAI | M(id)ATAI | NAPARS | NATARI | NJAAR | NYSTARS  
PSFM | SARS | SATAI | SCARS | SOAR | TAARS

#### **NEW INFORMATION**

The Texas Association of Accident Reconstruction Specialists has contracted with a travel agent who is blocking hotel rooms in College Station, Texas, near the Texas A&M campus. Therefore, all room reservations must be booked by the travel agent.

The travel agent has also secured a contract from Continental Airlines for a 10% discount on airfare to and from the conference that is available on the day the flight is booked through her office. To make your travel and hotel arrangements easier, the travel agent has furnished a toll free number, listed below. Therefore, you only have to make one call to book your hotel and airfare. Buses will be furnished to transport attendees to and from their hotels and all activity areas, thereby eliminating the need and cost of renting a car. Easterwood, College Station's airport, is served by Continental and American Airline flights from Houston and Dallas/Fort Worth airports.

**Reservations for hotel rooms and airline:** Contact Ms. Marie Atchley, Travel Choice, Inc. Houston, Texas, USA telephone: (281) 495-6787 or (800) 239-6121 Fax: (281) 495-8698

For available hotels and rates, please see the [WREX2000](#) website.

**Registration:** When activated, you will be able to register for the conference on-line, or print the registration form and send it via fax or mail. Registration forms have not been designed, however, the conference fee has been set.

- Register & Pay 60+ days out: \$450.00
- Register & Pay 30-60 days out: \$550.00
- Register & Pay less than 30 days out: \$600.00
- Register & Pay at the door: \$700.00
- Guest passes for observation of Tuesday & Wednesday's outside activities and robust testing: \$50.00

**Vendor information:** Those wishing to reserve a table for Vendors Night, Wednesday, September 27, 2000, to display their company's products and/or services may contact George Bonnett, telephone: 407-639-0124; or e-mail: [rec-tec@att.net](mailto:rec-tec@att.net); Chairman, WREX2000 Combined Conference Vendor Committee.

***This will be an historic event! Start making your plans now to attend.***  
Please see the WREX2000 website for detailed information on the Conference.

<http://www.wrex2000.org>

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#### **TEST YOUR SKILL ANSWERS**

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1. 68 mph
2. 02.7, 20 mph, rear are drive axle
3. 136514.25 ft-lbs., 36.31 mph

For detailed solutions, contact Toby L. Gloekler at Rudy Degger & Associates, Inc. E-mail: [tobyg@mindspring.com](mailto:tobyg@mindspring.com) [Back to Top](#)

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**ACTAR COMMENTS by AL BAXTER, ADMINISTRATOR**

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**Greetings:**

By the time you read this Santa has visited your house and we have all survived the Y2K bug without the world ending as we know it. I hope your holiday season was great. As of December 20th, we now have 646 reconstructionists currently holding accreditation and 87 waiting for examination results or a test site near where they live.

Over the past year a few accredited reconstructionists have lost their accreditation because they did not demonstrate keeping current with technology by attending any training. Most did not earn one Continuing Education Unit (CEU) during their entire five-year period. With the court cases I discussed in my last column, these reconstructionists have really placed themselves in jeopardy as expert witnesses due to this lack of training and accreditation.

The biggest supporters of the ACTAR CEU Program are TEEX and IPTM. Both have submitted many courses for continuing education units, and I personally thank them for their continued support. Another training organization that has come aboard is the Traffic Institute for Police Services (TIPS) located in Harrisburg Pennsylvania. All of the TIPS courses are provided in the state to active police officers. By participating in the ACTAR CEU Program, TIPS has aided those ACTAR accredited reconstructionists in earning their CEUs at a reasonable expense.

One training provider which has not joined the ACTAR CEU Program is the Society of Automotive Engineers (SAE). We have been corresponding with SAE since 1997 in an effort to obtain their participation in the various TOPTec Programs they provide in accident reconstruction. There are almost 200 ACTAR accredited reconstructionists who are members of SAE, and 75% of the ACTAR Board of Directors are members. We have tried to explain the economics of their participating in the CEU Program without success. If you are a member of SAE and desire to see them participate in the ACTAR CEU Program, please direct your correspondence to Mr. J. Kevin Perry - Professional Development Division - Society of Automotive Engineers - 400 Commonwealth Drive, Warrendale, PA 15096-0001. Mr. Perry has indicated if enough letters are received, he will address this issue again with the powers of SAE.

If you are considering training in the new millennium, please consider who provides the most cost-effective method for your training budget.

The ACTAR Examination schedule currently is:

Date and Location	Registration Deadline
Saturday February 26, 2000 - Golden, Colorado	February 11, 2000
Sunday April 2, 2000 - Concord, California	March 15, 2000

\*2-day ACTAR Review Course hosted by CA2RS will be held prior to the April 2nd ACTAR Examination. Call CA2RS Headquarters for details and registration. (925) 284-7739

Sunday April 30, 2000 - Jacksonville, Florida	April 20, 2000
Tuesday May 9, 2000 - Seattle, Washington	April 18, 2000
Sunday May 21, 2000 - Eau Claire, Wisconsin	May 1, 2000
Sunday September 24, 2000 - Riverside, Texas	September 1, 2000

As always, if you have any questions, please contact me.  
 PO Box 5436 Hudson, FL 34674-5436  
 Phone: 1-800-809-3818  
 E-Mail: [atbaxter@akos.net](mailto:atbaxter@akos.net)

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