WHERE ARE WE GOING WITH VARIABLE VALVE TIMING?
A Message From the Chicago Section Chairman

It's time again for the SAE International Congress and Exposition, held at Cobo Center in Detroit from Monday, Feb. 28, through Thursday, March 3. This is an excellent opportunity to learn about new developments in all areas of mobility engineering and to meet old friends and make new acquaintances from our related industries.

I urge employers to send their engineers to this annual event. There are fine technical presentations and seminars to make your employees more knowledgeable and enthusiastic about their daily challenges. There are more suppliers at this exposition than any other SAE event during the year, and it's a great chance to find the solution (or several) to that new design problem.

Please review the program booklet sent to every SAE member describing all the technical sessions and presentations to be held during the Congress week. Talk to your managers, and make plans to attend sessions which will help you in your work. And, remember, there is no admission charge for SAE members at the Congress.

Back in Chicago, we will have a presentation on variable valve timing for automotive engines at our Tuesday, March 8, meeting. On Tuesday, April 12, our technical presentation will be on CARB's (California Air Resources Board) OBD-2 (On-Board Diagnostics) requirements. This meeting will be held in the south suburbs and will be preceded by a tour of the Ford Taurus plant on Torrence Avenue. We will also be presenting SAE service awards on both of these nights. We look forward to seeing all of you there.

Chuck Cornell
Chicago Section Chairman
# 1993-94 SAE Chicago Section Governing Board

## Executive Committee

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Company/Institution</th>
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<tbody>
<tr>
<td>Chuck Cornell</td>
<td>Chairman Chicago Sec</td>
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<td>708/971-2442</td>
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<tr>
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<td>Gary Patterson</td>
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<td>219/879-5451x1604</td>
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<tr>
<td>Jim King</td>
<td>Past Chairman Chicago</td>
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<td>708/887-2012</td>
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<tr>
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<td>708/674-7701x2142</td>
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<tr>
<td>Eugene Wallace</td>
<td>Math &amp; Science K-12</td>
<td>ASME-GRI</td>
<td>708/241-0660</td>
</tr>
<tr>
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<td>Asst Math &amp; Sc K-12</td>
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<tr>
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<tr>
<td>Carson Eddy</td>
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<td>Aetna Bearing</td>
<td>312/227-2410</td>
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<tr>
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<td>1st Alternate</td>
<td>J I Case</td>
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<tr>
<td>Maurice Fernandez</td>
<td>Engrg Career Resources</td>
<td>Allied Automotive</td>
<td>708/349-9483</td>
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<tr>
<td>Dave Morris</td>
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<td>DAI Technologies</td>
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<td>Company Reps</td>
<td>J I Case</td>
<td>708/887-3736</td>
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<td>Long Range Planning</td>
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<td>Asst. Long Range Planning</td>
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<tr>
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<td>Co-Photographer</td>
<td>Bailey Marketing, Inc.</td>
<td>708/859-5001</td>
</tr>
<tr>
<td>Al Kluge</td>
<td>Co-Photographer</td>
<td>Caterpillar</td>
<td>708/859-4974</td>
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<td>Adam Wolf</td>
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<td>DAI Technologies</td>
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<td>Bob Larsen</td>
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<td>Fuels &amp; Lubricants</td>
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<td>Brian Schilling</td>
<td>Heavy Duty Vehicles</td>
<td>ZF of No America</td>
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<td>708/865-3103</td>
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<tr>
<td>Rich Barthel</td>
<td>Parts &amp; Accessories</td>
<td>Eaton Corp</td>
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## International SAE Support

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<tr>
<td>John Casker</td>
<td>Manager Section Relations</td>
<td>412/776-4841</td>
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<tr>
<td>Becky Fadik</td>
<td>Field Services Representative</td>
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Each month, more and more people who attend our dinner meetings do not make reservations in advance of the meeting date.

This makes it very difficult for the Tech Chairman to estimate how many will show and then notify Itasca Country Club how many dinners to prepare.

The last several meetings, we had about 50 reservations the evening before the meeting and 100 or more showed up for the meeting. Fortunately for us, Itasca managed to serve everyone who attended, but they have repeatedly asked for a much closer head count four days before the meeting date.

Our contract with Itasca reads as follows: “Food guarantees are requested four days in advance of the function date. We will be prepared to accommodate up to 10% above the guaranteed figure on parties of 100 or less and 5% above the guaranteed figure on parties over 100. We will make every effort to serve any excess beyond these figures, although not obliged to do so. No allowance will be made for groups whose attendance falls below guaranteed figure.”

From the last sentence you will note that it is also important to phone in cancellations as we are charged for dinners ordered but not served.

Effective with the March meeting, the deadline for dinner reservations will be the Friday before the meeting date. Persons attending the meeting without a reservation risk the possibility of not being served. We and Itasca will do our best to accommodate everyone within reason. Please help us by making reservations.
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Intelligent Solutions to Heavy-duty Problems
WHERE ARE WE GOING WITH VARIABLE VALVE TIMING?

by

David J. Britton

Many original equipment vehicle manufacturers are either using or considering variable valve event control as a means of obtaining further improvements in engine torque, fuel economy or emissions. This presentation will introduce valve event control devices, examine their technical advantages and limitations, and suggest possible future design trends. Technologies presented will include camshaft phasing, camlobe phasing/switching, variable lift and event, and camless engines. Considerations will be given to both traditional popper valve systems and non/popper valve systems.

David Britton was born in Peterborough, England, in 1949. After leaving high school, David completed a five-year graduate apprenticeship with Perkins Engines. Upon graduating with a mechanical engineering degree in 1970, David held a number of product engineering positions developing engine components and fuel injection systems with Perkins in Peterborough. In 1977, he transferred to their North American Operation, Perkins Diesel Corporation in Canton, Ohio. After seven years with Perkins Diesel in their applications engineering department, David left to join Eaton's Engine Components Division. In the nine years he has been
with Eaton, all but the last six months have been in various product engineering management and program management positions, focusing primarily on developing valve train systems for automotive engines. David is now responsible for the management of productivity and quality assurance programs throughout the Engine Components Division.

Rich holds a BSEE from the Illinois Institute of Technology and is active in SAE activities involved with multiplexed wiring systems. He is an engineering manager for Eaton Corporation Automotive Control Division for the past 13 years. Rich has been involved with multiplexed wiring systems in SAE activities in the last six months. Rich holds a BSEE from the Illinois Institute of Technology and is active in SAE activities involved with multiplexed wiring systems.

For Reservations and Information contact Section Office (708)663-0010.

Please make reservations by Friday, March 4, 1994.

**Prices**

<table>
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<th>Type</th>
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<tr>
<td>Members</td>
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<tr>
<td>Nonmembers</td>
<td>$17.00</td>
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<tr>
<td>Full Time Students</td>
<td>$7.50</td>
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October 12, 1993, Joint Meeting with ASAE

Tech Chairman Bob Paplaski presenting Steve Burdette with a memento in appreciation of an excellent presentation on Product Safety.

November 9, 1993, SAE President’s Night

It seems everyone who attended the meeting was very intrigued with the compact orbital engine.
During the executive luncheon at C.O.D. for SAE President Nominee Randy Richard, Margaret Bain, Membership Chairperson of the Chicago Section, gave an inspiring talk.

Eugene Wallace, Chairman of Math & Science K-12, with teacher Nancy O’Brien from Caroline Bentley School, New Lenox, IL, at the C.O.D. executive luncheon.
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