

Tentative AGENDA

SAE Fatigue Design and Evaluation Committee
October 11 & 12, 2000 in Urbana, IL
(Local Sponsor: Darrell Socie - SOMAT Corporation)

General Information:

The meetings will be held at the Holiday Inn. If you have not made reservations you should do so as soon as possible.

Holiday Inn Darrell Socie / Mindy Heaton
1001 Killarney Street SOMAT Corporation
Urbana Illinois 217-328-5359
217-328-7900 FAX 7941 E-mail: mindy@somat.com

The Holiday Inn has a 24 hour a day shuttle to and from the Urbana Airport. There is a mall and several restaurants close to the motel.

Tuesday Night October 10, 2000

7:00 PM Executive Committee Meeting (Salon C)

WEDNESDAY MORNING, (OCTOBER 11, 2000)

7:30 AM Registration and Coffee, Juice & Donuts

8:00 Main Committee Meeting - Room: Salon A-C
 Announcements
 Local Arrangements - Darrell Socie
 Meeting announcement format from SAE - Phil Dindinger
 Arlene Catrett 248-273-2490 acatrett@sae.org
 Education

8:15 Henry O. Fuchs Student Travel Award & Presentation

 "Fatigue Testing of Sheet Metals Subjected to Uniaxial Tension-Compression"

 - Rebecca Kaufman - University of Waterloo

9:00 Structural Analysis Division - Zhengxian Bai & Mary Wickham

 - Review and approve minutes from last meeting

 -Technical Presentations

 -Ground-Interface Load Inference - Jeff Sundermeyer, Caterpillar

 - Spotweld Fatigue Under Multi-axial Loading Conditions - Mark Barkey

10:00 Break: Coffee & Juice

10:30 Divisional Progress Meetings - Room: Salon A

Surface Enhancement Division Meeting will run concurrent to the other meetings in the Salon C.

10:30 Component Testing Division - Raj Thakkar -Approval of April 2000 meeting minutes.

-ATV Activities

-Technical Presentations

- ATV Dynamic Modeling Simulation Update - Ric Mousseau

- " Fatigue Evaluation of Lap Welded 6061T6 Aluminum Specimens" - Raj Thakkar

- "Empirical Dynamic Models of Non-Linear Suspension Components" - Tom Renner

11:45 Lunch -- Local Restaurants

WEDNESDAY AFTERNOON, (OCTOBER 11, 2000)

1:00 Divisional Progress Meetings (Continued) - Salon A

Surface Enhancement Division Meeting will run concurrent to the other meetings in Salon C

1:00 Fatigue Life Prediction Division - Chin-Chan Chu

- Approval of April 2000 meeting minutes.

- Technical Presentations:

- "Cracking Energy Density as A Fatigue Life Parameter for Rubber Subjected to Multiaxial Conditions," by W.V. Mars., Cooper Tire (25 mins.)

- "A Stress Based Fatigue Prediction Concept and Its Application to Vehicle Components," by H. Dannbauer, FEMFAT (30 mins.)

- "Thermal Fatigue of Automotive Components," by V. Ogarevic, Ncode (20 mins.)

2:00 Road Load Data Acquisition Division - Christoph Leser

- Approval of April 2000 meeting minutes.

- ATV Related Activities
 - "RLDA ATV review" - Mark Earley, John Deere
- Technical Presentations
 - "ADAMS Modeling Techniques" - TBA, Mechanical Dynamics Inc.
 - "www.fatigue.org, status and direction, a discussion"
 - Christoph Leser, MTS Systems

3:00 Break: Coffee & Soft Drinks

3:30 Materials Properties Division - John Bonnen

- Approval of April 2000 meeting minutes.
- Status of Current Activities
- Update on ATV control arm welds: Russ Chernenkoff (5 min.)
- Update on Composites Task Group: Alan Kallmeyer (5 min.)
- Technical Presentations

-"Mean Stress Effects in Multiaxial Fatigue" by Rebecca Kaufman,
University of Waterloo. (20 min.)

-"A Modified Partial Crack Closure Model" by Daniel Kujawski,
Western Michigan University, (25 min.)

5:00 PM Social Hour Sponsored by SOMAT Corporation

THURSDAY MORNING, (OCTOBER 12, 2000)

7:30 AM Coffee, Juice and Donuts

8:00 Technology Session - Room - Salon A

8:00 - 8:40 Implications of Testing Solid Bars for Axial-Torsional Loadings
- Peter Kurath, University of Illinois at Urbana-Champaign

8:40 - 9:20 Multiaxial Fatigue Life Predictions for Ti-6Al-4V - Allan R. Kallmeyer and Ahmo Krgo, North Dakota State University

9:20 - 10:00 Recent Attempts to quantify Stress Fields with Thermal Imaging Analysis (TSA)
Gavin Horn, University of Illinois at Urbana-Champaign

10:00 - 10:30 BREAK

10:30 - 11:10 Stress Concentrations in Weldments Gregorz Glinka,
University of Waterloo

11:10 - 11:30 Failure Analysis of a Brake Rotor - Henry A. Padilla and
Thomas Mackin, University of Illinois at Urbana-
Champaign

11:30 - Noon Effect of Cold Laps on Fatigue of Weldments with
Terminations
Fred Lawrence University of Illinois at Urbana-Champaign

12:00 Lunch -- Local Restaurants

THURSDAY AFTERNOON (OCTOBER 12, 2000)

1:15 Divisional Planning Sessions (Concurrent Sessions)

Room: Salon A

Room: Salon C

1:15 Component Testing Division Structural
Analysis Division

1:45 Fatigue Life Prediction Division Material Properties
Division

2:30 Road Load Data Acquisition Division

End of Meeting

WEDNESDAY OCTOBER 11, 2000

Surface Enhancement Division Meeting Agenda - Room: Salon C

Topics for Discussion

Update on J2441 Shot Peening - Dave Hale

Update on J2277 Shot Peening Coverage - Dave Francis

Update on HS-84 Manual on Shot Peening - Jack Champaigne

Update on AMS 2430 - Shot Peening - Jack Champaigne

Update on Purdue Shot Peening Center - Jack Champaigne

Update on SAE electronic ballots and Web pages - Jack Champaigne

Update on Almen saturation curve generation programs - Jack Champaigne