

LOG OF MEETING

SUBJECT: International Conference on Fire Safety

DATE: January 9-12, 1995

PLACE: Clarion Hotel, Millbrae, California

COMMISSION ATTENDEES: James F. Hoebel, Engineering Sciences

NON-COMMISSION ATTENDEES: Approximately 100 individuals active in fire safety, representing industry, trade associations, States, testing laboratories, Federal agencies, universities, consultants, professional societies, standards organizations, foreign interests, and others. See attached list.

LOG ENTRY SOURCE: James F. Hoebel

SUMMARY OF MEETING: This was the twentieth such conference, organized by the Product Safety Corporation. Papers were presented in four categories: Fire Safety of Buildings and Contents, Fire Safety in Transportation, Fire Safety Testing, and Materials for Increased Fire Safety. A copy of the agenda is attached.

The CPSC paper "The Role of the CPSC in Stimulating Development of More Fire-Safe Products" was well received. Questions from the floor addressed status of the furniture project, mattress investigations, ranges/ovens project and anticipated impact of the political change in Congress on CPSC. The answer to the final question was "business as usual."

Most other papers were of some interest to CPSC staff. These were notable:

"Cigarette Ignition of Upholstered Furniture" by Gordon Damant: California has tested over 1200 pieces of furniture to Cal 117, and observed failures have steadily declined to about 10 percent in 1992. A correlation between cellulose content and extent of failure has been observed. A lot of furniture passes Cal 116 but fails Cal 117.

"Spontaneous Combustion of Linseed Oil" by David Howitt: Linseed oil release heat when it polymerizes. The number of double bonds in the oil molecules increases risk. Boiled oil is worse than raw oil. Geometry, air circulation, ambient temperature affect risk. Contact with a cellulosic product is usually needed. Manufacturers sometimes add dryers, such as manganese oxide, which lowers activation energy and increases risk.

"How to Prevent Flashover Fires due to Furnishings or Contents of a Room" by Marcelo Hirshler: Control of a product's rate of heat release was emphasized. Author recommended revising tests to increase size of ignition source.

"Correlation of Cal 133 with Cone Calorimeter" by Herman Forsten: Poor correlation was observed.

"Combustion Explosions Involving Household Aerosol Products" by John De Haan: Many aerosol propellants are now flammable, because of the shift from CFC propellants. So are some solvents. Fires and explosions occur with interaction of an aerosol emission with many available ignition sources.

"Textile Industry Flammability Activities" by John Michener: CPSC activities on upholstered furniture, children's sleepwear, nightwear for the elderly, and bedding were described. The textile industry's position on the furniture issue is that they will help in any way that they can. The status of the NFPA 701 standard for vertical flame spread was described. The drapery industry is not active on this committee. The tent voluntary standard is being revised, and comments are being solicited. NAFTA harmonization was mentioned.

"Untitled" by Gordon Damant: A major fabric test program was described, but results have not yet been cleared for release. Two fabric trade associations provided major funding, with support from ATMI, AFMA fibers), PFA, BIFMA, and AFMA (furniture). Full scale mock ups were tested, by California's Bureau of Home Furnishings, with 26 different fabrics, several barriers, and Cal 117 foam. Results were correlated with companion cone calorimeter tests conducted by Omega Point Laboratory. The purpose is to try to avoid need for full scale testing under Cal 133 whenever a fabric is changed (there are over 20,000 available upholstery fabrics).

Persons Whom You May Meet at the

TWENTIETH INTERNATIONAL CONFERENCE ON FIRE SAFETY

(List prepared on January 5, 1995)

Alan M. Aaronson, Akzo Nobel Chemicals Inc.
Mark A. Anderson, Clark Schwebel
Robert H. Barker, American Fiber Manufacturers Association
Forest A. Benson, Du Pont Advanced Fibers Systems
Arnold Bertram, Charter Furniture Corporation
John A. Blair, Du Pont
George E. Booth, Springs Industries
Bobby Bush, Hickory Springs Manufacturing Co.
James L. Carmine, Akzo Nobel Chemicals Inc.
William F. Carroll Jr., Occidental Chemical Corporation
Loren M. Caudill, Du Pont
William L. Coble, Akzo Nobel Chemicals Inc.
Ronny J. Coleman, California State Fire Marshal
Gordon H. Damant, Inter-City Testing & Consulting Corporation of California
Alan L. Dean, Guilford of Maine
John D. DeHaan, California Department of Justice
Phillip DeMott, Milliken Research Corporation
David P. Derse, Gencorp
Robert J. Duffin, Elf Atochem NA
N. Dale Dunham, San Francisco International Airport
Donald J. Ferm, U.S. Borax Inc.
Carlos Fernandez-Pello, University of California, Berkeley
James L. Fetterly, Fetterly & Gordon
Charles W. Forsberg, Lamson & Sessions Co.
Herman H. Forsten, Du Pont
John R. Fraser, Shook, Hardy & Bacon
Robert Friedman, NASA Lewis Research Center
Thomas W. Fritz, Armstrong World Industries
Joseph Green, FMC Corporation
Bill Harmon, ICI Fiberite
James Hawkins, GenCorp
Carlos J. Hilado, Product Safety Corporation
Richard G. Hill, Federal Aviation Administration
Marcelo M. Hirschler, Safety Engineering Laboratories
James F. Hoebel, Consumer Product Safety Commission
James R. Hoover, Du Pont
David Howitt, University of California, Davis
Fu-Yu Hshieh, Allied Signal Technical Service Co.
Mark Huggard, Albright & Wilson
Robert C. Huttlinger, Consultant
James D. Innes, Flame Retardants Associates
Clas Tore Jacobsen, Polycer AS
William Kennelly, Climax Molybdenum Company
Daniel L. Kent, D. L. Kent & Associates
Arnold Krumrie, Steelcase Inc.
Jeffrey Lear, ARCO Chemical Company

Dale E. Lyman, Albright & Wilson Americas
Richard Lyon, Federal Aviation Administration
Alexander Maranghides, Geo-Centers Inc.
Ronald L. Markezich, Occidental Chemical Corporation
Kent R. Matthews, Schuller International
John A. McCormack, Calif. Bureau of Home Furnishings and Thermal Insulation
John W. Michener, Milliken Research Corporation
Joanne Mikami, Calif. Bureau of Home Furnishings and Thermal Insulation
Randall J. Miller, Nemschoff Chairs Inc.
David S. Morrison, Advanced Systems Technology
Rick Mulhaupt, NFPA Research Foundation
Christopher J. Nalepa, Albemarle
Gordon L. Nelson, Florida Institute of Technology
Mark S. Nemschoff, Nemschoff Chairs Inc.
Chi-Thau Nguyen, Bell Canada
James C. Norris, Union Carbide Corporation
Said Nurbakhsh, Calif. Bureau of Home Furnishings and Thermal Insulation
Thomas J. Ohlemiller, National Institute of Standards & Technology
Andrew Olah, B. F. Goodrich Company
Felix Oseguerra, Raychem Corporation
Maureen Owen, Tex Tech Industries
William C. Page, Dow Corning Corporation
Alexander J. Patton, University of Rhode Island
Chester Petkiewicz, Freudenberg Nonwovens
Leslie W. Richardson, Forintek Canada
Constantine P. Sarkos, Federal Aviation Administration
Kelvin K. Shen, U.S. Borax Inc.
Linda Simmons, Hickory Springs Manufacturing Co.
Usman Sorathia, Naval Surface Warfare Center
Howard W. Stacy, Southwest Research Institute
Lee E. Stanford, Shook, Hardy & Bacon
Douglas A. Sullivan, Hickory Springs Manufacturing Co.
Wes Suskey, Nemschoff Chairs Inc.
Mitchell S. Sweet, USDA Forest Products Laboratory
T. Hugh Talley, Hugh Talley Co.
Garrett Tom, Underwriters Laboratories
John F. Tramontana, Occidental Chemical Corporation
Carl F. Tripp, SPI Polyolefins Council
King-Mon Tu, Akzo Nobel Chemicals Inc.
Joe Urbas, Western Fire Center
Peter K. S. Wu, Factory Mutual Research Corporation
Joseph J. Ziolkowski, American Furniture Manufacturers Association