Message from the Chapter President...

Welcome back to another Chapter year.

As we start our 27th year I encourage you all to become involved in the Chapter by attending the meetings and upcoming seminars. Your Board of Directors has planned some very good programs for the coming year which includes a technical seminar in October. More information on this seminar will follow. Also in April 2005 there will be a joint seminar with the NY Chapter. Details on this seminar will be out later this year. If any of the membership has a topic/subject that you would like to have discussed, come to the meeting and let us know.

The dues notice for 2004-2005 will be sent out shortly. Last year we did not receive everyone’s dues so we ask that you please look for the notice this year (it will come in a separate mailing to your address we have on file) and mail in your payment. Thank you all in advance for helping us get this done. National SFPE is having its Annual Meeting and Awards dinner September 20 in Chicago in conjunction with Professional Development Week. In this issue of the Fusible Link you will note new Chapter Officers and Directors, Committee members and of course, our meeting schedule. It looks like a great year ahead.

I look forward to seeing you all on Monday, September 13, the kick-off meeting for the year.

Rich
The meeting was called to order at 6:15 by our President Sarge Slicer. The delay was due to the abundance of hot and cold hors d’oeuvres.

All attendees introduced themselves as is our normal custom. With this being election night there were a great deal of our honored past presidents in attendance. Time was taken to thank them personally for their past and continued service to our society and field.

The May minutes and this month’s treasurer’s report were read, motions were made to accept, seconded and both the minutes and treasurer’s report were accepted.

John Cholin took the floor to remind those in attendance that he could use some attendance for his SFPE Advanced Fire Alarm Design Seminar to be held later in June at Brooklyn Poly Tech. He stressed that this course is very technical and the reference manual needed is the SFPE Handbook.

Rich introduced a new applicant for tonight, Mike Falzarano of FM Global. Mike was accepted for membership which was important as he was nominated to fill the last year of Bob Murray’s term.

Sarge let the membership know that there were still 10 holes open for the Golf Outing. All foursomes were filled and there were already 26 hole sponsors along with other corporate and industry sponsors.

Sarge read a letter of thanks from Kathleen Almand thanking our chapter for its participation at a National and Local Level in gaining recognition of Fire Protection Engineers. Sarge also informed us that there was a new Staff Engineer at National. One of his duties is the support of chapters’ efforts with the recognition of Fire Protection Engineers at the state level. Finally that the SFPE Annual Meeting and Professional Development Conference will be held in Chicago on September 20-24, 2004.

Chuck Gandy read the chapter nominations for officers and directors. For President Rich Reitberger, First VP Glenn Deitz, Second VP Dave Gluckman, Treasurer John Cholin, Asst. Treasurer Bob Murray, Secretary Ed Armm and Asst. Secretary Brad Hart. Bob Hall and Vinny Fichera were nominated as a Board member-at-large and to fill the final year of Bob Murray’s term as a Board member-at-large Mike Falzarano. As all positions were unopposed the vote was made by the secretary who accepted all officers as nominated. There was no debate.

Joe Janiga took the floor to advise membership that he is working with the Governors Board and DCA to amend the Fire Alarm and Suppression law to allow larger industrial and commercial sites the ability to “self inspect” per NFPA 25 with a “Certificate of Fitness” from the sites insurance company.

Awards were given to Angelo who you all know as our most gracious host, the owner of the Hanover Manor and to Viva who we know as the lady at the bar, the lady that serves us and the lady that asks untiringly “fish or meat”. Presentations were made to past presidents Jim Tolos, Joe Janiga and Mike Newman.

Finally, just before our presentation Sarge finally gave it up, oops I meant to say immediate past president Sarge Slicer passed the gavel to our new president Rich Reitberger.

Our presentation this evening was by our brother member and Fellow to the Society of Fire Protection Engineers, John Cholin, P.E. FSFPPE. John’s presentation was titled “The Jahn Foundry Explosion - Findings and Analysis”.

The presentation dealt with the February 23, 1999 explosion at the Jahn Foundry which killed three employees and injured nine others some seriously. As usual John was not brought to the scene when he could have uncovered the most information, he had to follow the Commonwealth of Massachusetts Fire Marshall’s Office, the Springfield Massachusetts Arson and Bomb Squad and OSHA. John was retained by a defendant in the ensuing litigation.

An explosion occurred in a building where Shell Molding takes place, John explained the process of shell molding and specifically the way it was done at the Jahn Foundry. Each of the Mold Machines contained 2 heating chambers that were heated with open flame natural gas burners. It was reported that there was a history of pilot and flame failures with these heaters. Each area was ventilated by 45,000 cfm air systems providing 1 air change every 7 minutes.

It took John 28 slides to get to the particulars which we all know as the stuff that goes boom. There was some discussion as to which particulates were combustible and which were quite combustible. John shared numerous pictures that he used to determine the epicenter of the deflagration that caused the explosion, he explained the “Ejecta Patterning” used to locate epicenter based on wall fragments, wall surface features such as paint and trajectory.

As always John’s presentation was riveting, filled with interesting details and lessons learned through his meticulous analysis of the facts. Once again we are dealing with a loss that was both predictable and preventable. As always one of the leading lesson learned fell in the category of housekeeping.

John’s excellent presentation was followed by a Q & A session.
The following technical article has been taken from the “Fire Suppression and Detection Research Application Symposium” - Fire Protection Research Foundation. The entire paper will be part of a series in subsequent Fusible Link issues.

The United States Coast Guard (USCG) has been actively involved in evaluating alternative fire suppression methods and replacement agents for Halon 1301 total flooding systems for machinery space applications. The research conducted to date includes evaluations of both gaseous halon alternatives (halocarbons and inert gases) and water mist fire suppression systems (1,2,3,4,5). This water spray system evaluation was a continuation of this research and looked at the capabilities of these systems for this application.

The International Maritime Organization (IMO) allows the use of fixed pressure water spray fire extinguishing systems in machinery spaces per Regulation 10 Chapter II-2 of SOLAS (Safety of Life at Sea [6]). The water spray systems are not required to pass any fire tests and the only design constraint placed on the system is that it must discharge a minimum of 5 Lpm/m². Currently, the Code of Federal Regulations [7] does not permit the use of these systems for vessels registered in the United States. Therefore, it was USCG’s desire to determine if the systems meeting this requirement can provide adequate protection of shipboard machinery spaces.

The capabilities and limitations of the systems were determined using the IMO test protocol for water mist systems (MSC 668 and 728) [8] as the basis for this analysis. In order to successfully complete the protocol, all fires must be extinguished within 15 minutes of system activation.

The tests were conducted in the simulated machinery space aboard the test vessel, STATE OF MAINE, at the USCG Fire and Safety Test Detachment located at Little Sand Island in Mobile, AL. The compartment volume is approximately 500 m³ with nominal dimensions of 10 m x 10 m x 5 m as shown in Figure 1. The diesel engine mock-up described in the test protocol is located in the center of the compartment. Air to support combustion was provided naturally through two 2 m² vent openings located on the lower level. This ventilation configuration is slightly different than the single 4 m² vent opening described in the protocol but did not appear to adversely affect the results of these tests.

The phase initial of this investigation focused on identifying the firefighting capabilities of a group of representative systems. These systems were selected to cover the range of typical design parameters currently used throughout the industry. These systems consisted of two standard sprinkler systems (NFPA-13 [9] listed by underwriters Laboratories, Inc., (UL)), a water spray system (NFPA-15 [10] listed by UL), and two generic systems produced using off-the-shelf industrial spray nozzles. The second phase consisted of a parametric study intended to identify the relative contribution of the various system parameters (spray characteristics and system discharge rate) on the overall capabilities of the system. During these parametric studies, the systems were designed with the intent that only one parameter was varied at a time.

Seven generic water spray systems were evaluated during the second phase. All twelve systems included in this investigation (five in Phase I and seven in Phase II) were produced with open pendent nozzles installed with either a 1.5 m or 3.0 m nozzle spacing.

The simulated machinery space was instrumented to measure both the thermal conditions in the space as well as the range of typical fire gas concentrations. Instruments were installed to measure air temperature, fire/flame temperature (to note extinguishment time), radiant and total heat flux, and carbon monoxide, carbon dioxide and oxygen gas concentrations. The water spray systems were instrumented for flow rate and operating pressure.

Generally speaking, the capabilities and trends in performance of these systems were similar to those observed for water mist systems. All of the systems were capable of thermally managing the conditions in the compartment during the test and the extinguishment times for the obstructed spray fires approach infinity as the size of the fire is reduced to some critical/limiting value.

Immediately after system activation, the temperatures in the space were dramatically reduced and maintained for the duration of the test. In a majority of the tests, the space became well mixed with a uniform temperature between 50-70 °C.
Career Opportunities...

Wayne Fire Protection Services is a global HPR firm providing services for various insurance companies.

We are looking for qualified candidates who are willing to do free lance HPR work on a contract basis (may be in between jobs or retirees). Additional information listed in previous Fusible Links.

Please respond to email address below with resume, and sample of written survey report.

Wayne Fire Protection Services, Inc.
2218 Hamlet Circle
Round Rock, TX  78664
Toll Free Phone:  877-877-6400
Toll Free Fax:     877-248-1111
Email:gary.hartley@wayne-fire.com

NFSA - Sprinkler Advantage Seminar
September 22, 2004

Due to very positive feedback received, the NFSA - NJ Chapter has decided to repeat the presentation of the Sprinkler Design Advantage seminar. The seminar will be held on Wednesday, September 22, 2004 at Local 696 Union Hall in Millburn. NFSA would like to extend an invitation to the SFPE membership to participate in this seminar. Seating is limited and pre-registration is required. Please contact Vinnie Fichera via email or phone to pre-register (fichera@nfsa.org, 201-493-0999).

Register Now and Save! The ADVANCED REGISTRATION DISCOUNT deadline is August 20, 2004 for the 5th International Conference on Performance-Based Codes and Fire Safety Design Methods being held in Luxembourg on 6-8 October 2004. This conference promises to continue the tradition established by SFPE to present state of the art in performance-based codes and design methods. With 47 presentations and 17 countries represented, the first day of the conference will be dedicated to performance codes and will feature challenges they present. On the second day, the theme of the conference will turn to design in the performance environment. The last day of the conference is a compilation of case studies from Australia, France, Japan, the United Kingdom and the United States focused on a performance-based fire safety analysis and design for a transportation center.

The SFPE Annual Meeting and Professional Development Week is right around the corner; don’t miss out on your chance to save by registering by AUGUST 27, 2004 to receive the ADVANCE REGISTRATION DISCOUNT. The week will start on Monday, September 20 with a one day complimentary professional program addressing issues of concern for the practicing fire protection engineer. This will be followed by our traditional Awards and Honors Banquet, and by four days of education events, including nine seminars, a Symposium on Flammable and Combustible Liquids and an expanded Engineering Technology Showcase.

The nine seminars include: The New Human Behavior in Fire; the New Code Official’s Guide to Performance-based Design and Review; the New Dust Explosion – Hazard Recognition, Assessment and Management; Sprinkler Design for Engineers; Principles of Fire Protection Engineering; Introduction to Fire Dynamics Simulator and Smokeview; Tenability Systems for Smoke Management; How to Study for the FPE/P.E. Exam; and NSPE Project Managers Notebook Workshop.

To Register or for more detailed information visit our website at www.sfpe.org.
Meeting Dates/Program 2004-2005

(Programs Subject to Change)
Watch web page concerning cancellation in case of possible inclement weather conditions


Oct. 4  "AS Piping Corrosion" - The Growing Number of Incidents & Methods to Prevent - Mike Kim, PE - fpsCMI

Nov. 1  "NJ Administrative Code 574 - Who Can Touch and Test Fire Protection Equipment"

Dec. 6  "Pharmaceutical Hazards & Loss Prevention"

Jan. 3  "Occupant Alarm Notification" - Issue and Design of Occupant Directed Alarms


Seminar - Fuel Oil Systems in High Rise Buildings - October

We have all heard and read that fuel oil systems at the World Trade Center had some level of impact on the collapse of the 7 World Trade building. The NJ Chapter of SFPE will be sponsoring a 1-day seminar in October at the offices of FM Global in Parsippany, NJ. A history of this exposure and proposed protection standards will be just some of the topics presented at this seminar. More details as to the date, agenda and speakers will be forthcoming shortly.

Slicerc & Associates, L.L.C.
Fire Protection and Loss Prevention Consulting

J. Sargent "Sarge" Slicer
22 Laurel Street
Morris Plains, NJ 07950
Office 973-993-5947
Mobile 973-993-0369
VM & Fax 866-395-6172
Member – SFPE & NFPA sargeslicer1@myibes.com
MEETING NOTICE

Date:       September 13, 2004

Place:      Hanover Manor
            16 Eagle Rock Avenue
            East Hanover, NJ

Price:      In Advance - $22 At door - $25

Dinner:     5:00-6:00 (Cash bar for mixed drinks)
            Dinner at 6 PM

Speaker(s): Victor Gameiro - Marioff Company (A world leader in Water Mist Technology)


Please note for this meeting:
All officers, directors and committee chairman are requested to attend a meeting at 4:00 p.m. at the Hanover Manor.

Please complete and return with your check payable to “SFPE NJ Chapter” to:
Vicki Serafin
Affiliated FM
400 Interpace Parkway, Bldg C - 3rd Floor
Parsippany, NJ 07054-1196
vicki.serafin@affiliatedfm.com

____________________________________
NAME: ________________________________ TELEPHONE: ________________________________

COMPANY: ____________________________

All reservations should be received by Friday, September 10, 2004. Telephone reservations or cancellations should be received by noon of the meeting day.
2004-2005 Chapter Committees

STANDING COMMITTEES

Program
Mike Newman, Chairman
Consulting - Nick Chergolis & Peter Rullo

Arrangements
Vicki Serafin, Chairwoman

Membership
Glenn Deitz, Chairman

Nominating
Sarge Slicer, Chairman
Glenn Deitz
Bob Murray

Scholarship Fund
Rich Reitberger, Chairman
Robert Hall
Mike Machette
Dave Gluckman

Auditing
Joe Janiga

Archivist
Rich Reitberger (FM Global Library)

Historian
Jim Tolos

Communications
Vicki Serafin

Fusible Link
Brad Hart, Editor
Dave Gluckman, Asst. Editor
Ana Crisostomo, Publishing
Vicki Serafin, Distribution

SPECIAL COMMITTEES

Special Executive Assistant to the Board
Vicki Serafin

Bylaws
Jim Tolos, Chairman
Joe Janiga - Co-Chairman

Career Recruitment
Al Dopart, Chairman

Golf Outing
Richard Reitberger, Chairman

Awards
Jim Tolos
Frank Savino

NY Chapter Liaison
Rich Reitberger (Pat Egan back-up liaison)

PE Examination
John Cholin, Chairman
Joe Janiga
Mike Newman
Chuck Gandy

Joint Seminar/Chapter Seminar
Richard Reitberger, Chairman
Vinnie Fichera

Legislative
Rich Reitberger, Chairman
Vinnie Fichera