The NJ Chapter 2004-2005 year is almost over. Where has the time gone?! This month we have an off site visit to the Chubb sprinkler lab in Warren, NJ. This is always an informative meeting and we get to play with the toys. We only have a small number of slots left (limit is 35) so call Vicki at 973-541-6776 to reserve your spot. This is on a first come, first served basis so call today. As a reminder our annual business meeting has been moved to Monday June 13 to deconflict with the NFPA conference earlier in the month. Also in June the Joint Scholarship Golf Outing will be held at West Point Military Academy, NY on June 27. See sign up application in this issue of the Fusible Link. See you at Chubb.

Rich Reitberger
Chapter President
The meeting was called to order at 6:00 by our President Rich Reitberger. All those in attendance were asked to relocate to the Northwest corner of the Hanover Manor’s parking lot to view the first part of tonight’s presentation. Board member Vinny Fichera coordinated the demonstration of a residential fire sprinkler system in the new NFSA fire sprinkler demonstration trailer.

Vinny gave a short presentation explaining the construction and purpose of the trailer. The trailer is equipped with a residential sprinkler, water tank and pump, a horizontal sprinkler and a ceiling pendant sprinkler. The fire demonstration section of the trailer is 7.5’ wide by 8’ long and 6.9’ in height. The trailer has windows surrounding the three sides of the demonstration section that allow a very good view to all those taking part. The purpose of the trailer is to demonstrate the value of residential fire sprinklers and to hopefully make them more recognizable and accepted. Vinny then started a fire in a waste paper can under a horizontal mounted residential fire sprinkler.

The fire consisted of 8 or 9 sheets of newspaper; the waste paper can was directly below a “drapery” that hung near the sprinkler. After a little help from Vinny the drapery soon caught fire and shortly thereafter fused the sprinkler. Once fused the automatic residential fire sprinkler made very short work of suppressing the fire.

After a short discussion we all returned to the meeting room where a salute to the flag was followed by all attendees introducing themselves as is our custom.

The March minutes were approved as published in the Fusible Link. The treasurer’s report was read and accepted. Rich reminded those in attendance that the cut off of date had come and gone for membership renewal. If dues were not current they would no longer be members in good standing and would not be receiving a copy of the Fusible Link by email or snail mail.

Jim Tolos reread the By-Laws for the final time. A motion to accept them as read was made and carried to accept the changes to our By-Laws. A job well done by Jim. The membership applauded him for his effort.

Rich reminded the membership that the golf outing will be on June 27 and hole sponsorships were still available, contact Rich or Vicki to sponsor a hole.

Tonight’s presentation was done in three parts: Joe Janiga opened with a discussion of fire dynamics and growth, followed by Chuck Gandy who provided documentation on heat release and some excellent movies on sprinkler / fire tests. Finally, John Cholin gave us the details on the “t squared” fire.

Joe started with a debriefing of the residential fire sprinkler demonstration. He provided a detailed engineering analysis beginning with the explanation of the qualitative relationship between the heat source and the phenomena the sprinkler would be sensing. Simply stated the further away the sprinkler or any heat sensing device was the greater the heat source required to get the desired response. In the test our wall mounted horizontal 155 degree residential sprinkler had an RTI of 50 (English units) mounted directly over the fire. In his part of the presentation John Cholin explained exactly what the RTI was and how it is determined.

Joe’s parting words reminded the group that the Fire Protection Engineer must design for far less opportunist fires.

Chuck Gandy provided us with resources to find heat release figures for most common objects that would normally be found in a home, office or other environments. Chuck pointed out that our test burned 5.1 oz. of newsprint (40% consumed) and 2.8 oz. of muslin cloth (75% consumed) yielding 2.0 MJ of heat released in 27 seconds. Thus the heat release rate (HRR) grew from zero at ignition to approximately 140 KW at sprinkler activation. The observed HRR was similar to ninety-three 1,500 watt hair dryers being switched on ripple-start over the span of 27 seconds.

Chuck noted that none of this was taught in college in the 1970’s, but it can be picked up by interested Fire Protection Engineers reading the more modern texts and reference books. He was able to explain the theory based on his practice as a Fire Protection Engineer as well as observations gained as a firefighter. Chuck’s presentation was based on his earlier tests using the NFSA fire sprinkler demonstration trailer. He was able to show us how the heat release formula is used and how it can be applied to approximate a given fire.

Chuck then showed movies of a number of FM Global test fires providing greater insight into what can really be expected in a compartment fire, such as a college dorm room. One movie showed the same room with and without fire sprinklers. The first was a total loss; the second test simply fused a fire sprinkler that suppressed the fire quickly limiting damage to the area immediately surrounding the point of origin. Chuck showed a second movie that rather vividly documented an office fire from origin to room flash over.

Finally John Cholin stepped up to the plate to provide everyone with a
detailed explanation of the ‘t squared’ fire. He informed us that most fires in residential occupancies will follow the ‘t2’ growth curve and that most detector or sprinkler response models assume a ‘t2’ fire. Once we all understood how to find the formulas and numbers to plug in to complete them John went on and explained that the process can be made relative easily if one were to plug them into a spreadsheet. He showed us a spreadsheet program that he had written where all one must do is plug in variables based on the properties of the fire, its location and the location of automatic fire sprinklers.

Some of the basic fire dynamics John explained were ‘the buoyant plume’, ‘ceiling jets’, ‘heat transfer’, ‘response time index’ or ‘RTI’ and finally the limitations for the computational methods. John explained that when the plume collides with the ceiling momentum is conserved and the combustion product gases flow radially from the plume center-line, forming a ceiling jet. He also informed us that experimental correlations have been developed that allow the prediction of conditions for a given compartment and fire. John showed how the unconstrained plume will exhibit a natural divergence of approximately 22 degrees and the unconstrained ceiling jet will usually exhibit a thickness of approximately 1/10th the floor to ceiling height. John showed us how the flow of the ceiling jet controls the rate at which heat can flow into the sprinkler head, raising its temperature. He pointed out that the slower the ceiling jet flow - the slower the sprinkler head response. John provided us with formulas to estimate the ceiling jet velocity and told us that smaller fires produce less energetic ceiling jets with lower temperatures and lower velocities, resulting in the need for detectors on closer spacings to attain response that meets previously established design objectives.

Inversely larger fires produce more energetic ceiling jets, with higher temperatures and velocities.

John continued on with heat transfer to heat detectors explaining that the change in temperature of a heat detector or sprinkler as a function of temperature increment and time can be expressed by a formula which he shared with us. John explained that this heat transfer formula was how the RTI of a detector or sprinkler is calculated. This method for quantifying RTI was developed by FM Global and is used for all sprinklers and heat detectors.

Much of John’s presentation was from data found in Annex B of NFPA 72 - 2002 and the SFPE Handbook of Fire Protection Engineering.

After a short Q & A session the meeting was adjourned at 8:35 p.m.
May 2 Meeting to be at the Chubb Fire Training Lab

Our next meeting will be held at the Chubb Fire Training Lab in Warren, NJ. For those of you that are not familiar with this facility, it is a full scale fire protection lab that is used to demonstrate various different types of fire protection systems. A number of these systems will be shown and activated during our meeting. Directions to the facility are attached to this edition of the Fusible Link.

The Chubb Loss Control Training Center is located in Warren, New Jersey.

It is easily accessible from the New Jersey Turnpike, the Garden State Parkway and other interstate highways. It is only 30 minutes from Newark Liberty Airport.

Directions
From the New Jersey Turnpike or Garden State Parkway, go to Interstate 78 West. Take I-78 West to Exit 33. At the top of the exit ramp, turn left on Martinsville Road. Proceed over the highway and through 1 traffic light. At the next traffic light, turn left onto Mountainview Road. Remain in the left lane and follow the road into Chubb property. All visitors must use the right side of the guard booth, and stop to obtain a visitors pass.

From Interstate 287, go to Interstate 78 East. Take I-78 East one exit to Exit 33. At the top of the exit ramp, turn right on Martinsville Road. At the next traffic light, turn left onto Mountainview Road. Remain in the left lane and follow the road into Chubb property. All visitors must use the right side of the guard booth, and stop to obtain a visitors pass.

Loss Control Training Center  908-903-2432
Chubb: main switchboard 908-903-3164
2005-2006 New Jersey SFPE Nominations for Officers and Directors

In Compliance with the Nomination Section of the Constitution and By-Laws of the New Jersey Chapter of the Society of Fire Protection Engineers, The Nominating Committee submits the following slate for Offices and Directors. The election will be conducted at the next Annual Business Meeting, scheduled for Monday June 13, 2005, at the Hanover Manor.

President          Rich Reitberger
First VP           Glenn Deitz
Second VP          Dave Gluckman
Secretary          Ed Armm
Asst. Secretary   Brad Hart
Treasurer          Bob Murray
Asst. Treasurer    Charles Gandy

The following Chapter Members are nominated for their first two-year term as Board of Directors member-at-large 2005-2007.

John Warnet
Gerry Naylis

Chapter Members Vinny Fichera (First Term) and Robert Hall (Second Term) remain as Board of Directors member-at-large with their current terms ending in 2006.

Chapter Member Sarge Slicer will remain Immediate Past President, a voting member of the Board of Directors and Chair of the Nominating Committee.

The Nominating Committee and the Board of Directors welcomes volunteers to serve in leadership capacities within the organization including Committee activities and the Board itself. No other members made their interests and willingness to serve know to the Nominating Committee prior to this report.

Any member with a desire to run as a candidate for Chapter Officer or Director is encouraged to do so. They must contact the Chapter Secretary, Ed Armm (212-695-6670) at least four weeks prior to the Annual Business Meeting. In accordance with the New Jersey Chapter By-Laws, candidates must submit the signatures of five voting members of the New Jersey Chapter SFPE along with their letter of intention to run for any of the above positions. According to the calendar, the deadline is Monday May 16, 2004.

The revisions to the NJ Chapter SFPE Constitution & By-Laws was approved by the Chapter Board of Directors during their March 7 meeting and by the Chapter membership during the April 4 regular meeting. A copy of that document will be sent via e-mail to the Chapter Board of Directors and to Committee Chairs. Any member may obtain a copy by filling in the coupon below with your name and address, and mailing it to James M. Tolos, P. O. Box 4107, Dunellen, NJ 08812. The completed coupon will be used as the return mailing label.

Name:________________________________________
Address:____________________________________

CAREER OPPORTUNITIES

Multinational engineering consulting firm, specializing in fire protection, is seeking a fire protection oriented CAD contractor, in the NY, NJ, PA area, to produce insurance type diagrams on a contract basis. Please contact P. Rullo @ (732)827-4400.

Loss Prevention Consultant
The Loss Prevention Consultant will be responsible for conducting field inspections of existing and potential risks for insured hospitals, physician practices and healthcare facilities. They will assist with the coordination and provision of safety-related in-service education and training to policyholders. Participate in fee-for-service work. They will write comprehensive reports for policyholder and fee-for-service clients. Track all loss prevention activities in the activity tracking system. The ideal candidate will have 3 or more years experience with federal, state and local Loss Prevention standards, preferably in the healthcare industry. They will have good knowledge of OSHA, Joint Commission and the National Fire Protection Association standards. A bachelor degree in a related field is preferred. A valid driver’s license is necessary and the ability to receive designation as a CSP, CIH, or other professionally recognized certification. We offer a competitive salary and comprehensive benefits package. Please send your resume by e-mail: hrjobs@pinsco.com or fax to: (609) 951-5823.

If you should have any questions, please call:

Corinne M. Pecht
HR Generalist
Princeton Insurance Company
746 Alexander Road
Princeton, NJ  08540
Phone: (609) 452-9404 x306
NEW YORK METRO & NEW JERSEY
SFPE Chapters Annual Golf Outing
MONDAY JUNE 27, 2005
West Point Golf Course
West Point, NY
845-938-2435
www.usma.edu/dcfa/activity/golf

FOR THE BENEFIT OF THE SCHOLARSHIP FUND

Outing Highlights include:

• Limited Openings This Year - Sign Up Early - Last Year’s Outing sold out IN MAY at 144+ golfers - PLEASE REGISTER AND PAY EARLY TO GUARANTEE A SLOT
• Guests Welcome!!!!
• Chance for $10,000 Cash Hole-in-One Prize + 3 More Bonus Holes
• 7:00 - 8:15 a.m. Continental Breakfast & Registration with an 8:30 a.m. start
• Free Golf Range + Cash Cart & Bar
• Greens Fees & Cart Included
• 2:00 p.m. - Deluxe Hot Buffet & Draft Beer Served With Meal
• Tournament & Door Prizes (Prize Sponsors and Donations are Welcome)

All this for $140 Per Person if Payment Received by June 1st.
$170 if Payment is Received After the 1st.

FULL PAYMENT MUST ACCOMPANY REGISTRATION FORM IN ORDER TO RESERVE A FOURSOME OR INDIVIDUAL GOLFER SLOT.

We are in need of sponsors for the continental breakfast, buffet lunch and hole sponsors. Donations for door prizes and bonus hole prizes are being accepted.

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COMPLETE, DETACH & SUBMIT PORTION BELOW-------------------------------

Make checks Payable To: “SFPE NEW YORK METRO CHAPTER”

Amount enclosed: $____________ Group Contact:______________________________
Contact Phone # for the Golf Outing Morning, (In case event is cancelled for weather)________________

NY Members return this portion with your payment to:
John Durante
Risk Logic, Inc.
93 Apple Ridge
Woodcliff Lake, NJ 07677

NJ Members return this Portion with your payment to:
Vicki Serafin
c/o Affiliated FM
400 Interpace Pkwy
Building C - 3rd Floor
Parsippany, NJ 07054
SFPE Golf Outing
27 JUNE 2005

Location:
West Point Golf Course
Building 1230
West Point, NY 10996

Directions:
1. Palisades Parkway North to the Bear Mountain Bridge Traffic Circle.
2. Go three quarters of the way around the circle and take 9W toward West Point.
3. Go 5.5 miles and take the Rte. 218 / Rte. 293 / Rte. 6 exit (Note: You will go under a golf cart bridge just before the exit.) You can see the golf course on the right off of 9W.
4. Exit right off the ramp into the parking lot.

Hotel Accommodations For June 27th:  Book Early as they were sold out in 2004!
Rooms available at the Hotel Thayer - www.thethayerhotel.com phone: (845) 446-4731
Holiday Inn Express, which is 2 miles away on 9W; phone: (845) 446-4277

For More Information About The Outing, Call:
NJ Members call Rich Reitberger at (973) 541-6776
or Vicki Serafin at (973) 541-6771.
NY Members call either John Durante at (201) 930-0700
or Jim Goerl at (718) 328-4300
Lost? Call the Club at (845) 938-2435

If you need further directions, call John Durante.

☐ Check here if you would like to sponsor a Tee or Green for $200. NY Members call John Durante (201) 930-0700 and NJ Members call Vicki Serafin (973) 541-6771 for details, support and donations.

The fixed cost to the Country Club for the outing is $110.00 per person. Our goal is to contribute $30.00 per person x 144 golfers. This would profit $4,320.00 into the Scholarship Fund.

Our real profit is the tee & green sponsors. At $200 per sponsor, we can profit almost $400 per hole or $7,000.00 so please consider sponsoring a tee or a green so we can raise the maximum amount for the Scholarship Fund.

With the 50/50 drawing and raffles during our luncheon and other donations, we hope to reach our goal for the outing. Door prizes and gifts would be greatly appreciated to support this effort.

☐ Check here if you are only interested in coming to the post-golf activities and buffet. Call John Durante (201) 930-0700 for details.
If you are not a golfer and are interested in coming to the buffet only, the cost will be $45.00 per person.
Society of Fire Protection Engineers
NYC Metro Chapter
New Jersey Chapter

2005 Golf Outing to Benefit the
NY/NJ Society of Fire Protection Engineers
Joint Scholarship Fund

Monday June 27, 2005
West Point Military Country Club

Golf Sponsorship

Thank you for your support of this year’s golf outing. Proceeds from this year’s event will support the NYC / NJ SFPE Joint Scholarship fund

Company: _______________________________________

Contact: _______________________________________

Telephone: _____________________________________

Email: _________________________________________

_______Green Sponsorship @ $200.00

_______Tee Sponsorship @ $200.00

Additional Donation Amount $ ____________________

Total Amount of Sponsorship $ ____________________

Please make check payable to “SFPE NYC Chapter”

NY Members please mail payment to:                NJ Members please mail payment to:
John Durante - SFPE / NYC Chapter                  Vicki Serafin- SFPE / NJ Chapter
  c/o Risk Logic                                    c/o Affiliated FM
  93 Apple Ridge                                    400 Interpace Pkwy
  Woodcliff Lake, NJ 07677                           Building C - 3rd Floor
  Phone: 201.930.0700                                 Parsippany, NJ 07054
  Fax: 201.930.8795                                  Phone: 973.541.6771
                                                     Fax: 973.541.6909
Meeting Dates/Program 2004-2005

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

May 2
“Chubb Lab” - Visit and Demonstration of Chubb’s Fire Protection Systems Lab in Warren, NJ.

June 13
NOTE: DATE HAS BEEN CHANGED -
“Annual Meeting - Election of Officers
Topic: “NFPA Conference Overview” by Chuck Gandy and “Year in Review and Looking Forward” by Rich Reitberger

June 27
Joint NY/NJ Chapter Joint Scholarship
Golf Outing at West Point

POSITIONS TAKEN BY SPEAKERS ARE NOT NECESSARILY THE POSITION OF THE NJ S.F.P.E.
All meetings are held at the Hanover Manor, Eagle Rock Road, Hanover, NJ (approximately 1 1/2 miles west of Eisenhower Parkway). Get Acquainted Hour 5:00-6:00 p.m. Adjournment is usually before 8:30 p.m. The Executive Committee meets at 4:00 p.m.

Editors Note--If you would like to advertise your company and help offset the cost of this publication, as well as having your business card in front of over 150 Fire Protection Professionals please call John Cholin at (201) 337-8621 for further information. The cost is $100 for fiscal year.

PE EXAM TRAINING

The NJ Chapter has historically supported our membership in preparing for the Professional Engineering License test in Fire Protection. Preparing for this course takes an enormous amount of time on behalf of the instructors and a minimum number of students are required to make this worthwhile. If anyone is interested in taking this course, they should contact John Cholin at jmcholin@bellatlantic.net as soon as possible. There is very little time left for candidates to submit their applications (with the materials required) to one of the states in our area that recognize the Fire Protection PE (PA or CT).

Associated Consulting Engineers, P.C.
A Professional Corporation

Robert E. Murray, P.E.
President

1910 Oak Tree Road, Suite 28, Edison, New Jersey 08820
(732) 205-9440 FAX (732) 205-9442 Email rmurogue@es.com
Fire Protection/Electrical Systems/Security/Code Consulting/Loss Control

JMCC

John M. Cholin P.E., S.F.P.E.

J.M.Cholin Consultants, Inc.
Fire Protection Engineering and Consulting Services
101 Roosevelt Drive, Oakland NJ 07436 USA
Telephone: 201-337-8621 Fax: 201-337-5603

UNITED

FRANK SAVINO

United Fire Protection Corporation
493 Lehigh Ave., Union, NJ 07083
(908) 688-0300 Ext. 222 • FAX (908) 688-0218
MEETING NOTICE

Date: May 2, 2005

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): Chubb Fire Lab Directors

Topic: “Chubb Lab” - Visit and Demonstration of Chubb’s Fire Protection Systems Lab in Warren, NJ. (Refer to the Fusible Link for Directions to the Chubb Training Lab)

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:

NAME: ______________________________________
COMPANY: ______________________ TELEPHONE: ______________________

ALL RESERVATIONS SHOULD BE RECEIVED BY FRIDAY, APRIL 29, 2005. 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 Chergotis & Peter Rullo

Arrangements
Vicki Serafin, Chairwoman

Membership
Glenn Deitz, Chairman

Nominating
Sarge Slicer, Chairman
Glenn Deitz
Bob Murray

Scholarship Fund
Chuck Gandy, Chairman
Robert Hall
Mike Machette
Dave Gluckman

Auditing
Joe Janiga, Chairman
Glenn Deitz

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
Glenn Deitz
Dave Gluckman

Golf Outing
Richard Reitberger, Chairman

Awards
Rich Reitberger, Chairman
Mike Newman

NY Chapter Liaison
Tom Kuhta (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
Dave Gluckman

Legislative
Rich Reitberger, Chairman
Vinnie Fichera
Jerry Naylis

P.E. Test Questions
Chuck Gandy, Chairman