



Society of Fire Protection Engineers

New Jersey Chapter

Editor Fusible Link:
Brad Hart & Ana
Crisostomo
Tel. (212) 837-0827
Fax (212) 344-3060

President – Sarge Slicer – 973-993-5947
First V.P. – Rich Reitberger – 973-541-6776
Second V.P. - Glenn Deitz – 973-822-7396
Past President – Chuck Gandy – 973-541-6712
Director - Pat Egan - 973-541-6862
Director - Frank Savino - 908-688-0300 Ext. 222

Treasurer– Dave Gluckman – 973-410-4635
Asst. Treasurer – John Cholin – 201-337-8621
Secretary – Edward Armm – 212-695-6670
Asst. Secretary – Brad Hart – 212-837-0827
Director - Bob Murray - 732-205-9440
Director – Bob Hall – 908-995-4786

FUSIBLE LINK

www.njsfpe.com

<http://groups.yahoo.com/group/sfpenjchapter>

May 2003

The following article has been reprinted with permission from *The Fire Protection Research Foundation Proceedings*, January 23-25, 2002

Flammable Liquids Storage Research: A Study of Fire Protection Designs for Rack Storage of Flammable Liquids Storage in Drums

Todd E. Schumann, GE Global Asset Protection Services, Chicago, Illinois

Martin J. Pabich, P.E., Underwriters Laboratories Inc. Northbrook, Illinois

Executive Summary

The International Intermediate Bulk Container Rack Storage Fire Test Project was conducted in 1999 by the Fire Protection Research Foundation. During the project, five large scale fire tests were conducted to develop fire protection criteria for this hazard. In two of the tests, provided with ceiling and only longitudinal flue in-rack sprinkler protection (no in-rack face sprinklers), the racks sustained serious damage. Rack collapse occurred in one test and in another there was a failure of a rack upright but no collapse. These rack failures are cause for concern.

To study this problem, a series of five tests were conducted to evaluate the level of protection which could be achieved with water only ceiling and in-rack sprinkler systems used to protect steel drums with plastic closures containing IB, IC, II or IIIA class liquids. Fifty five gallon water filled steel drums with flammable liquid vapor space were placed on wood pallets in three tier *high double* row racks. Ceiling sprinklers and various configurations of in-rack sprinklers were provided. A 2 gpm running heptane spill was used as the ignition source. Its location was also varied.

Tests No. 1 through No. 4 used two levels of face and staggered flue in-rack sprinklers. The spill location was at the floor away from the rack uprights for Test No. 1, at the base of the second level of storage away from the rack uprights for Test No. 2, at the base of the first level of storage adjacent to a rack upright for test No. 3, and at the base of the third level of storage adjacent to a rack upright for Test No. 4. The fifth test used two levels of staggered flue in-rack sprinklers with the spill fire located at the base of the first level of storage away from the rack uprights.

In Tests No. 1 through No. 4, the in-rack sprinkler system operated and protected the rack and stored drums for the 30 minute test duration. No ceiling sprinklers

operated in Tests No. 1 through No. 3. One ceiling sprinkler operated in Test No.4. In Test No. 5, the in-rack sprinkler system operated but was not able to protect the rack structure from damage. Drums located on the second level dropped into the aisle space less than 30 minutes. One ceiling sprinkler operated in Test No. 5. Plastic drum closures relieved internal drum pressure in Tests No. 1 through No. 4, but were inadequate in Test No. 5 as evidenced by drum distortion.

The test results indicate that rack elements must be protected to prevent structural failure of the rack. One protection method is by the quick application of water spray to the rack structure by face and flue in-rack sprinklers.

FIRE & RISK ENGINEERING

Fire Protection Engineering - Risk Management
Fire/Explosion Modeling & Reconstruction - Forensics - Codes
Water Supply, Fire Defense and Risk Assessments

Robert Malanga, P.E. - President

9 Flintlock Drive, Suite 100 - Long Valley, NJ 07853
Tel: (908) 876-3255 Fax: (908) 876-4299 www.fire-risk.com

The following article has been reprinted with permission from *The Fire Protection Research Foundation* Proceedings, January 23-25, 2002

**RECENT ACTS OF TERRORISM IN THE
UNITED STATES
SOME IMPLICATIONS FOR FIRE
SAFETY**

*J. Respondek
Sicherheitsinstitut
Zurich, Switzerland*

The recent acts of terrorism in Washington and New York have politicians and citizens asking themselves: "What could have been done to better prepare us for such horrific attacks?" A seemingly compelling response to this question is to impose even stricter standards/codes and higher security for those engaged in or seeking to utilize civil infrastructure. However, immediately one chose to complete the answer to the question, in truth absolute safety cannot be guaranteed. Finally, will future design standards and building codes take into account events such as the attack on the World Trade Center? While it may be over zealous to design

our buildings to survive such intense fire, surely it is reasonable to ask our architects and designers to consider the possibility of terrorist or arson attack when developing plans for special structures and buildings? Can engineers design terrorist-resistant buildings? May be, but they'd probably resemble a fortress, and people might not use them or be able to afford them. As a matter of fact, the majority of Swiss fire experts don't believe that future fire safety codes will reference the incident, but there will be a greater sense of awareness that things such as this can happen. Perhaps, now is the time to re-examine carefully evacuation procedures and codes relative to the structure of egress routes for high-rise buildings around the world. Is phased evacuation really a viable option? And is it acceptable to maintain an evacuation strategy that expects it to take hours to evacuate a building? The World Trade Center incident has shown that, in extreme circumstances, a building may not survive an hour, let alone two or three hours required in some high-rise buildings. The main advantages of well known "defend in place" egress concept is to reduce the number of people trying to evacuate a building at one time, thus keeping the egress routes free for responding emergency personnel. It also reduces the number of people outside a building, which in turn reduces the threat from falling debris to the evacuees. In an ordinary emergency, such a concept makes a great deal of sense. In this regard, one can ask, "is it necessary to modify to codes prescribing the structure of egress routes to such extent, that the time to abandon a high-rise building would be shorter than say 1.0 hour?" Can we afford such a solution? Probably not. If nothing else, the incident should remind building managers and owners of the importance of evacuation drills. When disaster strikes, an ordered evacuation, where everyone knows exactly what to do and how to get out can save vital minutes. The importance of matters such as "human factors" in risk management-self rescue and an informed public should be squarely put on the agenda along with traditional or modern measures of increased security (features related to the structure of the building). For this reason, we shall in the future look into the measures designed to engage the public in a safety dialogue so that they become a part of the emergency response strategy and not merely an unwilling participant in the process. Our experience has shown how the people's motivation can enhance the reaction and response of high-rise building occupants facing a situation supposed to threaten their lives. Last year we assisted two unannounced evacuation drills carried out in a 9-story high-rise building. During the first drill performed in January, the total time necessary to abandon the building was not shorter than 6.0 minutes. In the second drill carried out for identical egress conditions, this time was reduced to 4.0 minutes. Why

this difference? The second drill was performed in November, i.e., 2 months after the World Trade Center incident. Appropriate reactions by people during the first minutes of an emergency often make the difference between life and death. Emergencies do not respect borders, they occur without warning, injuring and killing people and destroying property. Recent terrorist attacks in Washington and New York compel us to call upon all citizens who use facilities we design and operate to familiarize themselves with their safety features and procedures. Safety systems and procedures designed for emergencies form on integrated part of all public facilities. We are concerned that many users are unable to take best advantage of the emergency systems we have designed and operate because they are unaware of their existence and have a limited understanding of emergency procedures. Citizens who are familiar with the safety features of the public places they use make informed decisions with respect to self-rescue when emergencies occur. Both operators/owners and citizens can play an important role in greatly increasing the chances of surviving an emergency. We urge all users and operators/owners of public buildings/facilities to take such steps as are necessary to ensure that people are sufficiently well prepared to use the emergency safety measures in a timely and effective manner. From our point of view, the tragedy should also raise questions concerning emergency response procedures. Is it appropriate to locate emergency command facilities within such buildings or should these be provided in some remote location? Furthermore, should access plans for firefighting vehicles and other emergency vehicles include alternative safety assembly areas protected against building collapse? Finally, one has to recognize, that this incident has raised a lot of difficult questions for which unfortunately we do not have ready answers. It's simply too early to know how the lessons learned at such a cost would change the way things are done. Many commentators have declared that the September 11 attacks will change the world. Let us hope that first of all, they will promote rational thought to enable us to provide practical solutions to previously unenvisioned problems.

Associated fire Protection
 100 Jackson Street Paterson, NJ 07501
Roland Straten
 Professional Engineer

SPECIALIZING IN THE DESIGN AND INSTALLATION OF:

SPECIAL HAZARD SYSTEMS	FIRE ALARM SYSTEMS	
* FM 200 * Foam	* CO ₂ * Kitchen	
* Wet and Dry Chemical		
		SPRINKLER SYSTEMS

Call Today 1-888-FIRE FIX Buy Online at www.afpfire.com

In accordance with our Chapter bylaws we are running the officer nomination letter again.

2003-2004 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 Officers and Directors. The election will be conducted at the next Annual Business Meeting, scheduled for Monday, June 2, 2003, at the Hanover Manor.

President	Sarge Slicer
First VP	Rich Reitberger
Second VP	Glenn Deitz
Treasurer	Dave Gluckman
Asst. Treasurer	John Cholin
Secretary	Edward Armm
Asst. Secretary	Brad Hart

The following Board of Directors members-at-large are nominated for a second two-year term as director:

Member-at-large	Bob Murray
Member-at-large	Frank Savino

Board of Directors member-at-large Bob Hall is entering the second year of his first term as director. Board of Directors member-at-large Pat Egan is entering the second year of his second term as director.

The existing slate of officers is willing to continue serving in the same capacity for the 2003-2004 fiscal year. The Nominating Committee, and the present Board of Directors, welcomes volunteers to serve in leadership capacity within our organization. This includes Committee activities, and the Board itself. No other members made their interest and

SURVIVOR

FIRE & SECURITY SYSTEMS
SERVICE • DESIGN • INSTALLATION

39A Myrtle Street • Cranford, NJ 07016-3456
Tel. (908) 272-0066 • Fax (908) 272-8144

willingness to serve known to the Nominating committee prior to our February 2003 meeting.

Any member with a desire to run as a candidate for Chapter Officer or Director is encouraged to do so. They must contact Ed Armm (212) 695-6670 at least four weeks prior to the Annual Business Meeting (June 2, 2003). In accordance with 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. The deadline is Monday, May 5, 2003.

Alpha~Omega Engineering, PA.
Fire Protection - Alarms - Security Systems - Mechanical & Electrical
Design Build Services and Custom
Inspection & Maintenance Programs

Contact: George Koutsoubis P.E.
Email: George@AOServices
Web Page: www.AOServices.Net
Tel (732) 826-6162 - Fax (732) 324-0057
235 Water Street - Perth Amboy - NJ 08861



Successful Joint NJ/NY Seminar April

Dear Members of the New York and New Jersey Chapters of the Society of Fire Protection Engineers:

I'd like to thank everyone who made today's seminar a huge success. Approximately 50 members attended the seminar and heard 11 speakers discuss various technical and code related areas of interest in the field of fire protection engineering.

Tom Kuhta and Bella Treyger, Seminar Co-Chairs - Thanks for pulling the whole seminar together, from the room arrangements to speakers and topics. Great job.

Rich Reitberger - Thanks for the coordination with the NJ Chapter and thanks for taking care of the registration desk and name tags.

Mike Newman - Thanks for handling all the registration forms and checks.

All members who attended and members who have passed the information along to others who attended.

Although the numbers are not final, it is anticipated that the seminar raised approximately \$2,000 for the Joint NY & NJ Scholarship fund. Final numbers will be released at our respective chapter meetings.

The next NY & NJ Chapters event to benefit the Scholarship fund is the Annual Golf Outing on June 30th. Please support the chapters by planning to attend the outing or sponsoring a hole or tee.

Thanks again to all for a Successful Technical Seminar.

Joe Razza
President, SFPE NY



FIRE SECURITY LIFE SAFETY
TVA FIRE & LIFE SAFETY, INC.

William F. Wayman
Regional Director

200 Valley Road, Suite 306
Mt. Arlington, NJ 07856
E-mail: bwayman@tva-firesafety.com

Tel (973) 398-1445
Fax (973) 398-1442

CAREER OPPORTUNITIES

More detailed information is contained in previous Fusible Link issues and on www.njsfpe.com

=====

Sprinkler technicians needed. Inspection, fitter, &/or repairs. Experienced technicians need only apply. Excellent pay & benefits. Please call Atlantic Fire Service 973-887-9494.

Todd Abrams
Atlantic Fire Service
401 Rt. 10
Whippany, NJ 07981
973-887-9494 fax-887-0332
visit us at:
<http://atlanticfireservice.com>

Sales Service Installation Inspection
Fire alarm panels, Sprinkler systems,
Kitchen detection systems, CCTV



Associated Consulting Engineers, P.A.
A Professional Corporation

Robert E. Murray, P.E.
President

1910 Oak Tree Road, Suite 2B, Edison, New Jersey 08820
(732) 205-9440 FAX (732) 205-9442 Email rmurrayace@cs.e
Fire Protection/Life Safety Systems/Security/Code Consulting/Loss Cont.

Card access systems, Extinguishers,
Monitoring

Risk Logic Incorporated (RLI) is looking for a Property Loss Control Consultant to conduct Highly Protected Risk (“HPR”) type loss prevention inspections and write technical reports. The position is virtually open to most any region of the country. Candidates will need to work from home and be expected to travel overnight 5 nights per month. Primary responsibilities will include conducting property loss prevention evaluations with detailed Construction / Occupancy/Protection/ Exposure (“COPE”) information as well as fire protection analyses, process hazard reviews and roofing system evaluations. The technical risk analyses will be conducted for large commercial and industrial manufacturing facilities and warehouses.

RLI is a property loss prevention and fire protection consulting engineering company that provides comprehensive unbundled services for insurance brokers, insurance carriers and direct with clients. Most of our services are performed nationwide. RLI has been in business for over 5 years and has over 40 clients. Go to www.risklogic.com for more information.

Position Requirements: BS – Engineering Degree from an accredited college, PE license a plus. Minimum five (5) years Factory Mutual or equivalent experience. Expertise in conducting PML’s, NLE’s and MFL’s. Understanding of FM & NFPA codes. Strong technical writing skills. Self motivated person who can work efficiently from a home office. Computer literate (Microsoft Windows, Word, Excel, etc.). Adequate interpersonal skills to communicate effectively with various clients.

Position includes a competitive salary paid semi-monthly and a full benefit package including health insurance, dental discount plan, long term disability, 401K, company bonus plan, and holiday / personal day

EDWARD B. ARMM, SET



ROLF JENSEN & ASSOCIATES, INC.
FIRE PROTECTION ENGINEERING CONSULTANTS

360 WEST 31ST STREET SUITE 1104
NEW YORK, NY 10001-4092 USA

+1 212 695-6670
FAX +1 212 695-6671
earmm@rjagroup.com

A SUBSIDIARY OF THE RJA GROUP, INC.

vacation package.

If interested, please contact John Durante at jdurante@risklogic.com or (201) 930-0700.

HSB Professional Loss Control has possible part time opportunities for retired, semi-retired and underemployed loss control and fire protection engineers. Anyone that is interested can contact:

Maurice Marvi
HSB Professional Loss Control
(800) 222- 0483 x8020

=====
Link Technologies is looking for Fire Safety Engineers. Anyone interested should contact:

Lindsay Banko
Link Technologies
Office: 702.233.8703
lindsayb@linktechconsulting.com

Project Manager – New Jersey

The individual will work in the Building and Fire Systems area on various projects in an environment of electronics and sensors. The position is located in Pine Brook, NJ and is a full time direct hire position (formerly known as a permanent position). The company offers a competitive salary and benefits.

Please forward all resumes to John Palmer at jpalmer111@intelegra.com.

John Palmer
Intelegra, Inc.
P.O. Box 505
Far Hills, NJ 07931-0505
jpalmer111@intelegra.com
908-876-5900
908-876-1788 Fax

=====
J.M. CHOLIN CONSULTANTS, INC.
CONSULTING SERVICES -
FIRE PROTECTION ENGINEERING

JOHN M. CHOLIN, P.E.

101 ROOSEVELT DR. OAKLAND, N.J. 07436 U.S.A.
TEL: 201-337-8621 FAX: 201-337-5603



NEW YORK METRO & NEW JERSEY
SFPE Chapters
MONDAY, JUNE 30, 2003



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 at 144 golfers
- 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. – Delmonico Steak, Grilled Shrimp and Sausage & Peppers Deluxe Hot Buffet & Draft Beer Served With Meal
- Tournament & Door Prizes (Prize Sponsors and Donations are Welcomed)

***All This For \$125 Per Person If Payment Received By June 13.
\$150 If Payment is Received After The 13th.***

Please pay early as we are obligated to pay for the outing in full by June 23rd. 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.

COMPLETE, DETACH & SUBMIT PORTION BELOW

NAME	COMPANY	PHONE or EMAIL
Cart 1		
Cart 1		
Cart 2		
Cart 2		

Make checks Payable To: "SFPE NEW YORK METRO CHAPTER"

Amount enclosed: \$ _____

Group Contact: _____

Contact Phone # (To call if postponed the morning of the event. (In case of inclement weather) _____

Return this portion with your payment to: Jim Goerl Federated Fire Protection, 61 Vandam Street, 2nd floor New York, NY 10013

SFPE Golf Outing

30 JUNE 2003

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 (If needed):

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:

John Durante (201) 930-0700

Jim Goerl (212) 367-7658

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. Call John Durante (201) 930-0700 for details, support and donations.

The fixed cost to the Country Club for the outing is \$100.00 per person. Our goal is to contribute 25.00 per person x 144 golfers. This would profit \$3,600 into the Scholarship Fund.

Our real profit is the tee & green sponsors. At \$200 per sponsor, we can profit \$400 per hole or \$7,200.

With the 50/50 drawing and raffles during our buffet 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 only interested incoming 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 \$40.00 per person.

MEETING DATES/PROGRAM

(Programs Subject to Change)

Watch web page concerning cancellation In case of possible inclement weather conditions

May 5 Malden Mills Loss, John Cholin, PE
June 2 Gaseous Suppression Systems Update (NFPA 2001 – “Clean Agent Protection”) – Phil DiNenno, PE,
 Hughes Associates
 Annual/Election
June 30 GOLF OUTING

***Watch Web Page for Weather Announcement**

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 1½ 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 10 issues.

COMMITTEES 2002-2003

Standing Committees

Program:

Mike Newman, Peter Rullo, Co-Chairs, with
input from all members
Consulting – Nick Chergotis & Chuck Gandy

Arrangements:

Mike Newman, Peter Rullo, Co-Chair

Membership:

Rich Reitberger, Chairman

Nominating:

Chuck Gandy, Chairman
Glenn Deitz
Bob Murray

Scholarship Fund:

Rich Reitberger, Chairman
Robert Hall
Mike Machette

Auditing:

Joe Janiga

Archivist:

Rich Reitberger (FM Global Library)

Historian:

Jim Tolos

Communications:

Fusible Link: Brad Hart, Editor

Dave Gluckman, Asst. Editor
Ana Crisostomo, Publishing
Vicky Serafin, Mailing/Automation

Special Committees

Bylaws: Jim Tolos, Chairman

Joe Janiga – Co-Chairman

Career Recruitment:

Al Dopart, Chairman
Tom Brereton
Joe Stavish
Glenn Deitz
Dave Gluckman

Golf Outing:

Richard Reitberger, Chairman

Awards: John Ed Ryan

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
Nick Chergotis
Pat Egan
Dave Gluckman

Legislative:

Rich Reitberger, Chairman

Special Executive Assistant to the Board:

Vicki Serafin

Michael T. Newman, P.E.
Manager
Property Loss Prevention
Johnson & Johnson
One Johnson & Johnson Plaza
New Brunswick, NJ 08933
Phone: (732) 524-3224
Fax: (732) 524-2196

MEETING NOTICE

Date: Monday, May 5, 2003

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: John Cholin, PE

Topic: "Malden Mills Loss"

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

Please note for this meeting:

PLEASE COMPLETE AND RETURN WITH YOUR CHECK PAYABLE TO "SFPE N.J. CHAPTER" TO:

Michael Newman
Johnson & Johnson
One Johnson & Johnson Plaza
New Brunswick, NJ 08933

Prime Rib

Fish

NAME: _____

COMPANY: _____ TELEPHONE _____

ALL RESERVATIONS SHOULD BE RECEIVED BY **FRIDAY, May 2, 2003**. TELEPHONE RESERVATIONS OR CANCELLATIONS SHOULD BE RECEIVED BY NOON OF THE MEETING DAY.

Fusible Link Editors NJSFPE
C/o Rich Reitberger
Affiliated FM Ins. Co.
400 Interpace Parkway
Parsippany, NJ 07054