



Editor Fusible Link
Brad Hart
bhart@lockton.com
& Ana Crisostomo
Tel. 646-572-3920
Fax: 646-871-3920

Society of Fire Protection Engineers

New Jersey Chapter

Chapter Officers

President

Joe Janiga—973-541-6774 W
Joseph.janiga@fmglobal.com
First V.P.

Dave Gluckman - 973-829-2920
Gluckman_da@willis.com

Second V.P.

Paul McGrath
paul@cityfire.com
973-560-1600 ext 204

Past President

Ed Armm - 973-663-4291
edamm@hotmail.com

Treasurer

Glenn Buser—201-891-1405
gbuser@gbrisk.com

Asst. Treasurer

Nathan Gorey—973-541-6782
Nathan.gorey@affiliatedfm.com

Secretary

Mike Newman
mnewman@its.jnj.com
732-524-3224

Asst. Secretary

Rich Reitberger
richard.reitberger@us.rsagroup.com
212-510-1133

Directors

John Stoppi
jstoppi@amaa-eng.com
610-698-4010
Chris Vitale
christopher.vitale@fmglobal.com
973-541-6837

Ernesto Vega-Janica
347-604-3501
Evega@RJAGroup.com
Robert Murray
rmurray@acefirepros.com
908-755-5001

Special Executive Assistant to The Board

Vicki Serafin
vicki.serafin@affiliatedfm.com

FUSIBLE LINK

DECEMBER 2013

President's Message...

Last year we had Thanksgiving dinner at my mother-in-law's house. Before appetizers were finished my son's girlfriend jumped up and pointed to the front window, a little girl two houses down had run out of her front door crying and shouting that her house was on fire. Someone dialed 911 while I grabbed the extinguisher from mom's kitchen and trotted over. Sure enough, there was smoke (still sweet) billowing out of the open front door, the sound of a smoke detector and women's voices inside. The oven fire wasn't far developed when I got there. A big gooey casserole had overflowed its dish and was spilling grease onto the oven floor where it caught fire. Without needing the extinguisher I was able to remove the dish, put it on a metal tray and cover it with a pot lid. The fire in the oven died out a moment later. Had the fire been given another few minutes it would have spread to the wooden cabinets above and then who knows what would have happened. The women were opening windows and I was walking down the front steps when the fire department arrived.

That little girl was the smartest one of us. She sensed danger, got out of the house and got help. Her family had to find an open restaurant for their Thanksgiving dinner but I can tell you she celebrated the following Christmas at home with her loved ones.

It can happen to anyone. So this year clean your ovens before the holiday cooking begins, use pans under baking dishes in the oven, don't leave the kitchen while there are things cooking on the stove, keep a pot lid on the counter, check your smoke detectors and have an extinguisher nearby. And if you are faced with fire and don't know what to do CALL 911 AND GET OUT.

Best wishes for Safe and Happy Holidays. Come join us on December 9 for our next meeting.

Joe Janiga
President, NJ Chapter SFPE

Minutes of the SFPE NJ Chapter Meeting November 4, 2013

President Joe Janiga convened the meeting at 6:10 PM at the Hanover Manor, E. Hanover, NJ with a salute to the flag and the customary introductions. There were 19 attendees.

The Executive Board meeting was briefly reopened to vote on a new member to the Chapter. A motion was made and passed to accept Joseph DeLuca of Metro Fire and Communications Systems as a member of the NJ Chapter.

The minutes from the September, 2013 meeting were

approved as read by the Chapter Secretary. Treasurer Glenn Buser presented the Treasurer's Report of September - October 2013. A motion was made and passed to accept the report as presented.

Paul McGrath updated the membership on some upcoming events at City Fire Equipment and drew the door prizes for tonight's meeting. Ed Armm and Jim Burge were tonight's winners.

Rich Reitberger updated the membership on the recent

SFPE National meeting and highlighted that presentations were made by NJ Chapter members Ernesto Vega – Janica and John Cholin.

Joe Janiga was tonight's speaker and presented several short topics on various aspects of sprinklers, pipe, fire pumps, a developing occupancy hazard that is likely to be prevalent in our region, a brief useful loss discussion and one or two fire test videos of some of FM Global's recent research.

The meeting was adjourned at 8:05 PM.

NJ CHAPTER MEMBERSHIP DUES

Only about half of our Chapter members have paid their annual dues so far this year. We are about 100 days through the Chapter's year and would appreciate it if each member would check their records and send in their dues promptly if you have not already done so. It is only \$20 for the year.

Fire Destroys Building at Chemical Factory in Granby, Prompts Evacuation Fears

CTV Montreal

Published Wednesday, October 30, 2013 6:32PM EDT

Last Updated Thursday, October 31, 2013 1:46PM EDT

GRANBY -- "I heard the detonation of the fire, like a really big bang," said Tommy Forand, who works nearby. "We have big windows in the office so I saw everything."



Thick, black smoke was visible for kilometres, but while the fire raged for hours no other buildings were in danger of catching fire, because the distance to other structures was too far.

It took several hours to put out the flames, and when the work was done a building lay in ruins.

An explosion at a chemical plant in Granby created thick black plumes of smoke (photo courtesy: Tommy Forand)

Firefighters were worried the smoke could have been toxic, and they told residents they may have to evacuate their homes and head to emergency shelter at nearby schools if the wind started blowing smoke toward a residential area.

The plant makes styrofoam and had sulfuric acid, benzene, ammonia and other dangerous products on hand. However before any evacuation was ordered, workers at the plant were able to inform authorities that the smoke was not toxic.

"We prepared to make an evacuation and the city has the way to take care of people, but we didn't need to do [it]. We had a plan prepared for that. We started our plan, but we didn't need to use it," said Granby Fire Chief Pierre Lacombe.

When the blast started the fire about a dozen employees were inside Aldex Chemicals.

"Nobody was injured, everyone got out safely," said police spokesperson Guy Rousseau.

Officials from the provincial environment ministry rushed to the scene to ensure the smoke was not dangerous. Air tests confirmed that the air was safe.

"I can confirm there's no chemicals that would affect the population in the area. So we're sure of that," said Christian Blanchette.

There remain concerns that runoff from the firefighting efforts could affect the nearby Yamaska river, so officials will be testing soil and water sources to ensure everything is safe.

On Thursday work turned to removing barrels of dangerous chemicals from the factory, with the company's owner trying to convince providers to take them back for storage.

Failing that the materials will be brought to a secure location.

However the roof of one building collapsed, and debris from that section will have to be hauled away before the containers of hazardous material can be transported to a safe facility.

The president of the company told CTV Montreal he was shocked by the disaster, and is very glad that none of his employees, some of whom he hired decades ago, were hurt.

The cause of the explosion is not known.

Investigation of Fatal 2009 Blast at NDK Crystal in Illinois

The Chemical Safety Board (CSB) has produced a great video as a result of their investigation. This 8 minute video can be seen on You Tube at http://www.youtube.com/embed/uo7H_ILs1qc.

In [2009 an explosion at NDK Crystal in Belvidere, Illinois](#), fatally injured a truck driver at a nearby gas station. The video contains an animation which depicts the stress corrosion cracking that accumulated over time in the walls of the vessel where synthetic quartz crystals were manufactured under extremely high pressures and temperatures

The accident occurred December 7, 2009, with a violent rupture in the Number 2 vessel. A combination of animation and surveillance video shows how one piece of steel from the building was blown 650 feet, striking a truck driver who was walking back to his vehicle. Another piece – a vessel fragment weighing over 8,000 pounds -- tore through a wall at the facility, skipped across a neighboring parking lot and struck the wall of an automotive supply company where 70 people were working; but only one was injured.

The video displays text of a direct warning by a third-party safety auditor called in by the NDK insurance carrier following an uncontrolled leak of hot, caustic material in January 2007 from the lid of another similar pressure vessel. The consultant concluded the accident resulted from the vessel's improper design, fabrication and material selection, determined four vessels were experiencing stress corrosion cracking, and advised against returning any of the facility's eight vessels into service, saying "far more catastrophic scenarios are possible," specifically naming danger of public death or injury at the gas station where the truck driver would be killed in 2009. But NDK never established an internal vessel inspection program and did not perform testing on the vessels before returning them to service.

CSB lead investigator Johnnie Banks said, "The video shows how cracking on and near the inner diameter of the vessel fragment reduced the vessel material toughness, which eventually led to large flaws resulting in the catastrophic failure." CSB investigator Lucy Sciallo-Tyler added, "We hope operators in the chemical industry take away the clear message that warnings and near misses must be acted on immediately to prevent major accidents."

CSB Safety Videos typically feature detailed animation sequences to depict the chemical processes and sequence of events that led to explosions, fires and releases causing injuries, deaths, damage and destruction of production facilities. They have received accolades from safety professionals around the world, who have told the CSB they use the videos in training, seminars, board presentations and other venues as object lessons in the consequences of inadequate process safety management.



Coffee Break Training - Fire Protection Series

Fire Pumps: Cavitation

No. FP-2013- 34 August 20, 2013

Learning Objective: *The student will learn the signs and consequences of cavitation in fire pumps*

Fire pumps are an essential part of many fire protection systems. They are, however, vulnerable to damage when certain conditions occur in the water supply.

Water emits a vapor over its surface, which produces a certain amount of pressure. This vapor pressure increases as the liquid temperature rises. Water boils when the vapor pressure is equal to or greater than the pressure surrounding the liquid. Vapor pressure is important because of the way it affects pump operation.

Pumps are designed to operate within a given speed range and under a specific set of intake conditions. Operating a pump at excessive speed or at too high an intake lift (from a static water source), restricting the intake, or any other factor that causes the pressure on the water to fall below its normal vapor pressure produces a condition called cavitation. When cavitation occurs, the water vapor released in the low-pressure regions of the pump forms bubbles. These bubbles are carried into the high-pressure sections of the impeller where they collapse with considerable force. This may cause pitting near the impeller surfaces.

Noise is one of the early indications that a centrifugal pump is cavitating. A cavitating pump may sound like a can of marbles being shaken. Other indications that can be observed from a remote operating station are a sudden pressure or capacity loss, fluctuating discharge pressure or flow rate, or an increasing pump speed without corresponding increase in volume or pressure.

Damage signs of general cavitation are on the low-pressure area of the impeller vane. These signs are always characterized as being rough, sometimes jagged with striations running in any direction. Cavitation also causes corrosion, pitting and abrasion. Prolonged exposure to cavitation can form pitting in different parts of the pump.

Cavitation in a centrifugal pump has a significant effect on pump performance. Cavitation degrades the performance of a pump, resulting in a fluctuating flow rate and discharge pressure. Cavitation can also be destructive to a pump's internal components; it can cause excessive pump vibration or overheating, which could damage pump bearings, wearing rings, and seals.

If cavitation or other damage is suspected, the fire pump assembly should be checked by qualified maintenance personnel, and repairs, if needed, should be made promptly. If the fire pump is out of service for an extended period of time, an impairment plan should be implemented. (See Coffee Break Training 2006-12, for impairment guidance, at <http://1.usa.gov/16xO60m>.)



A fire pump service technician inspects the exposed vane for evidence of cavitation. (Photo courtesy of Keith Heckler, Rockville Fire Department, Maryland)



Former SFPE President and current NJ SFPE Chapter Assistant Secretary, Rich Reitberger presents SFPE National Chairwoman, April Berkol, with a \$1,000 NJ Chapter donation to the SFPE Educational Foundation



Jeff Mattern, a Fellow at SFPE with Rich Reitberger, former Chapter president and current Assistant Secretary



Glenn D. Buser, P.E.
 201-891-1405
 201-450-7559 (Cell)

GB Risk Consulting, LLC
 155 Moramarco Court
 Mahwah, NJ 07430
 Email: gbuger@gbrisk.com



Frank Savino, President
 1 Mark Road • Kenilworth, NJ 07033 Email: fsavino@ufpc.com
 Tel: 908 688 0300 x222 Fax: 908 481 1112 Call: 908 337 7711

www.ufpc.com



Associated Consulting Engineers, P.C.
 A Professional Corporation

Robert E. Murray, P.E.
 President

214 Clarke Avenue, South Plainfield, New Jersey 07080
 (908) 755-5001 Fax (908) 755-5007 Email rmurray@acefirepros.com
 Fire Protection / Life Safety Systems / Security / Code Consulting

SLICER & ASSOCIATES
 Fire Protection and Loss
 Prevention Consulting

J. Sargent "Sarge" Slicer, FSFPE

P.O. Box 1647 Office 508-945-5074
 West Chatham, MA 02669-1647 Mobile 973-493-0369
 VM & Fax 866-395-6172
 Member – SFPE & NFPA sargeslicer@gmail.com



Paul McGrath
 President
 Permit #PG0072

CITY FIRE EQUIPMENT CO., INC.
www.cityfire.com

733 Ridgedale Ave.
 East Hanover, NJ 07936
 Phone: (973) 580-1800 ext. 204
 Fax: (973) 781-1099 • Call: (973) 476-6132
psu@cityfire.com



NFPA #126548
 Inspection & Testing of
 Water Based Systems
 Level II

Ernesto Vega Janica, SET
 Senior Consultant



RJA
ROLF JENSEN & ASSOCIATES, INC.
 GLOBAL FIRE PROTECTION CONSULTANTS

360 West 31st Street
 Suite 900
 New York, NY 10001 USA
www.rja.com
 +1 212-695-8670
 Fax: +1 212-695-9671
 Cell: +1 347-604-3501
www.rja.com



Associated fire Protection

ROLAND STRATEN, P.E.



100 Jackson Street
 Paterson, NJ 07501
 (973) 684-7250 Ext. 150
 Fax: (973) 684-4511
www.afipfire.com

Vicki Serafin
Affiliated FM
400 Interpace Parkway, Bldg C
3rd Floor
Parsippany, NJ 07054-1196
Phone: (973) 541-6771
Fax: (973) 541-6909

MEETING NOTICE

Date: December 9, 2013

Place: Hanover Manor
16 Eagle Rock Avenue
East Hanover, NJ 07936

Price: \$30.00

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

Topic: Special Inspections by John Stoppi of AMAA Co.

Speaker: John Stoppi of AMAA Co.

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

OR PAY AT THE DOOR

NAME: _____

COMPANY: _____ TELEPHONE: _____

Meeting Dates/Programs 2013-2014

Dec. 9	Topic: Special Inspections by John Stoppi of AMAA Co.
Jan. 6	Topic: Forensic Loss Investigation' by Stephen Hill, PE and/or Steve Venditti, PE of RJA
Feb. 3	Topic: NYC Resiliency' by Rich Leentjes, Operations Engineering Manager of FM Global
March 3	Aerosol Storage Suppression by Anthony Gee—Company to be provided later
April 17	Chapter Seminar
May 5	NOVEC Fire Suppression Agent Update—Larry Lussier, 3M
June 2	TBD
June	Joint NY/NJ Chapter Golf Outing – details and date to follow



John M. Cholin P.E., FSFPE, M.E.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
jmc@jmcholinconsultants.com • www.jmcholinconsultants.com



SURVIVOR
FIRE & SECURITY SYSTEMS
 SERVICE • DESIGN • INSTALLATION

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



JIM BURGE
 Vice President
burge@oliverfireprotection.com

555 East Main Street
 Chester, NJ 07930
 908-832-5111
 Cell: 862-307-3525

www.oliverfireprotection.com



2013-2014 CHAPTER COMMITTEES

STANDING COMMITTEES

Program

Ed Armm, Chairman
Consulting - Rich Reitberger
Paul McGrath

Arrangements

Vicki Serafin, Chairperson

Membership

Dave Gluckman, Chairman
Rich Reitberger
Ernesto Vega-Janica

Nominating

Ed Armm, Chairman

Scholarship Fund

Ed Armm, Chairman
Mike Newman
C. Vitale

Auditing

Joe Janiga, Chairman

Archivist

Jim Tolos

Historian

Jim Tolos

Communications

Fusible Link—Brad Hart
Ana Crisostomo—Coordinator

Mailing/Automation/e-mail—Vicki Serafin, Chairperson

Webmaster—Mike Newman & Paul McGrath

SPECIAL COMMITTEES

Spring Seminar

Ed Armm
Rich Reitberger
Dave Kurasz

Bylaws

Jim Tolos, Chairman

Career Recruitment

Rich Reitberger, Chairman
John Stoppi
Donna Spano
Marios Michaelides

Golf Outing

NY Chapter for 2014

Awards

Rich Reitberger, Chairman

PE Examination

Donna Spano

Chapter Seminar/Field Trip

Richard Reitberger, Chairman
Ed Armm, CoChairman
Dave Gluckman
Joe Janiga

Legislative

Rich Reitberger, Chairman
Jerry Naylis
Dave Kurasz

Finance

Rich Reitberger - Chairman
Vanessa Gallagher
C. Patel

HELPFUL LINKS

ADAAG <http://www.access-board.gov/adaag/about/index.htm>

AFAA National <http://www.affaa.org/>

AFAA <http://www.firesprinkler.org/>

ANSI <http://web.ansi.org/>

ASHRAE <http://www.ashrae.org/>

Campus-Firewatch <http://www.campus-firewatch.com/>

Coffee Break Training <http://www.usfa.dhs.gov/nfa/coffee-break/>

CPSC <http://www.cpsc.gov/>

CSAA <http://www.csaaul.org/>

Municipal Codes (E Codes) <http://www.generalcode.com/Webcode2.html>

FDNY <http://nyc.gov/html/fdny/html/home2.shtml>

FM Global <http://www.fmglobal.com/>

FSDANY <http://www.fsdany.org/regs.htm>

FSI <http://www.firesprinklerinitiative.org/>

FSSA <http://www.fssa.net/>

Fire Tech Productions—Nicet Training (FTP) <http://www.firetech.com/>

Home Fire Spklr Coalition <http://www.homefiresprinkler.org/>

HVAC Bld. Control Fire Safety <http://www.iklimnet.com/hotelfires/hotelfiresmain.html>

AFAA-NJ <http://www.afaanj.org/>

International Code Council - <http://www.iccsafe.org/>

International Code Council Residential Sprinkler Exam - http://www.iccsafe.org/news/nr/2009/0709_ResidentialSprinklerExam.pdf

The Joint Commission (JCAHO) - <http://www.jointcommission.org/www.JointCommission.org/>

Material safety data Sheets (MSDS-OSHA Site) - <http://www.osha.gov/SLTC/hazardcommunications/index.html>

National of Fire Equipment Distributors (NAFED) - <http://www.nafed.org/index.cfm>

ADVERTISE IN THE FUSIBLE LINK

Do you want your business to be known by over 125 professionals in the local Fire Protection industry? Advertise in the Fusible Link. \$100 per chapter fiscal year. Contact Vicki Serafin for more info: [Vicki.serafin@affiliated fm.com](mailto:Vicki.serafin@affiliatedfm.com)