

International
SprinklerScene

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2001 On-Line Seminar Technical Topics Announced

The National Fire Sprinkler Association has announced dates and topics for On-Line Seminars to be delivered in 2001. Programs are one to one and a half hours in length and are delivered live over the Internet by NFSA's professional technical staff starting at 10:30 am New York time. The seminars allow for interaction with the instructor by e-mail during the presentation. It's all delivered to the desktop with no incurred travel expense. The cost is US\$125 for NFSA and IFSA members and US\$250 for nonmembers. Information and registration is available at www.nfsa.org

Date	Topic	Instructor
January 23	Antifreeze Systems	Russell P. Fleming, P.E.
February 6	Water Supply Testing	Victoria Valentine
February 20	Basic Drafting	Kevin J. Kelly
March 13	Hardy-Cross Loop Analysis	Kenneth E. Isman, P.E.
March 27	Pipe Joining Techniques	Russell P. Fleming, P.E.
April 10	Systems Types & Components	Victoria B. Valentine
April 24	Rules Governing Installation	Kevin J. Kelly
May 8	Project Scheduling	Michael Friedman, P.E.
May 22	Contracts and Specifications	Michael Friedman, P.E.
June 5	Velocity Pressure Calculations	Kenneth E. Isman, P.E.
July 17	Hangers and Hanging	Russell P. Fleming, P.E.
July 31	Types of Construction	Gene Endthoff
August 14	Pump Appurtenances	Kenneth E. Isman, P.E.
August 28	Standpipes and Pressure Reducers	Kevin Kelly
September 11	New Storage Protection Options	Kenneth E. Isman, P.E.
September 25	Fire Dept. Support of Systems	Kevin Kelly
October 9	Earthquake Protection Update	Russell P. Fleming, P.E.
November 6	MIC Update	Kevin Kelly
November 20	Darcy-Weisbach Calculations	Kenneth E. Isman, P.E.
December 4	NFPA 5000	Robert E. Solomon, P.E.

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World Fire Statistics Released

The International Association for the Study of Insurance Economics has released an information bulletin from its World Fire Statistics Centre that addresses comparative fire losses of more than 20 leading countries. The Centre's stated objective is to persuade governments to adopt strategies aimed at reducing the cost of fire. The Centre estimates that fire consumes about 1 percent of GDP (gross domestic product) in most advanced countries, but has generally received much less attention than the cost of crime or automobile accidents. The Centre is also making an effort to persuade the European Union to identify fire safety as a topic for collective action leading to a European fire strategy. The country with the lowest rate of fire deaths is Singapore, which is also known for its extensive use of automatic fire suppression systems.

Summary of Comparative World Fire Statistics - Averages for 1995-1997 (or for years indicated)

All costs expressed in percentage of country's annual gross domestic product

Country	Fire Deaths per 100,000	Direct Fire Losses	Cost of Fire Organizations	Cost of Fire Insurance Administration	Cost of Fire Protection for Buildings
Australia	0.71				
Austria	0.79				
Belgium					
Canada					
Czech Rep.					
Denmark					
Finland					
France	1.01				
Germany	0.98				
Greece					
Hungary					
Italy	0.82 (93-95)				
Japan					
Netherlands	0.68 (94-96)				
New Zealand	1.10				
Norway					
Poland					
Singapore	0.20 (96-97)				
Slovenia					
Spain	0.60 (95,97)				
Sweden					
Switzerland	0.43 (94-96)				
UK					
United States					

World Sprinkler News

ADD Testing for Spray Sprinklers - The LPC Centre for Risk Sciences at the Building Research Establishment in the United Kingdom is undertaking ADD (actual delivered density) testing of conventional and spray sprinklers to determine if ADD testing can become a feasible and economical alternative to full-scale testing or large-scale testing involving wood cribs. ADD testing was developed for suppression-oriented sprinklers like the ESFR (early suppression fast response).

Mist Tested for Flammable Liquid Storage - In an investigation for the Museum of Victoria in Melbourne, the Australian Scientific Services Laboratory conducted a series of tests to compare the performance of variations of the Wormald/Tyco AquaMist system against a benchmark NFPA 16 foam-water sprinkler system for the protection of storage of flammable liquids, specifically ethyl alcohol solutions used for specimen preservation. The museum stores quantities of about 92,000 liters in separate storage areas. Tests included a basic automatic water mist system, a deluge mist system, an automatic foam-mist system, and a foam-deluge mist system. An additional test examined the performance of the automatic foam-mist system in an accidental spill fire. The design density was 2.9 mm/min with a design area of 139 m² for the automatic systems. AFFF concentrate suitable for alcohol fires was injected at a 3% concentration for 10 minutes. The foam-deluge mist system and the automatic foam-mist system both extinguished the fire faster than the benchmark foam-water sprinkler system, with the latter designated the system of choice using a 20-minute water supply.

Sentencing in Swedish Disco Fire - Four Iranian-born men have been convicted of aggravated arson in the October 1998 fire that killed 63 teenagers in Gothenburg, Sweden. Three of the men were given prison sentences of six to eight years, while the fourth, under 18 at the time of the fire, was sentenced to three years in juvenile detention.

Sydney Dome Not Supersprinklered - The Sydney Superdome, constructed to help host the 2000 Summer Olympics, has sprinklers in most areas, but sprinklers were omitted from the 39 m high 350,000 m³ volume arena bowl by means of a performance-based variance from the Australian Building Code. Sprinklers were considered inappropriate because activation would be delayed by ceiling height, and cooling of smoke by sprinkler discharge might interfere with the smoke extraction system. To ensure safe evacuation, fire engineers modeled a 48 MW fire taking place in the bowl, representing two house trucks burning simultaneously. Some required fire ratings in the facility were reduced from 4 hours to 2 hours on basis of presumed fire loads and ventilation conditions, and columns in the sprinklered main foyer were permitted to be constructed from unprotected steel.

New E-Commerce Magazine for Fire Safety - *FS-World.com* is a new fire and safety publication of the Fire & Safety Group.com, headed by Neville Buch, formerly vice-president of marketing and strategy for Tyco Fire and Security. Formed to service the e-commerce needs of small to medium sized companies in the fire and safety industry, Fire & Safety Group.com has been publishing the magazine on-line and plans to now publish in print on a quarterly basis. In the first issue, Mr. Buch is quoted as characterizing the market for fire and safety products and services as a “global niche market worth over \$40 billion per annum employing over 2 million people. There are over 50,000 companies servicing this market including standards organizations, manufacturers, consultants, distributors, installation companies and maintenance organisations.”

FPA Now NFPA Agent - The Fire Protection Association in the United Kingdom has agreed to act as the UK distributor for all NFPA publications.

Australian Study Slights Sprinklers – A paper entitled “Cost-Effectiveness of Fire Safety Measures in Community Residential Units”, presented at the 3rd International Conference on Performance-Based Codes in Lund, Sweden in June 2000, reported 108 fires in sprinklered care facilities in Australia

between 1989 and 1993. A total of three injuries and no fatalities were reported in those fires. In 1725 fires in care facilities with no sprinklers, there were 108 injuries and 7 fatalities. However, because the fire reports for 6 of the 108 fires in sprinklered properties suggested that “sprinklers should have operated but did not”, sprinkler systems were assigned a reliability level of 94%, indicating that completely sprinklering these facilities would prevent only 94 percent of the life loss. The cost of the sprinkler program was predicted to be about A\$4.5 million per life saved and declared not cost-effective.

Upcoming Meetings, Seminars, and Exhibitions of Interest

February 13-15, 2001 - Fire Australia Exhibition and Conference, Melbourne, Australia, Fire Protection Association Australia, (Fax +61-3-9890-1577 or events@fpaa.com.au)

February 26-28, 2001 – Middle East Fire Safety and Security Exhibition, Cairo, Egypt, Egyptian Fire Protection Association (Fax +202-3408801 or www.egytec.com)

April 4-6, 2001 – International Water Mist Conference, Vienna, Austria, International Water Mist Association (Fax +49-39-202-85-250 or www.iwma.net)

April 19-21, 2001 – NFSA Annual Seminar & Exhibition, San Francisco, California, USA (Fax +1-845-878-4215 or www.nfsa.org)

May 14-16, 2001 – World Fire Safety Congress & Expo, Anaheim, California, USA, NFPA (www.nfpa.org)

May 15, 2001 – International Fire Sprinkler Association 3rd Annual Meeting of Board of Directors, Anaheim, California, USA

May 21-24, 2001 – Fire Expo 2001, Birmingham, England, UK (Fax +44-(0)870-429-4327 or www.fire-expo.co.uk)

July 24-26, 2001 – Americas’ Fire Expo, Miami, Florida, USA, NFPA (www.nfpa.org)

September 17-19, 2001 – Interflam 2001, Edinburgh, Scotland, UK, Interscience Communications (Fax +44(0)20-8692-5155 or interflam@dial.pipex.com)