Theater Disaster Killed 602 and Changed Fire Safety Forever

By Francine Uenuma

The deadly conflagration ushered in a series of reforms that are still visible today

The Iroquois Theatre Fire occurred during a musical matinee in Chicago, Illinois, on December 30, 1903. The play’s scenery consisted of many canvas backdrops decorated in highly flammable oil paints, and when a hot stage light ignited a velvet curtain the backdrops soon went up in flames. This eventually caused the deaths of 602 people, making this the most fatal single-building fire in U.S. history.

Although the lighting and scenery fire hazards started the fire, the high number of fatalities resulted from the theatre’s failure to take proper fire safety precautions. There were no automatic fire sprinklers for the stage, and the stage’s fire curtain did not close properly to contain the fire. In addition, there was no emergency lighting, the stage’s smoke and heat vents were not functional, and many exit doors were either locked or did not swing in the direction of travel.
The ornate, five-week-old Iroquois Theater was filled with teachers, mothers and children enjoying their holiday break. They had gathered to see Mr. Bluebeard, an over-the-top musical comedy starring Chicago native Eddie Foy. It featured scenes from around the world, actors masquerading as animals and a suspended ballerina.

As the show began its second act at 3:15 that afternoon, a spark from a stage light ignited nearby drapery. Attempts to stamp out the fire with a primitive retardant did nothing to halt its spread across the flammable decorative backdrops. Foy, dressed in drag for his next scene, attempted to calm the increasingly agitated audience. He ordered the orchestra to continue playing as stagehands made futile attempts to lower a supposedly flame-retardant curtain, but it snagged.

It was soon apparent that the fire could not be contained. Audience members bolted from their seats toward what few exit doors they could find, but most were obscured by curtains. They were further stymied by metal accordion gates, firmly locked to keep those in upper levels from sneaking down to pricier seats during intermissions. The terrified patrons—an estimated 1,700 with many more standing ticket holders clogging the aisles—were funneling through scant few chokepoints.

Quickly the scene had changed “from mimicry to tragedy,” as one survivor said. Watching from the stage, Foy wrote in his memoirs, he saw in the upper levels a “mad, animal-like stampede—their screams, groans and snarls, the scuffle of thousands of feet and bodies grinding against bodies merging into a crescendo half-wail, half-roar.”

As cast members realized the peril they were in, they opened a rear stage door to escape. The backdraft from the open door caused a sudden ball of flame to explode through the theater, instantly killing many in the virtually inescapable balconies. It was powerful enough to blow at least one exit door open, aiding those frantically trying to work the unfamiliar locks. A few were fortunate enough to find an upper-level fire escape, only to realize it lacked an exterior ladder down to the ground.

The Great Chicago Fire Disaster described what awaited them as worse than that “pictured in the mind of Dante in his vision of the inferno.”

Days later, the Chicago Tribune ran a list of regulations that had been flouted by the Iroquois, including the lack of an adequate fire alarm, automatic sprinklers, marked exits, or suitable fire extinguishing devices. Even the two large flues on the rooftop where the smoke and flame could have vented out were boarded shut. The newspaper called for action: “The only atonement that can be made to these hapless victims of negligence is to make the theaters of Chicago absolutely safe, so that none others may meet their fate.”

Excerpted from www.smithsonianmag.com

Chicago Fire Chief William Musham testifies before the speaker’s rostrum of the council chamber during the fire investigation. Reprinted by permission of the Chicago History Museum Research Center

Among the enduring changes were the stipulations pertaining to the lighting of exits, aisles and corridors, including the requirement that “a red light to be kept burning over the exits” during performances. This echoed the words of an electrical engineer who had advocated for signs to be illuminated by “a source of light independent of the theater lighting system,” a critical point since the Iroquois’ electricity had gone out during the blaze.

An April 1904 edition of Western Electrician highlighted the adoption of “exit lights [which] are also supplemented by sperm-oil lamps” in the event that “the current supply is interrupted.” Although technology has evolved, signs like these were the forerunners to the glowing red exit signs ubiquitous in modern theaters.

Excerpted from www.smithsonianmag.com
National Fire Heritage Center Executive Director Retires

The Board of Directors of the National Fire Heritage Center accepted the resignation of its Executive Director R. Wayne Powell at its annual meeting on October 8, 2018.

Mr. Powell was instrumental in the growth and prosperity of the NFHC since its founding in 2007.

R. Wayne Powell retired December 15, 2018 as the Executive Director of the National Fire Heritage Center in Emmitsburg, Maryland. Powell's depth of fire history at the local and national levels and his eye for detail, along with the energy he brought to this position will be difficult to replicate.

One of the last accomplishments completed by Powell was an application for funding from the Delaplaine Foundation, which resulted in a $4500 grant earlier this month.

Powell had previously retired from the U.S. Fire Administration and the Marriott Corporation prior to his stint at the National Fire Heritage Center.

NFHC Promotion

The NFHC home office staff marketed the NFHC to attendees of the 255th Annual Meeting and Dinner of the Ancient and Honorable Mechanical (Fire) Company of Baltimore.

Organized in 1763, the Mechanical Company (MC) is the oldest civic organization in the United States with today’s decedent being Baltimore City Engine 4. One of the MC’s original hand engines, “The Old Lady,” is on display at the FCFR Museum. Of interest, over 100 streets in Baltimore are named for early MC members.

New Trustee

Mike Dixon of Elkton, MD has been named to the Board of Trustees for the National Fire Heritage Center. The National Fire Heritage Center is the nation’s archive for historic documents, and other perishables related to fire protection. These perishables include:

- Art and artifacts
- Audio
- Books
- Charts and graphs
- Documents
- Maps
- Photography
- Reports
- Video

Dixon is a historian, adjunct professor, and writer whose research and teaching focuses on community studies and social history. He has served as a consultant for public television documentaries, Smithsonian Museum on Main Street Exhibits, and local government commissions. He has appeared on The Today Show, Maryland Public Television, the National Geographic Channel, and National Public Radio Shows.

Dixon joined the Singerly Fire Company of Elkton as a teenager in the late 1960s. Today, he chairs the company’s museum committee and is the editor of the Maryland State Firemen’s Association newsletter, the Volunteer Trumpet.

He holds undergraduate and graduate degrees in history and the behavioral science from St. Joseph’s University (Philadelphia), Washington College, and Wilmington University.

“Michael Dixon’s unique combination of being a historical scholar and his combat firefighting experience makes him an ideal member or our Board of Trustees. He has a built-in appreciation for what we are doing and why we are doing it.” Says NFHC President Bill Killen.
Message from the NFHC President

The National Fire Heritage Center’s officers and directors were quite busy in November and December with conference calls, negotiations with the Clarion Fire Rescue Group, taking care of the business of transitioning from a part-time Executive Director to dividing up Executive Director duties and functions among the Executive Board. A special THANKS to Archivist Frank Schmersal for his assistance to Treasurer Paul Brooks in taking care of the bank accounts.

Vigilant Hose Company President Frank Davis participated in our January conference call and informed us the agreement between the NFHC and Vigilant hose for the use of the second floor of the EMS Building on Creamery Road should be signed by all parties by mid-January 2019.

Revisions to the Hall of Legends, Legacies and Leaders program have been completed. The number of inductees will be limited to six per year and the nomination period is January 15 through February 28, 2019. A news release was distributed to the fire service media January 8th, 2019. The new criteria has been posted to the NFHC website and on Facebook. It would be quite beneficial as well as helpful in promoting the NFHC if every officer, director, trustee, staff member would invite their friends to like our Facebook page.

A BIG THANK YOU is for our Executive Board for the several conference calls and negotiations that lead to a Memorandum of Agreement with the Clarion Fire Rescue Group, creating a partnership with the Fire Department Instructors Conference. Beginning in 2019 the Hall of Legends induction ceremony will be held annually at the Fire Department Instructors Conference in Indianapolis, Indiana. This year’s conference is scheduled for April 8-13, 2019. The FDIC is the largest fire and emergency services training conference in North America.

Over the next several months our officers, directors, committee members and supporters will be working on updating the NFHC Policy and Procedures manual, developing position descriptions for officers, directors, trustees, committees, and other important positions in the organization.

January 9th we initiated discussions with a Maryland vendor about providing golf shirts, t-shirts, baseball caps, decals, patches and other paraphernalia that might be of interest to members and supporters. We are exploring the purchase of additional challenge coins which is very popular and a good selling item. Hopefully we will be able to improve our on-line store and provide a better opportunity for members and supporters to purchase our products.

Bill Killen, President
National Fire Heritage Center

NFHC Finalizes Partnership With FDIC

The Clarion Fire Rescue Group (CFRG), Tulsa, Oklahoma, the FDIC, Fire Engineering, collectively CFRG, and the National Fire Heritage Center, (NFHC), finalized a Memorandum of Agreement January 15th, 2019, where both signatories agreed to a cooperative partnership.

This year the NFHC will conduct their annual Hall of Legends, Legacies and Leaders Award Induction Ceremony at FDIC on the main program. CFRG will identify the NFHC as an associate and active participant at FDIC. The lifetime achievement award beginning in 2020 will be a collaborative effort between the executive leadership of CFRG and the NFHC.

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Bill Killen, President
National Fire Heritage Center
to provide quality written records of the mission vision and efforts of the fire service currently. Following the Annual Meeting in Emmitsburg, the NFHC leadership contacted several fire service entities to explore the feasibility of holding the annual HLLL ceremony at their annual meeting. In November the Executive Board participated in conference calls with two entities, both offering incredible support and opportunities for the NFHC. After careful consideration the Executive Board agreed that the FDIC provided the best opportunity for the NFHC.

NFHC President Bill Killen and Chief Bobby Halton, Editorial Director for the Clarion Fire Rescue Group worked out the details of the Memorandum of Agreement between Thanksgiving and Christmas. The MoA was finalized and became effective January 15th, 2019.

Gift Shop Changes

Following discussions during the Annual Meeting, the contents of the NFHC Book Store / Gift Shop will be pulled and temporarily placed into storage until sufficient help can be obtained to manage the effort. To properly feature items in the Gift Shop is an extremely time-consuming activity (securing, cleaning, repairing, pricing, etc.) plus time handling sales (making change, bagging, etc.) such that return on investment does not warrant continuing it just now and especially so in light of a recent reduction in Home Office staffing. Treasurer Brooks advises that Gift Shop sales account for about 7% of the NFHC’s annual income. The plan is to re-establish the effort when both practicable and possible.

Hall of Legends, Legacies and Leaders Nominations Open

BACKGROUND
The National Fire Heritage Center Board of Directors has opened nominations for the Fire and Emergency Services Hall of Legends, Legacies and Leaders (HLLL). Nominations will be accepted from January 15 through February 28, 2019. The HLLL provides individual recognition of significant contributions and distinguished service to the Fire and Emergency Services mission. Vice President Billy Shelton states that the HLLL is one of the most important initiatives of the National Fire Heritage Center (NFHC). Located in Emmitsburg, Maryland, where it is maintained along with a virtual “Hall” that is part of the National Fire Heritage Center’s website (www.fireheritageusa.org).

NOMINATING CRITERIA AND FORMAT
 Any person or organization may submit a nomination to the Hall of Legends, Legacies and Leaders in accordance with the following criteria:
 Nominees should have completed at least 25 years of service in the fire service and or fire protection disciplines and be known/recognized in the national/international fire service arena (local/regional recognition does not qualify).
 Nominations packages shall be single page printed both sides of the paper, typed, Arial Font 10 point, and a maximum of one page permitted.
 Nomination packages shall be postmarked no later than February 28th and delivered to the National Fire Heritage Center, P. O. Drawer 76, Emmitsburg, MD. 21727

Nomination Packages Include:
 A Cover Page
 Picture and complete name of nominee to include middle initial, date of birth, current
President Bill Killen encourages your submittal of individuals who you believe have made significant contributions to this profession. The candidates for this year’s induction will be vetted by the HLLL Committee and submitted to Board of Directors for final approval and announced at the Fire Department Instructors Conference. Selections will be limited to no more than six inductees per year.

For additional information contact:
George Morgan, Chairman
Hall of Legends, Legacies and Leaders Committee
National Fire Heritage Center
P.O. Drawer 76
Emmitsburg, MD 21727
Email: hampvafire@yahoo.com
(410) 274-3031

Notes from the Archives

The State of the Archive
The archive now stands at almost 15,000 cataloged objects, and more than 900 cartons of material in the cataloging backlog. A new directory is in process; the directory will be accessible via a link from the NFHC website, www.fireheritageusa.org.

Recent Acquisitions
There have been many one-, two-, and three-carton donations of materials received in the past several months, from all over the country. Among them were about 400 National Board of Fire Underwriters/American Insurance Association/Insurance Services Office reports on various cities; many old magazines; sprinkler heads of various designs; and assorted other materials. The photograph shows one especially interesting donation, received in September from Floyd Greene of Virginia. It’s a training prop, used to show the effect of dust explosions. Flour is placed in a dish inside the box, along with a lighted candle or kitchen match; blowing through a rubber tube atomizes the flour, causing an explosion which blows the doors open!

And a new donor, Bob Busbey, whom we had not met before, came in one day with a collection of 652 apparatus snapshots by various photographers, most taken in the Northeast in the 1950s and 1960s. Almost every photo has the details of the apparatus carefully noted on the back. The photos are being placed in archival plastic pages and stored in what we call “binder boxes” – an archival box with a ring-binder mechanism attached to one surface.

Delaplaine Foundation Grant
In December we received a grant from the Delaplaine Foundation of Frederick, Maryland, for $4,500 for archiving and display materials and equipment. The grant was in response to an application written by retired Executive Director Wayne Powell (with just a little help from the archivist!) This generous grant will keep us supplied with archival boxes and other supplies for the coming year and will allow us to purchase some equipment with which to make our job easier.
Reconfiguring the Archive

We continue to transfer, 8 or 10 cartons at a time, materials from the museum building on South Seton Avenue in Emmitsburg to the Vigilant Hose Company Activities Building. We list each item being transferred, then go into the database and change the location so that we know where each object in the collection is located. At the Activities Building, we sort and shelve the transferred materials by accession number. It’s a slow process, but necessary as we continue to grow.

In addition to the archive area, about 2,500 square feet, VHC has given us the use of two small rooms. One will be used as an office, while the other is being set up as a research room, where visitors can consult the NFHC online directory and then view materials from the collection.

The Archivist’s Wish List

The items on the following list are needed for us to view, process, and store items that are in the collection. If you can help the NFHC obtain any of these items, please contact Archivist Frank Schmersal (accobonack@aol.com).

- Fluorescent light box, 18 x 24 inches (or larger)
- Audio tape player/CD recorder (also known as a “dubber”)
- Microfiche and microfilm viewers, preferably with printers or scanners built in
- 35mm filmstrip projector
- Drawing files (“flat files”) for 24 x 36 inch and 36 x 48 inch drawings donated by Jay Livingston

I’m Glad You Asked . . .

If the NFHC is not a museum, why does the archive contain three-dimensional objects?

The NFHC archive contains a modest number of three-dimensional objects for two reasons: to show the progress of technology in the world of fire, and to give “personality” to the paper objects in the collection. It’s much easier to visualize the improvements in, say, sprinkler head design, if you can see examples of different styles of heads in front of you. And it’s easier to understand how basic early fire protection was if you can see a watchman’s rattle and a leather bucket. There are about 450 fine fire museums in the United States, and the NFHC does not try to compete with them, but if a picture is worth a thousand words, then sometimes having the actual object in hand can be priceless!

Frank Schmersal, Archivist
National Fire Heritage Center

Answers from the Archivist

Climate control, climate control, climate control!
Always keep color slides, negatives, motion pictures, and photographs in a cool, dry, dark place to prevent color shift and other deterioration. Avoid humid places like the attic and basement (unless they are finished and air-conditioned)!

Magnetic tape, both audio and video, deteriorates with time and eventually becomes unplayable. Consider transferring the contents of audio or video tapes to CDs or DVDs as appropriate. The NFHC uses an inline converter (about $40) between a videotape player and a computer to create a digital file, then uses the computer to record DVDs.

We’ve all done it. We get a package in the mail and think "ooh, this box will be perfect for holding..." and soon enough we’ve carefully stored away a prized possession in a box that might actually be hurting more than it's helping. Why? It turns out that the chemicals used to produce and color that box could be eating away the finishes on your artifacts causing them to fade and deteriorate, possibly beyond repair! Avoid allowing random corrugated cardboard boxes, liquor boxes, copier-paper boxes, etc., to come into contact with irreplaceable artifacts. If possible, use acid-free archival containers; at the very least, place archival tissue or other paper between artifacts and the cardboard.
NFHC Membership Application Form

Name: __________________________

Organization: ____________________

Address: _________________________

City: ___________________ State: _______ Zip: _________

E-mail: ___________________ Telephone: ________________

Organizational Affiliation(s): ________________________________

NFHC Membership Categories (please check one):
[ ] Individual – $50/Year
[ ] Organizational – $200/Year
[ ] Student – $10/Year

Amount enclosed: $ _____________

Please enclose your payment with this form and return to:
National Fire Heritage Center
Post Office Drawer 76
Emmitsburg MD 21727

-Or-

Join online using PayPal via the NFHC Website –
~ https://fireheritageusa.org/donate/

Comment(s) -

“PRESERVING THE PERISHABLE”

As an IRS 501c3 non-profit organization, the National Fire Heritage Center exists to preserve, protect and increase the utilization of contributors to the body of knowledge of the American Fire Protection Services and allied disciplines through identification, acquisition, preservation, conservation and restoration.
The National Fire Heritage Center (NFHC) is a nonprofit organization working to preserve the written history of “fire in America.” We support individuals, fire departments, fire libraries and museums, fire protection organizations, and others who wish to collect, catalog and preserve fire-related writings.

The NFHC is both a fire history archive and a documentation preservation project. Our collection of over 13,000 items consists of written documents and three-dimensional items donated by the public and private sectors. Materials are cataloged, preserved and made available to NFHC visitors and online researchers.

Gaining access to historical fire-related writings can be hard. Prior to the establishment of the NFHC in 2005, there was no centralized, coordinated archival activity in the United States to ensure that important fire materials were saved in an accessible way. Much of the written history of “fire in America” was challenging to locate or, unfortunately, forever lost. Historical documentation that did exist was held in private collections where access was difficult or materials were not properly preserved.

The NFHC has changed all of that. Today, our organization works to assure the collection and proper preservation of these historical materials and that access is available to all who wish to know the story of “fire in America.”

The NFHC is co-located with the Frederick County Fire-Rescue Museum in Emmitsburg, Maryland, within walking distance of the National Emergency Training Center.

Visit us on the web at fireheritageusa.org to learn more about our work and how you can donate items to our collection.

National Fire Heritage Center
300B S. Seton Ave.
P.O. Drawer 76
Emmitsburg, MD 21727

Twitter and Instagram @fireheritageusa
Facebook.com/NationalFireHeritageCenter