



# Historical Highlights

The First 25 Years of  
Fire Protection Engineering  
Graduate Studies at WPI

1979 –2004

This document was drafted in preparation for the  
25<sup>th</sup> Anniversary celebration held on the WPI campus April 1, 2004.

Content is based upon internal university documents  
and first-person accounts of principals who were involved in  
developing the fire protection engineering program.

David Lucht

May, 2004

In the late 1970's, WPI set out to establish a graduate degree program in fire protection engineering with great aspirations and meager resources. While a formal degree program was not officially established until 1979, WPI was contributing to the fire protection movement as early as the 19<sup>th</sup> century.

One of the very earliest references to fire protection engineering as a discipline appeared in the *WPI Journal* in 1898. At that time, Henry Lucian Phillips, WPI class of 1893, wrote: "It's safe to prophesy that not many years will lapse before scientific colleges will seriously consider this subject [fire protection engineering] and include regular lectures or courses upon it in their curriculum."

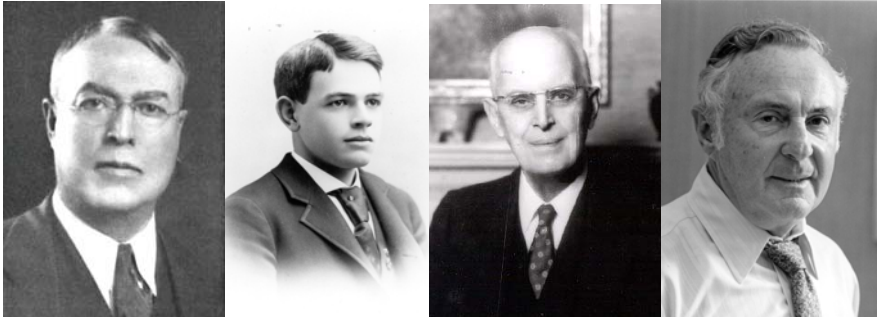
Little did Phillips know that 81 years later his alma mater would establish the first fire protection engineering graduate degree program in the US. Phillips also served as the seventh president of the National Fire Protection Association and was an early leader in the Factory Insurance Association (later Industrial Risk Insurers and GE GAPS).

Ten years after Phillips wrote about fire protection engineering, George I. Rockwood, class of 1888, founded the Rockwood Sprinkler Company in Worcester, Massachusetts. Then in 1940, Howard W. Freeman, class of 1940, joined Rockwood as its first head of the Research and Development Department. Freeman earned over 20 patents for fire protection devices, including what became the U.S. Navy water fog nozzle, credited with saving dozens of naval vessels and thousands of seamen during World War II.

In 1892, Simplex Time Recorder Company was founded by Edward B. Watkins, WPI class of 1886. Later Simplex became a world leader in fire detection and alarm systems.

Phillips, Rockwood, Freeman and Watkins were only four of many Worcester Polytechnic Institute alumni who contributed significantly to fire protection. Creation of the formal fire protection engineering degree program thus followed a heritage of involvement in the field.

Today hundreds of engineering alumni who pre-date WPI's fire protection engineering program are active as fire protection engineering practitioners.



*Watkins*

*Rockwood*

*Phillips*

*Freeman*

*Class of 1886*

*Class of 1888*

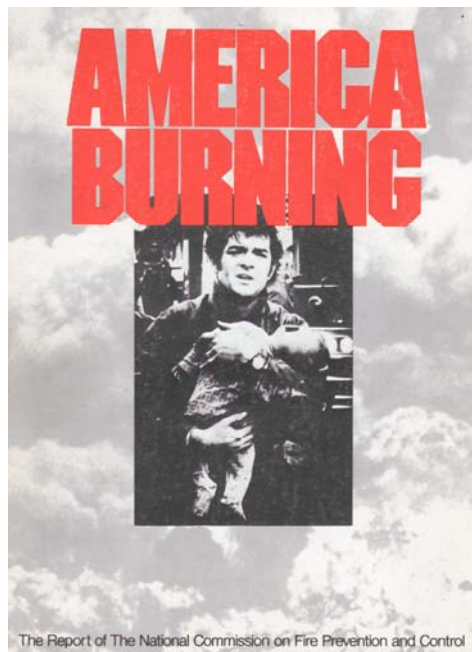
*Class of 1893*

*Class of 1940*

The story of how the seeds were planted for WPI's fire safety effort says much about the institution and the era in which the decision was made to begin the program. This period was marked by several important events which formed a climate favorable to creation of the new program. First, the United States Congress created the National Commission on Fire Prevention and Control (1968) and mandated a study of the American fire problem. This resulted in a highly publicized Presidential Commission report titled *America Burning*, which observed:

*“Appallingly, the richest and most technologically advanced nation in the world leads all of the major industrialized countries in per capita deaths and property loss from fire.”*

Hearings had been held throughout the country leading to the conclusion that fire was both a technological and sociological problem of enormous proportions in the US.



### *America Burning*

At the same time, the WPI community was involved in a vigorous discussion aimed at totally revising its approach to engineering education and created what became known as the “WPI Plan” (1969). The Plan changed WPI’s emphasis from a prescriptive approach to engineering education (specifying which courses must be taken) to a performance-based approach to making sure WPI graduates have the skills needed to perform effectively. Among other components, the Plan requires each student to complete an Interactive Qualifying Project (IQP), a substantive team-based student undertaking at the intersection of technology and greater social issues. The basis for the IQP is to help form a well-rounded, socially aware practicing professional.

National discussions about fire safety problems and creation of the WPI Plan converged in the 1970’s. *America Burning* spotlighted a national sociological issue of major proportions. And the WPI Plan required students and faculty alike to become intimately involved in projects of study at the intersection of societal and technical issues. Fire safety topics of all kinds became candidates for Interactive Qualifying Projects.

In essence, the idea for a degree program in fire protection engineering grew “from the bottom up” as a natural outgrowth of the WPI Plan. With faculty encouragement, the on-campus

fire safety movement began to gain momentum on the student level. A student chapter of the Society of Fire Protection Engineers (SFPE) was chartered at WPI in 1974, well before a formal FPE degree program was launched.



With Civil Engineering Professor Robert Fitzgerald serving as the catalyst, over 40 professors became involved in fire-related IQP projects during the 1970s. The range of study topics included cooperative work with the Worcester Fire Department, the U.S. Government, and with private corporations. Worcester Fire Department projects included a host of topics ranging from fire suppression, code studies and communications to development of information systems and hazard assessments. Projects with the U.S. Government and private corporations involved a broader spectrum of topics.

Professor Fitzgerald's own interest in fire protection was initiated in 1970 during his studies of building codes. It was expanded through involvement with the Defense Civil Preparedness Agency's fallout shelter analysis and emergency preparedness program. He subsequently became involved in teaching short courses on building fire analysis at the University of Wisconsin, WPI, and other locations (with Rexford Wilson). He was also one of the early pioneers in what we now call performance-based design. With the WPI Plan and an intensive national focus on the American fire problem as a backdrop, Professor Fitzgerald was successful in developing a broad level of interest in fire protection engineering on the WPI campus.



*Robert Fitzgerald*

*Class of 1953*

With time, Fitzgerald and other faculty became strong proponents for the formulation of a formal FPE degree program. Fitzgerald also sought and received valuable advice and counsel from off campus sources including Richard Stevens at the National Fire Protection Association and leading researchers at Factory Mutual Research Corporation (now FM Global). An area of national need had been identified and faculty had developed an appreciation for both technical and social aspects of fire safety. A spirit of inventiveness and creativity pervaded the campus. The seeds for establishing a discipline had been sown.

As these initial years went by, the interest in fire safety gained momentum and engaged the interest of top administration officials including the late Dean Ray Bolz and WPI President Edmund T. Cranch. President Cranch saw this as an opportunity for WPI to form a unique program of excellence in an emerging field. At the urging of Dean Bolz, Mechanical Engineering Department Head Donald Zwiap and Professor Fitzgerald, President Cranch agreed to support development of a formal FPE degree program at WPI. However, he had one proviso...he insisted on appointing a nationally known leader to head up the new effort. In response, Fitzgerald and Rexford Wilson sought out David A. Lucht who was then heavily involved in starting up a new and highly publicized fire safety agency in the Federal government. They secured his commitment to move to Worcester. In 1978 Cranch appointed Lucht as the first head of the fire protection engineering degree program and director of the newly created Center for Firesafety Studies.

Lucht came to Worcester from his prior post as Deputy Administrator of the United States Fire Administration in the US Department of Commerce, Washington, D.C. He had previously been selected by President Gerald R. Ford and confirmed by the US Senate as the first presidential appointee to provide leadership in the newly created United States Fire Administration...which had a Congressional mandate to implement the *America Burning* report. He had the needed breadth of management and technical experience, which included an FPE degree from Illinois Institute of Technology and a diverse career in insurance engineering at the Ohio Inspection Bureau (now ISO), fire research and structural testing at The Ohio State University and public service as the Ohio State Fire Marshal. He later went on to become a President and Fellow of the Society of Fire Protection Engineers. His broad background ideally suited him for building important relationships with government and industry.

Lucht oversaw development and operation of the WPI program for over 25 years until his retirement in 2004. His role included not only that of functioning as the academic department head but also fund raising, faculty and organizational development, recruiting, marketing, administration and media relations.



*David Lucht*

Broad-based discussions were conducted toward defining a curriculum and finding competent instructors for the program. A formal proposal was prepared for review and approval by the faculty at large. This included nine new graduate courses and a formal decision to begin

offering the MS degree in fire protection engineering. The proposal was approved by the campus-wide faculty on February 15, 1979, by unanimous vote.

The original courses approved by the faculty on February 15, 1979 were:

FPE 521 Combustion Science and Engineering

FPE 551 Fire Protection Systems

FPE 571 Engineering the Firesafety of Buildings

FPE 522 Risk Evaluation

FPE 561 Fire and Casualty Insurance Practices

FPE 562 Fire Program Management

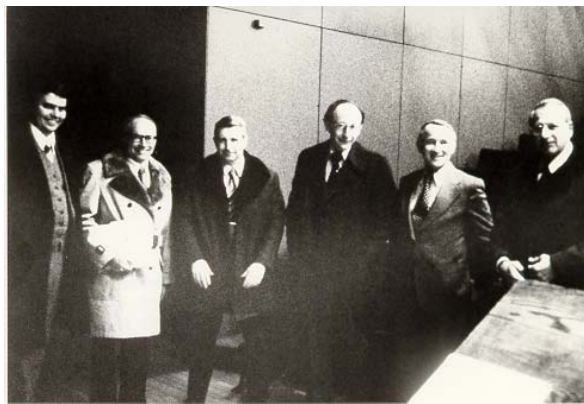
FPE 572 Failure Analysis

FPE 580 Special Problems

FPE 581 Seminar

## 25<sup>th</sup> Anniversary Celebration April 1, 2004

A grand celebration of the 25<sup>th</sup> Anniversary was held in the Campus Center on April 1, 2004. The over 200 attendees included students, faculty, friends sponsors and patrons from around the world. The full day event included seminars and roundtable discussions followed by a reception and banquet. Distinguished guests included several “old timers” who participated in the original founding of the Center for Firesafety Studies and were present at the 1979 faculty vote to authorize the MSFPE degree.



*At the February 15, 1979 faculty vote (L to R) Wayne Moore, Dean Ray Bolz (deceased), Robert Fitzgerald, David Lucht, President Cranch, Donald Zwiep*



*At the April 1, 2004 25<sup>th</sup> Anniversary Celebration (L to R) Wayne Moore, Robert Fitzgerald, David Lucht, President Cranch, Donald Zwiep*

Other highlights of the celebration included announcement of the Robert W. Fitzgerald Scholarship Endowment and Provost Carney’s introduction of the next Director of the Center for Firesafety Studies, Dr. Kathy Notarianni. Dr. Duane Pearsall, our major lifetime donor, received the Presidential Medal from President Parrish. And the Society of Fire Protection Engineers announced the David A. Lucht award to be presented in his honor by SFPE on an ongoing basis.

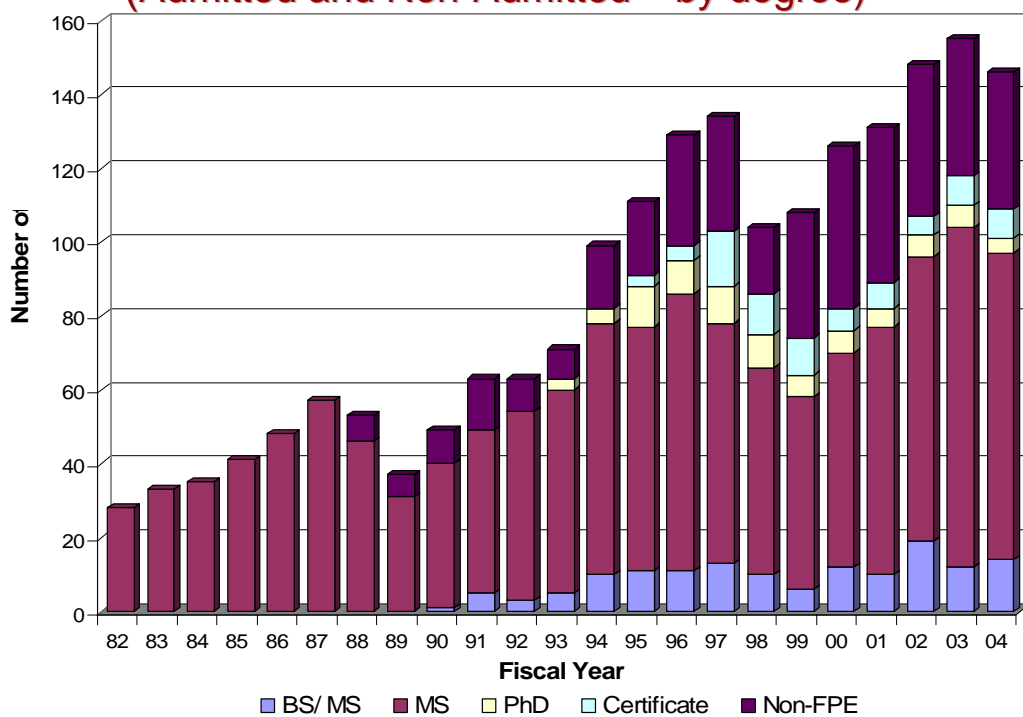
The academic home for the new degree program was the Center for Firesafety Studies, conceived to function as a self-standing academic department and an interdisciplinary crossroads for research, continuing education and technology transfer. The program started offering courses to part-time students in 1979. Initially one course was offered in the evenings each semester, taught by adjunct professors recruited from the pool of practicing professionals in the area. The first full-time students enrolled in 1983. A series of non-credit seminars and short courses was also offered to practicing professionals.

While the WPI program started with just a handful of part-time evening students, by 2004 enrollment totaled over 150 students at any given time. Students came to the campus from throughout the United States and 29 other countries. Fire protection engineering became one of the largest graduate engineering departments at WPI. Graduate enrollments for 2003 – 2004 are shown below:

Electrical Engineering	29%
Mechanical	19%
Fire Protection	18%
Civil	12%
Chemical	7%
Biomedical	6%
Manufacturing	5%
Materials	4%

The program grew to include five academic options, serving the needs of a host of constituents ranging from recent high school graduates to senior practicing professionals, worldwide. Options offered include the Graduate Certificate, Advanced Certificate, BS/MS (five-year) program, MS and Ph.D. in fire protection engineering. Enrollments over the years are shown in Figure 1.

**Figure 1. Total Students Enrolled  
(Admitted and Non-Admitted – by degree)**



## *Salamander Honorary Fire Protection Engineering Society*



Salamander is an academic honor society aimed at promoting high scholarship and original investigation in all branches of fire protection engineering. The Alpha Chapter was established in 1922 at Armour Institute of Technology (now IIT) in connection with its BSFPE program. The Beta Chapter was established at the University of Maryland in 1967, 11 years after it started its undergraduate FPE program.

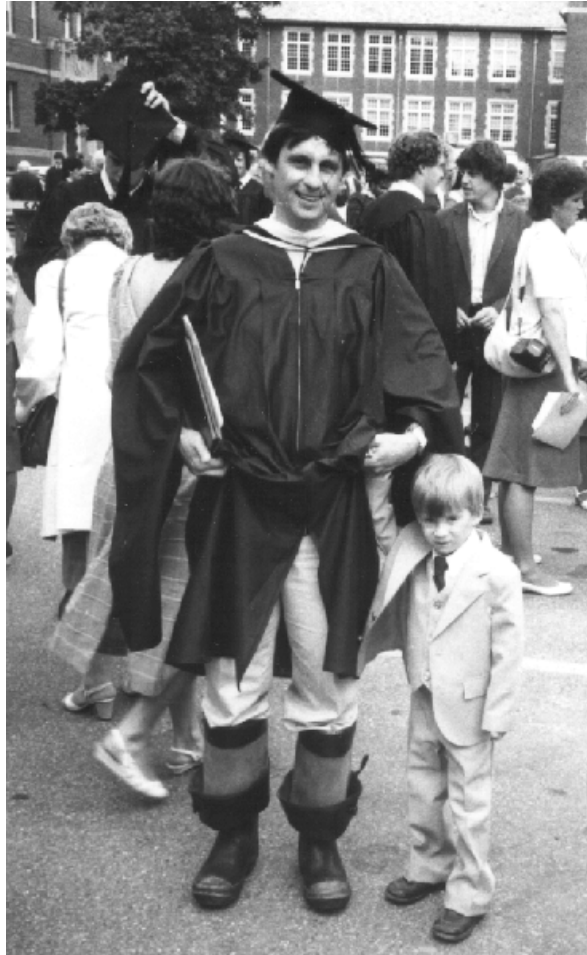
The Gamma Chapter of Salamander Honorary Society was chartered at WPI on May 4, 1984. This was the first Salamander chapter established for graduate students. Faculty from the Alpha and Beta chapters participated in the chartering ceremony on the WPI campus.



*Fire Protection Engineering Faculty at the May 4, 1984 Chartering Ceremony  
(L to R) Richard Custer (WPI), John Bryan (U. Maryland), David Lucht (WPI),  
John Mertens (IIT), Robert Fitzgerald (WPI), Craig Beyler (WPI)*

## *Graduates*

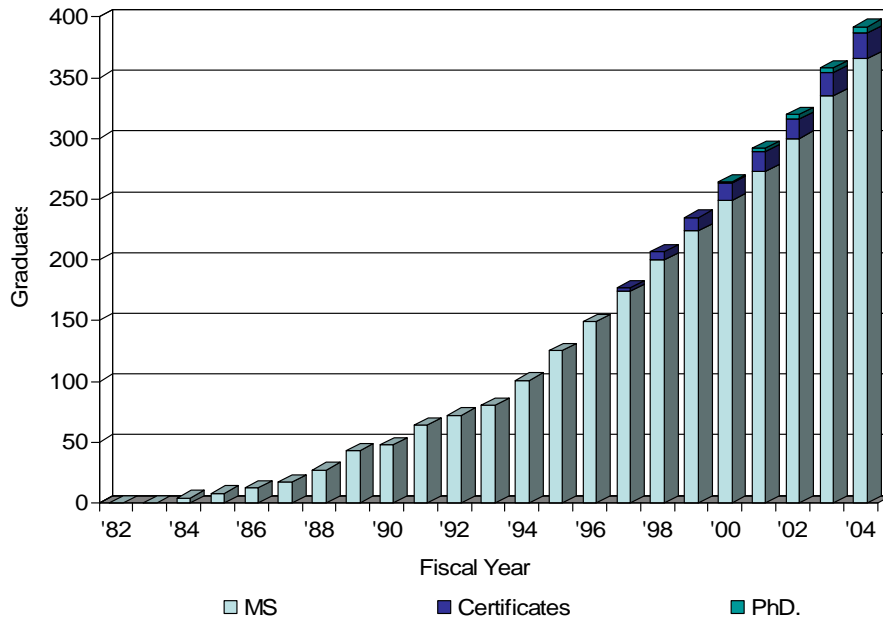
By 2004 WPI produced 393 FPE alumni, including Richard Pehrson, the first Ph.D. fire protection engineer who graduated in May, 1999. David Demers was the first part-time student to earn the MSFPE (1984). Richard Bielen was the first full-time student to complete the master's (1984). Another early graduate was Ronald Salig ('84), a former New York City firefighter. Ron is shown below in cap and gown and wearing his FDNY turnout boots with his son Jeremy.



*Ron Salig, one of the first FPE graduates, with son Jeremy (1984)*

Growth in the alumni body is shown in Figure 2.

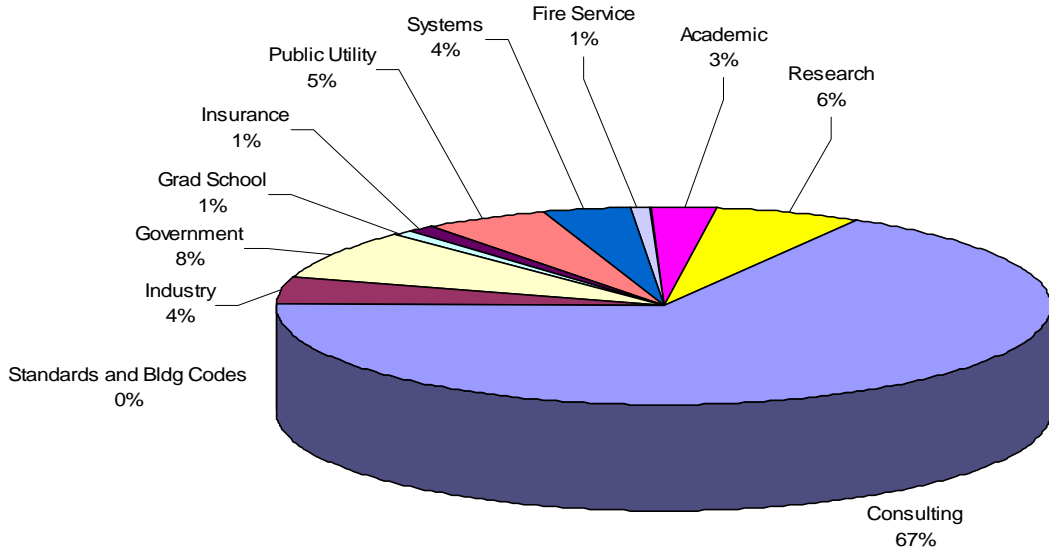
**FIGURE 2. Total FPE Graduates**



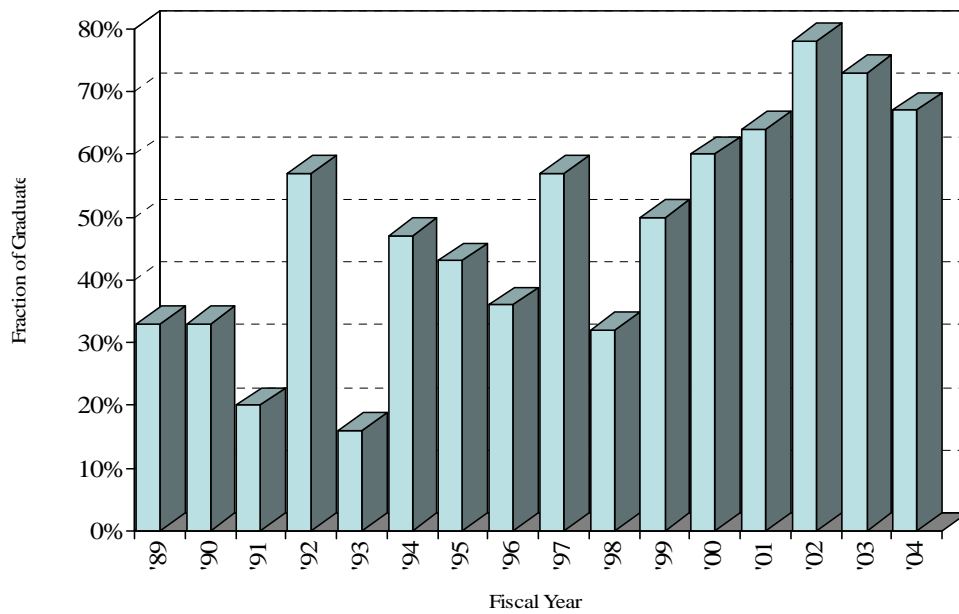
## ***Employers***

Employers of WPI graduates cover a broad spectrum ranging from consulting firms, manufacturing and process industries, federal, state and local government agencies to insurance companies, testing laboratories, academic and research institutions. Figure 3 shows the five year average of employer categories for 1999 – 2004.. The consulting sector was the fastest growing, as shown in Figure 4.

**FIGURE 3. Employers – Past 5 Years**



**FIGURE 4. Consultant Employers**



## *Faculty and Staff*

Initially courses were taught in the Evening Division by part-time adjunct professors. The first course was taught by Dr. Edward Clougherty, Chief Chemist for the Boston Fire Department and then part-time adjunct professor. In 1982 Dr. Dougal Drysdale, of the University of Edinburgh, Scotland, was recruited as at the Aetna Visiting Professor to teach the Fire Dynamics course, the keystone to the entire curriculum. While at the WPI campus, Drysdale



*Edward Clougherty*



*Dougal Drysdale*

wrote a chapter a week for the landmark book titled *Introduction to Fire Dynamics* (First Edition) published by John Wiley & Sons. The book-writing project was sponsored by Aetna Insurance, then headquartered in Hartford, CT.

Previous full-time faculty have included Richard Custer (1982 -1984), Craig Beyler (1983-87) and Vahid Motevalli (1988-92). Custer was actually the first full-time FPE professor hired at WPI and he served as associate director from 1982-1990. Barnett was a WPI graduate student, working on his PhD when the FPE program began operation in 1979. He served as an instructor and assistant director for nearly 10 years before becoming a full-time professor



***Anniversary Year Faculty & Staff (2004)***

*Top row (L to R): Lucht, Fitzgerald, Harris, Dembsey*

*Bottom row: Woycheese, Zalosh, Malone, Caisse, Barnett*

Sandi Williams, who served faithfully as the Center’s administrative secretary for over 15 years retired and toured the United States with her husband Don in their new motor home.

Mrs. Linda Malone, who formerly worked in the Physical Education and Athletics Department, followed Sandi. She did a great job upholding the fine tradition set by Sandi. And the Center received capable part-time support from Peg Caisse. Randy Harris was the first Fire Science Laboratory Manager.

***Distance Learning***

As the scientific basis for fire protection has become more and more complex, practicing engineers have found themselves looking for advanced courses to help them stay up to date.

The distance learning program offers a great opportunity for practitioners to access WPI's graduate courses without leaving their home or office.

WPI first started its distance learning effort on a pilot basis, delivering courses to FPE's at the Westinghouse Savannah River DOE site in 1993. Since then WPI's Advanced Distance Learning Network was formed; offerings use the most advanced communications technology available. Wherever they are in the world, distance learners are actually a part of the on campus class each week, receiving exactly the same lectures and course materials as do the full-time students in the on-campus classroom. Distance learners receive the lectures online via streamed video, along with PowerPoint slides, assignments and lecture notes on a password protected website.

Distance learning offered the WPI Center for Firesafety Studies a great opportunity to pursue its mission of disseminating state-of-the-art knowledge to the fire protection engineering community, worldwide. During the initial years, practitioners received for-credit FPE courses in countries ranging from Australia and New Zealand to England, Saudi Arabia and Korea.

The first corporate distance learning site was established at Underwriters Laboratories in Northbrook, IL in 1997. UL engineers met together on site as a group, earning course credits from WPI. Marty Pabich was the first UL engineer to complete the Graduate Certificate and the Master of Science degree via distance.



*Marty Pabich as his photo appeared in a UL Annual Report*

Pabich said: “The experience has been great. I learn the concepts in class and work with them the next day in real life. It’s been a tremendous professional development experience”.

In 2001 a “branch campus” was established at the prestigious Seoul National University in the Republic of South Korea. Students enrolled in these courses received WPI credit toward the MS degree. The SNU relationship was developed in cooperation with W.K. Kim a 1991 graduate of the WPI FPE program. He served as a consultant and affiliate professor at SNU.

James Eckroth was the first distance learning student to graduate with the MSFPE without setting foot on the WPI campus.



*James Eckroth, Graduated 2000*

## ***Laboratories and Research***

While the major emphasis of the academic program has been on professional practice, fire research is also an important element of the WPI program. WPI fire protection engineering students work with faculty on a wide range of research initiatives in areas ranging from computer fire modeling, fire performance of structural systems, composite materials, fire growth and smoke characterization to fire safety design methods and explosion phenomena.

Over the years, research in the Center for Firesafety Studies covered a wide range of topics from performance-based analysis and design for U.S. Coast Guard and Navy vessels and on-shore facilities to the combustion characteristics of materials, testing the effectiveness of new fire suppression chemicals to the development of new software tools for modeling fire and predicting fire behavior. Research was also done in collaboration with other laboratories such as FM Global, Fenwal, 3M, UL and NIST.

Theses and dissertations completed by WPI fire protection engineering students are available online at [www.wpi.edu/Pubs/ETD](http://www.wpi.edu/Pubs/ETD)

- ***Fire Science Laboratory***

The “second generation” Fire Science Laboratory became operational in 1996 with state-of-the-art capabilities including cone and room calorimeters, smoke density chamber, flame spread apparatus, infra-red imaging, phase doppler particle analyzer, explosion test vessels, smoke detection, fire pump and sprinkler systems. All of this equipment was funded by NSF and industry.

In 2003, Professor Lucht and FM Global’s Paul Croce developed a cooperative research agreement between their two institutions. FM Global donated two state-of-the-art Fire Propagation Apparatus (FPA) as part of a package valued at over \$600,000. Also included in the gift were FPA training resources, summer salary for the FM Global Scholar (Professor Dembsey) and one PhD student. This, combined with access to FM Global’s world class laboratory in West Gloucester, RI, brought WPI’s fire experimentation capability to an entirely new level.



*Nicholas Dembsey (L) and Robert Zalosh(R ) in Fire Science Laboratory.*



*Fire Propagation Apparatus*

- ***Holden Fire Research Laboratory***

With funding from DoD (via Battelle Labs) Professor Barnett established a temporary lab space on the site of Alden Research Laboratories in Holden, MA. Barnett and his students pioneered new test methods for fire fighter protective clothing.



- ***Fire Modeling Laboratory***

The Fire Modeling Laboratory specialized in computer applications to fire protection engineering and research. Research included computational fluid dynamics, modeling of building and vehicle fires and flame spread model development.

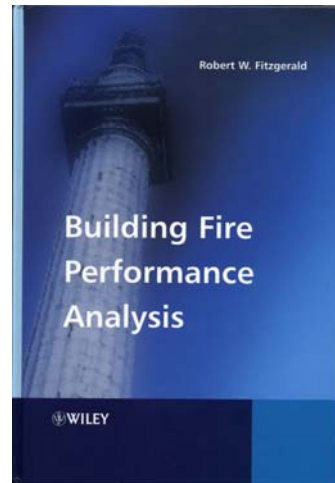
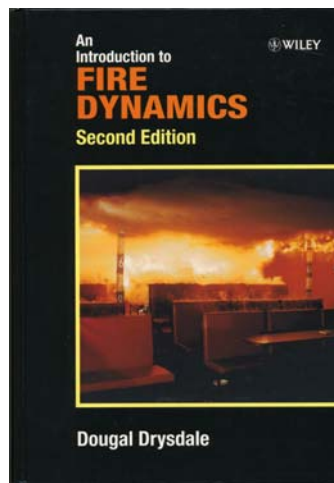
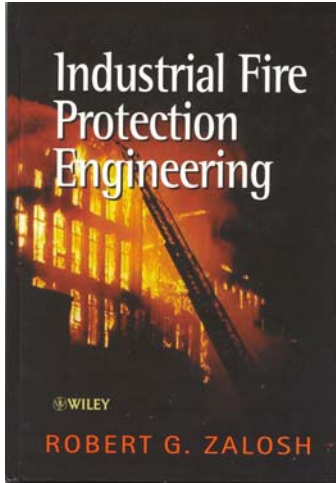
## ***Technology Transfer***

WPI has been the lead participant in the John Wiley Fire Science and Engineering Series of textbooks. David Lucht and Dougal Drysdale were the initial co-editors of the series. The first of the series, Introduction to Fire Dynamics (Drysdale) was written at WPI in 1982 with generous financial support from Aetna Insurance. Robert Zalosh completed Industrial Fire Protection Engineering, in 2003, partly funded by the SFPE Foundation. He also served as contributing author for another book sponsored by the AIChE Center for Chemical Process Safety.

Professor Fitzgerald completed his text Building Fire Performance Analysis: A Way of Thinking, published by Wiley in 2004. He is also collaborating with Professor Albano on a structural fire performance textbook.

Working with WPI's Academic Technology Center and the Society of Fire Protection Engineers, the Center for Firesafety Studies completed a video-based PE review course for the fire protection engineer national professional registration examination. The 9-hour VHS cassette was distributed by SFPE. Live classroom style seminars and short courses were also delivered over the years. The Engineering Methods courses originally developed by Robert Fitzgerald and Rexford Wilson were prominent among them. The First and Second Conferences on Fire Safety Design in the 21<sup>st</sup> Century held on the campus in 1991 and 1999 were also notable contributions. These conferences were funded by the National Science Foundation. Professor Lucht was the principal investigator.

Finally, it has also been mentioned that the Fire Science Laboratory stands to serve as a bridge between WPI faculty and off-campus industries. Over the years WPI performed laboratory services for a range of different companies and agencies.



## ***Firesafety Board of Advisors***

The Firesafety Board of Advisors was prominent among off-campus sources of advice and support . First created in 1980, this group of leaders from industry, academia and government served as an invaluable sounding board and source of advice for decades. While individual board members have been exceedingly busy professionals, they always have been eager to share their time and expertise to help the fire protection engineering program be successful. The first chair of the Advisory Board was the late Herrick Drake, then President of Aetna Insurance Company. FM Global's Paul Croce chaired the Board in the 2004 Anniversary Year.

## ***Donors & Patrons***

Also of great significance have been the countless individuals, corporations and foundations which have provided various forms of financial support to the fire protection engineering program. Over \$4 million of cash contributions, pledges, trusts, equities and other assets were contributed to support the startup of the program.

Several permanent endowments totaling over \$3M were established including:

Distinguished Scholar Endowment  
Dorothy Simon Endowment  
Howard Emmons Distinguished Lecture Endowment  
Philip Buffinton Endowment  
Mickey Reiss Lectureship Endowment  
Robert W. Fitzgerald Scholarship Endowment  
Rolf Jensen Endowment  
Klares Memorial Scholarship

Sponsors also provide annual scholarship/fellowship gifts having the virtual effect of endowment income. These include:

Gerald Maatman Fellowship  
(James S. Kemper Foundation)

Percy Bugbee Fellowship  
(National Fire Protection Association)

John J. Jablonsky Scholarship  
(National Fire Protection Association)

Honeywell Scholarship

Marsh Scholarship

Figure 5 highlights some of the milestones of the first 25 years.

1968	Fire Research and Safety Act adopted by Congress, mandating study of American fire problem
1969	WPI Plan instituted
1973	<i>American Burning</i> released
1974	Professor Fitzgerald writes fire portion of multi-disaster design manual
1974	Fire Prevention and Control Act adopted by Congress, creating US Fire Administration and National Fire Academy
1975	Fitzgerald, Wilson, Zwiép, Bolz meet to discuss new concept at WPI
1976	Professors Fitzgerald and Zwiép propose a new program
1976	Student chapter of SFPE chartered
1978	Professor Lucht employed as first head of the Center for Firesafety Studies and FPE graduate degree program
1979	Faculty approves master of science in fire protection engineering
1979	Professor Barnett becomes part-time assistant director and part-time instructor, Mechanical Engineering
1980	First Firesafety Board of Advisors appointed
1980	First course offered by adjunct professor Edward Clougherty
1981	Dougal Drysdale writes <u>Introduction to Fire Dynamics</u> at WPI
1982	First full-time professor hired – R.L.P. Custer
1984	First full-time MS FPE graduates (Bielen)
1984	First part-time MS FPE graduates (Demers)
1984	Gamma Chapter of Salamander chartered
1989	The Big Bomb (see p. 26)
1989	Professor Barnett becomes full-time faculty member
1990	Professor Zalosh joins WPI full-time
1993	First distance learning course
1995	Professor Dembsey joins WPI full-time
1995	FPE enrolls over 100 students
1995	Fire Science Laboratory completed
1997	First advanced certificate awarded (Bellamy) via Distance Learning
1998	First graduate certificate awarded (Pabich) via Distance Learning
1999	First Ph.D. graduated (Pehrson)
2000	Professor Woycheese joins WPI full-time
2000	WPI graduates 249 <sup>th</sup> masters' student
2000	First MSFPE awarded to distance learner (Eckroth )
2003	Zalosh publishes <u>Industrial Fire Protection</u> textbook
2004	Fitzgerald publishes <u>Building Fire Performance Analysis</u> textbook
2003	FM Global gift received; Dembsey appointed FM Global Scholar
2004	Professor Lucht retires from FPE, becomes AVP University Relations
2004	Kathy Notarianni assumes Center directorship

***Figure 5. Historical Milestones***

The fire protection engineering program has come a long way since its meager beginnings a quarter century ago. During the first 25 years WPI graduates, students and faculty established a meaningful presence in the profession and provide another important voice for modern approaches to fire protection engineering, worldwide. But none of this progress would have been possible without the ongoing encouragement and support generously provide by uncounted individuals, foundations and corporations.

### ***Post Script: The Big Bomb***

In 1989, the tenth anniversary of the FPE degree program, WPI President Jon C. Strauss proposed to shut down the Center for Firesafety Studies. This not only caused disquiet among on-campus faculty, staff and students but also quickly evolved to be a bomb burst heard throughout the global fire community. There were considerable sensitivities to the prospect of shutdown given that degree programs at IIT and the University of Edinburgh had been abandoned by their respective university administrators in recent preceding years. The longstanding BS FPE program at the University of Maryland had been similarly threatened a time or two.

In his subsequent open letter to the fire community, Dr. Strauss began... “Colleges and university leaders across the United States are having to make tough decisions coping with severe budget issues”. In an effort to stimulate discussion on how to close a large budget deficit projected for the following year, he proposed several hypothetical budget reductions, including closure of the FPE program. Discussion was indeed stimulated with focus on a number of issues including the fundamental question of whether eliminating both fire related expenses and revenues would be a net gain or loss to the university’s bottom line.

This incident can serve as a note of warning to the FPE community and all universities that operate FPE degree programs. Severe budget problems continue to ravage both public and private academic institutions. And this will continue indefinitely. Non mainstream disciplines like FPE are good targets for budget cutting. This issue will not go away.

Fortunately, the issue was resolved in 1990. President Strauss’ open letter ended by saying he had authorized expansion of the FPE faculty payroll, evidence that, in his words...

“WPI is demonstrating its long-term commitment to the distinctive instruction and research programs of the Center for Firesafety Studies”.

May the WPI FPE program continue to evolve and flourish forever.

# # #