8620 N. New Braunfels Avenue, Suite 100 San Antonio, Texas 78217-6361 210.828.7533 voice 210.828.7534 fax www.PDIFire.com

Curriculum Vitae

Robert C. Andrews, Jr., P.E., B.Sc., M.Sc., DBA, FDIRDI, FIFireE, PMSFPE, EFO, CFO (former) Founder & Chairman

Education

Texas Registered Engineering Firm F-2816

2024 Cambridge Advanced Leadership Program (Cohort 24)

University of Cambridge Judge Business School Cambridge, England

2022 Doctor of Business Administration (DBA)

Temple University
Fox School of Business
Philadelphia, Pennsylvania

Dissertation title:

The Demise of the Lone Star Rail District: A Case Study in the Failure to Expand Passenger Rail Service in Texas

Dr. Stuart M. Schmidt, Advisory Chair, Human Resource Management

2008 Certificate Course in Railway Management (RMP)

Michigan State University East Lansing, Michigan

2002 Master of Science – Executive Fire Service Leadership (M.Sc.)

Grand Canyon University

Phoenix, Arizona

2002 Executive Fire Officer Program (EFO)

National Fire Academy Emmitsburg, Maryland

(Residency requirements completed 1988 – 1991)

1980 Bachelor of Science – Fire Protection Engineering (B.Sc.)

University of Maryland College Park, Maryland

1976 **Diploma**

Great Valley High School Malvern, Pennsylvania

Rev. 19 July 2024 Page 1 of 19

Professional Experience

Aug. 2021 – Present **2026 American Freedom Train, Inc.**

A Texas Non-Profit Corporation

San Antonio, Texas

President

Jul. 2019 – Present **Executive Rail**, a division of

The Catalpa Falls Group, LLC

Philadelphia, Pennsylvania & San Antonio, Texas

President

Mar. 1985 – Present **Protection Development, Incorporated**

San Antonio, Texas

Dec. 2023 – Present Founder & Chairman

Nov. 2004 – Dec. 2023 President & Chief Executive Officer

Principal Fire Protection Engineer Principal Rail Consultant (added 2009)

Sept. 2001 – Nov. 2004 Managing Partner (added to existing responsibilities)

Mar. 1985 – Sept. 2001 Founding Partner, Fire Protection Engineer, Vice President &

Corporate Secretary

Apr. 2005 – Present Bob Andrews Group, L.L.C.

San Antonio, Texas

Owner, President & CEO

Sept. 2003 – Present The Catalpa Falls Group, L.L.C.

San Antonio, Texas

Member, Managing Partner & Chief Engineer

Mar. 1999 – Jan. 2013 Industrial Emergency Services, L.L.C.

Baton Rouge, Louisiana

Mar. 2012 – Jan. 2013 Member – Board of Managers &

Fire Chief Emeritus

Jan. 2010 – Mar. 2012 Chief Executive Officer &

Fire Chief Emeritus

Mar. 1999 – Dec. 2009 President & Fire Chief Founder

Jan. 1986 – Mar. 1999 Refinery Terminal Fire Company

Corpus Christi, Texas

Vice President (General Manager) & Fire Chief

Rev. 19 July 2024 Page 2 of 19

Jan. 1982 – Dec. 1985 Celanese Chemical Company

Bishop, Texas

Fire Protection Engineer & Facility Fire Chief

Dec. 1980 – Dec. 1981 Marathon Oil Company

Findlay, Ohio

Associate Risk Engineer

Summer Internships

1980 Phoenix Fire Department

Phoenix, Arizona

Fire Protection Engineer - Intern

1977, 1978 & 1979 Factory Mutual Engineering Association

Philadelphia, Pennsylvania

Loss Prevention Engineer - Intern

Concurrent Academic (Teaching) Experience

July 2024 - Present

Durham University

The Durham Institute of Research, Development, and Invention (DIRDI) Durham, England

Visiting Fellow (FDIRDI)

Honored to be nominated by DIRDI Chairman and Director-General, Carl Stephen Patrick Hunter OBE, and subsequently appointed as a Visiting Fellow of the Institute.

Fellows play a vital role in shaping the research, discussions, and culture of the Institute. Visiting Fellows are individuals located outside of Durham who have made exceptional contributions to an academic field. Each Fellow is asked to simply endeavor and support, in whichever way he or she can, DIRDI's Five Aims, which are:

- 1. To achieve "Newtonian Discovery" fundamental research into the physical laws of the Universe, for the benefit of humankind.
- 2. To achieve "Edisonian Commercialisation" applied research in acoustics, electromagnetism, and information engineering, through enabling technological diversification.
- 3. To identify the "United Kingdom's Next Newton" (whomever they may be).
- 4. To identify future Nobel Prize Winners of Science at an early stage in their undergraduate academic careers and nurture them

Rev. 19 July 2024 Page 3 of 19

through their postgraduate, post-doctoral, associate professor and professorial careers.

5. To provide a gateway into academic research at Durham University for local people with inventions and inventive ideas, across the Northeast, so that their inventive ideas can be sifted, selected, realised and used to generate "economic hope" for many, where there is currently so little for so few. In time, we may also grow this nationally, since our belief is that inventive thought exists within everyone.

Mar. 2023 – Present

University of Maryland

College Park, Maryland
A. James Clark School of Engineering
Department of Fire Protection Engineering

Adjunct Professor

Served as a committee member and Symposium Chair for the NFPA / University of Maryland 2022 Ecosystem Symposium held in College Park in September of 2022. Actively involved in the planning of the next joint Ecosystem Symposium expected in 2024. Coach and mentor department students and alumni in the areas of business, leadership, entrepreneurship, and career planning. Counsel members of the fire service who are interested in considering the department's future on-line B.S. in Fire Protection Engineering degree. Perform teaching duties upon request.

Spring 2023

Temple University

Fox School of Business Philadelphia, Pennsylvania

Advisor – Capstone Project: "Communications Strategy Temple University Public Safety"

Management of Business Administration – Course BA 5287 – Fox Management Consulting Practicum. 3 Credit Hours

The Fox Management Consulting Practicum is the capstone experience for the Fox MBAs. It is designed to integrate and apply concepts and skills learned across the entire MBA. In the capstone, students combine theory, evidence, and experience to analyze and solve a strategic challenge in a rigorous, thoughtful way. This course is designed to help students structure unstructured strategic challenges; develop the ability to recognize and assess strategic opportunities; conduct top-notch market, industry, and competitive analysis; foresee strategic implementation issues; support strategic recommendations with financial decision models; manage clients and teams; and lead change by generating support for the recommendations. This course is also designed to produce useful, commercial-grade results for clients - who help in providing a rich and consequential learning opportunity for students.

Rev. 19 July 2024 Page 4 of 19

Spring 2023 The University of Texas at Austin

School of Architecture

Austin, Texas

Advisor – UT Community and Regional Planning Spring Practicum: "Positioning the Austin-San Antonio Corridor for High-Performance Intercity Rail". The project reports are available online at https://lnkd.in/g727kfWi.

Master of Science in Community and Regional Planning – Course CRP395C – Planning Studio. 3 Credit Hours

Dec. 2020 – May 2023 National Fire Academy

Emmitsburg, Maryland

Contract Instructor

Executive Fire Officer Program (EFOP)

Jan. 2023 – May 2023 Served as Mentor (non-paid) for a assistant chief fire officer

in the last semester of his Capstone project. My mentee was one of only six EFO graduates whose Capstone paper

received the 2023 Outstanding Research Award.

Aug. 2022 – Jan. 2023 Served as Executive Advisor (Professor) supervising the

graduate-level research of 4 chief fire officers and serving as second-reader for an additional 4 chief fire officers in course "M-5104 Applications in the Exercise of Leadership:

Capstone I."

June - Sep. 2021 Served as Executive Advisor (Professor) supervising the

graduate-level research of 13 chief fire officers in course "M-5105 Executive Fire Officer - Thesis - Semester 2 -

Research Proposal."

Jan. – July 2021 Served as Executive Advisor (Professor) supervising the

graduate-level research of 16 chief fire officers in course "M-5105 Executive Fire Officer - Thesis - Semester 1 -

Research Synopsis."

Concurrent Public Safety (Community Service) Experience

Sept. 2018 – Present Bexar County Fire Marshal's Office

San Antonio, Texas

Executive Advisor to the Fire Marshal & Command Staff

Deputy Fire Marshal (Non-Paid Peace Officer)

Fire Protection Engineer (Non-Paid)

Rev. 19 July 2024 Page 5 of 19

East Whiteland Volunteer Fire Association May 2017 – Dec 2017 Frazer, Pennsylvania Associate Member – Administration Member of the Apparatus Committee Nueces County Constable's Office - Precinct 2 * Jan. 1997 – May 2017 Corpus Christi, Texas (* formerly Precinct 8) Master Peace Officer & K-9 Handler Jan. 2007 – Mar. 2009 **Nueces County Sheriff's Office** Corpus Christi, Texas Major – Reserve Unit Commander Jan. 2006 - Mar. 2009 Jim Kaelin [for Nueces County Sheriff] Campaign Corpus Christi, Texas Campaign Manager Nov. 1990 – Dec. 1997 **Nueces County Constable's Office - Precinct 8** Corpus Christi, Texas Regular Peace Officer & K-9 Handler (01/02/91 – 01/01/97) Reserve Officer & K-9 Handler (11/28/90 – 01/02/91) Jan. 1990 – Nov. 1990 **Nueces County Sheriff's Office** Corpus Christi, Texas Reserve Officer (1/22/90 – 11/14/90) 1987 - 1988**Nueces County – City of Corpus Christi Local Emergency Planning Committee (LEPC)** Corpus Christi, Texas Co-chairperson Aug. 1976 – Dec. 1980 **College Park Volunteer Fire Department** College Park, Maryland Private, EMT, Chief's Aide, Driver, Sergeant, Lieutenant, Captain, and Training Officer 1976 - 1980Maryland Fire & Rescue Institute College Park, Maryland Student Assistant Sept. 1974 – Dec. 1980 East Whiteland Volunteer Fire Association Frazer, Pennsylvania Firefighter, Emergency Medical Technician (NREMT), Chief's Aide

Rev. 19 July 2024 Page 6 of 19

Boards & Committees (Professional and Charitable)

Jan. 2023 – Present Military Railroad Society

Gloucester, Virginia

Member, Board of Directors (Director of Strategic Planning)

June 2020 – Present The 1st and 2nd Biennial University of Maryland

NFPA Fire & Life Safety Ecosystem Symposium

Presented by the University of Maryland Department of Fire Protection Engineering

Member of the Symposium Committee and 2022 and 2024 Conference

Chair

July 2017 – July 2018 Institution of Fire Engineers

Stratford-upon-Avon, United Kingdom

Member of the Centenary Committee

July 2016 – Present National Fire Heritage Center

Emmitsburg, Maryland

Jan. 2023 – Present Member, Board of Directors

July 2016 – Jan. 2023 Trustee

April 2016 – Mar 2018 Institution of Fire Engineers (United Kingdom)

United States of America Branch

Board of Directors - Member-at-Large

May 2014 – June 2023 Rail Industry Fire Association (United Kingdom)

Member of the Management Committee (2022 to June 2023)

USA Advocate (2014 to June 2023)

June 2012 – June 2018 Abraham Lincoln Foundation of the Union League of

Philadelphia

Philadelphia, Pennsylvania

Trustee and Member of the Finance Committee and the Art Collections

Committee

May 2012 – May 2023 Legacy Campaign for a Professor of the Practice

and the

James A. Milke, Ph.D. Endowed Professorship of Practice in Fire

Protection Engineering

Department of Fire Protection Engineering

A. James Clark School of Engineering

University of Maryland College Park, Maryland

Rev. 19 July 2024 Page 7 of 19

Jan. 2023 – May 2023 Financial Contributor and Committee Member

Called back into service, supported an effort to rename the professorship in honor of long-term serving Fire Protection Engineering Professor and Chair James A. Milke. Assisted in raising an additional \$500,000 in gifts and pledges, bringing the value of the endowment to over \$3 million.

The James A. Milke, Ph.D. Endowed Professorship of the Practice in Fire Protection Engineering will support an endowed professorship in the Department of Fire Protection Engineering. Funds may be used for, but not limited to salary support, industry-related student projects, and industry-related travel. Funds may be used for faculty and staff salary enhancements, stipends, or reimbursement of base salary costs to the administrating unit at the direction and approval of the Dean of their designee.

May 2012 – July 2018 Co-Founder, Co-Chair, and Financial Contributor

Along with Arthur E. Cote '65 and other alumni from the Department of Fire Protection Engineering established the Department of Fire Protection Engineering Professorship in October 2012 to support a professorship in the department of Fire Protection Engineering in the A. James Clark School of Engineering. The initial fundraising effort raised \$2.5 million.

Licenses, Certifications, Professional Societies, and Awards

Licenses

1990* – Present Licensed Peace Officer

Texas Commission on Law Enforcement

* Inactive as of 10/1/2017(retired) - Reactivated 9/12/2018

1985 – Present Licensed Professional Engineer (P.E.)

Texas Board of Professional Engineers & Land Surveyors

Professional Engineer No. 57907 – Fire Protection Branch Specialty

Certifications

2003 - 2006 Chief Fire Officer Designation (CFO)*

Commission on Chief Fire Officer Designation

*currently "retired" status

2001 Master Peace Officer Certificate

Texas Commission on Law Enforcement

2001 Instructor Certificate

Texas Commission on Law Enforcement

Rev. 19 July 2024 Page 8 of 19

Professional Engineering & Business Societies

2022 – Present Lifetime Member – Beta Gamma Sigma

The International Business Honor Society St. Louis, Missouri

2017 - 2020 **Member (MIoD)**

Institute of Directors London, United Kingdom

2016 – Present Fellow (FIFIreE) – Elected April 2016 2003 – 2016 Member (MIFireE) – Elected August 2003

Institution of Fire Engineers

Stratford-upon-Avon, United Kingdom

2003 – Present **Professional Member (PMSFPE)**

Society of Fire Protection Engineers Bethesda, Maryland

(Associate Member 1981 – 2003)

1979 Member (and Past President)

Salamander Honorary Fire Protection Engineering Society Beta Chapter

University of Maryland College Park, Maryland

Awards

2021 Inductee # **0098**

Hall of Legends, Legacies & Leaders National Fire Heritage Center Emmitsburg, Maryland

"In recognition of professional achievements, significant contributions and distinguished service to the Nation's Fire & Emergency Services and fire protection disciplines."

2017 Life Member

National Fire Protection Association Quincy, Massachusetts

"In recognition of a lasting commitment to protecting lives and property from fire, electrical and related hazards, the National Fire Protection Association hereby recognizes you as a Life Member with all of the rights and privileges thereto – June 19, 2017". Awarded by Jim Pauley, NFPA President & Chief Executive Officer.

2016 **Dean's Circle** – *Inaugurated November 18, 2016*

A. James Clark School of Engineering University of Maryland College Park, Maryland

"The Dean's Circle is a community of philanthropists whose vision and contributions have empowered the Clark School's ascent. The A. James Clark School of Engineering and Dean Darryll J. Pines would like to thank and recognize [those] individual donors for their generous support and significant investment in our college."

2016 Appreciation Award (Plague)

Szkoła Główna Służby Pożarniczej (SGSP) (Main School of Fire Service) Warsaw, Poland

Rev. 19 July 2024 Page 9 of 19

"In appreciation for cooperation with the POLAND – USA – INFIRENET PROJECT. 1 October 2016"

2003 Certificaat Met Lof – Politiehond II

Koninklijke Nederlandse Politiehond Vereniging (KNPV) (Royal Dutch Policedog Association)

"...at the examination held in Almere (Netherlands) on 26 July 2003, the K-9 named Bronko with handler R. C. Andrews, Jr. earned a Certificate Policedog II (advanced) Met Lof (with honors) having earned a total of 433 points [out of 455 points possible]"

2003 Academic Recognition Award (Medal)

Texas Commission on Law Enforcement

"In acknowledgement of Academic Achievement..."

2002 Advanced K-9 Patrol Certificate (with honors)

Nueces County Constable Department – Precinct 2

Awarded to the Patrol K-9 Team of Deputy Robert Andrews and K-9 Bronko

1999 Certificate of Appreciation

United States Army Special Operations Command (Delta Force)

"your assistance made an immeasurable contribution to the successful accomplishment of all our training objectives...."

1998 Certificate of Appreciation United States Coast Guard MSO. Corpus Christi, Texas

"In appreciation of participating as a guest speaker at the 1st Annual South Texas Coastal Zone Marine Fire Fighting Symposium"

1998 Appreciation Award (Plaque) Singapore Civil Defense Force. Singapore, Singapore

"in appreciation for services rendered"

1997 Corporate Resolution (Department-wide Commendation)

Refinery Terminal Fire Company. Corpus Christi, Texas

"Whereas, the Refinery Terminal Fire Company employees, who responded to and after the 12 May 1997 CITGO Fire, performed in an exemplary manner during the response and recovery phases; and displayed professionalism, energy, strength, bravery, and judgement..."

1996 Combat Cross (Medal) & Certificate of Commendation

Nueces County Precinct 8 Constable's Office Corpus Christi, Texas

"for outstanding service and contributions to the standoff at Port Aransas, Texas on December 23, 1996, for maintaining a calm professional demeanor, while drawing fire from an armed adversary while attempting to effect an arrest"

Related citations also received from:

Port Aransas (TX) Police Department:

Rev. 19 July 2024 Page 10 of 19

"...appreciation for the personal effort you made during the shooting incident and subsequent manhunt of December 22-23, 1996 in Port Aransas, Texas. Your dedication to law enforcement and the professionalism you displayed was evident during this armed standoff..."

1996 Certificaat – Politiehond II

Koninklijke Nederlandse Politiehond Vereniging (KNPV) (Royal Dutch Policedog Association)

"...at the examination held in Hilversum (Netherlands) on 26 July 1996, the K-9 named Robby with handler R. C. Andrews, Jr. earned a Certificate Policedog II (advanced) having earned a total of 399 points"

1995 Letter of Appreciation

U. S. Department of Justice Federal Bureau of Investigation

"....along with K-9 Argos... assisted the FBI with the arrest of Carl Sidney Race.Race was indicted...on two counts of Deliberate Homicide, two counts of Attempted Homicide and one count of Felony Arson."

"The arrest of Race took place without incident. There is no doubt in my mind that a significant reason for the successful outcome was the assistance and professionalism demonstrated by [your deputies]."

"Deputy Constables Cox, Marsh, Whitmore, Johnson, and Andrews are not only a credit to your office but are also a credit to law enforcement"

1993 Certificate of Service

Nueces County Precinct 8 Constable's Office Corpus Christi, Texas

"for outstanding service and contributions"

1993 Letter of Appreciation

Department of the Treasury U. S. Customs Service

"....express our appreciation to Deputy Constable Robert Andrews and his K-9 partner Argos, for their dedication, skill, perseverance, and cooperative spirit"

"During the periods of June, July, and August of 1993 Deputy Robert Andrews and his partner "Argos" assisted the U.S. Customs Service in targeting and examining commercial vessels in searching for contraband. Their efforts contributed significantly in deterring drug smuggling in South Texas. Deputy Robert Andrews' knowledge, skill, and participation is both noteworthy and appreciated."

1991 Certificate of Appreciation – Reserve Deputy of the Year 1991

Nueces County Precinct 8 Constable's Office Corpus Christi, Texas

1990 Executive Fire Officer Program – 1990 Outstanding Research Award National Fire Academy Emmitsburg, Maryland

Rev. 19 July 2024 Page 11 of 19

"A study to determine the feasibility of utilizing the incident command system as adopted by the National Fire Academy for the command and control of resources at emergency incidents at refining and petrochemical facilities in Corpus Christi, Texas."

1979 Chief's Award

College Park Volunteer Fire Department College Park, Maryland

1978 Local Firefighter of the Year Award Jos. Schlitz Brewing Company

Maryland State Firemen's Association

1977 Lifesaving Recognition

College Park Volunteer Fire Department College Park, Maryland

"in recognition of his assistance in a successful rescue at a house fire on February 4, 1977"

Publications, Presentations, Interviews, and Technical Reviews – (a selection)

Publications

- Andrews, R. C., (2022, August 1) Remedial Actions to Assure Fire and Life Safety in Heritage Passenger Cars A USA Case Study. [Submitted for publication]. Modern Fire Protection Directions of Rolling Stock (a monograph in process). Instytut Kolejnictwa, Warsaw, Poland.
- Andrews, R. C., (2022, May). The Demise of the Lone Star Rail District: A Case Study in the Failure to Expand Passenger Rail Service in Texas. A Dissertation Submitted to the Temple University Graduate Board in Partial Fulfillment of the Degree Doctor of Business Administration. Temple University. Philadelphia, PA. (197 pages). https://www.proquest.com/docview/2667742240/B0CA067274674C44PQ/2
- Andrews, R. C., (2020, October 2). The Demise of the Lone Star Rail District: A Case Study in the Failure to Expand Passenger Rail Service in Texas. A Dissertation Proposal Submitted to the Temple University Graduate Board. Temple University. Philadelphia, PA. (133 pages).
- Andrews, R.C., Jr., Brooks, Paul D., & Laforet, Chris. (2017, November). *Custom Promotional and Recruitment Video*. Institution of Fire Engineers USA Branch. Produced by Shuttle Release Films. See: https://www.ife-usa.org/news/entry/institution-of-fire-engineers-usa-branch-promotional-video [05:09].
- Andrews, R. C., Jr. (2013, February). *Iowa Pacific Holdings, LLC Failed Axle Investigation, Passenger Car "Baton Rouge" SLRG 9115 Amtrak 800028* [draft report]. PDI Rail Project No. R12-041. San Antonio, TX: PDI Rail Solutions A Division of Protection Development, Incorporated (Report and Appendices 331 pages).
- Andrews, R. C., Jr. (2012, September 23). Saratoga & North Creek Railway System Safety Program Plan (In accordance with the American Public Transit Association (APTA) Manual for the Development of System Safety Program Plans for Commuter Railroads (dated May 15, 2006). PDI Rail Project No. R11-011. San Antonio, TX: PDI Rail Solutions A Division of Protection Development, Incorporated (48 pages).

Rev. 19 July 2024 Page 12 of 19

- Andrews, R. C., Jr. (2012, July 30). Saratoga & North Creek Railway Fire Safety Analysis (In Accordance with 49 CFR 238.103(d) "Fire Safety" and APTA RP-PS-005-00 "Recommended Practice for Fire Safety Analysis of Existing Passenger Rail Equipment"). PDI Rail Project No. R11-009. San Antonio, TX: PDI Rail Solutions A Division of Protection Development, Incorporated (106 pages).
- Andrews, R. C., Jr. (2012, March 8). Michigan Department of Transportation Ann Arbor to Detroit Regional Rail Project: Fire Safety Analysis Revision 1 (In accordance with 29 CFR 238.103(d) "Fire Safety" and APTA RP-PS-005-00 "Recommended Practice for Fire Safety Analysis of Existing Passenger Rail Equipment"). PDI Rail Project No. R11-016. San Antonio, TX: PDI Rail Solutions A Division of Protection Development, Incorporated (Report 41 pages with cover. Appendices 229 pages).
- Andrews, R. C., Jr. (2012, February 24). Saratoga and North Creek Railway Joint Emergency Preparedness Plan Final (In accordance with 29 CFR 239.101 "Emergency Preparedness Plan). PDI Rail Project No. R11-009. San Antonio, TX: PDI Rail Solutions A Division of Protection Development, Incorporated (70 pages).
- Andrews, R. C., Jr. (2011, September). Saratoga and North Creek Railway Inspection, Testing, and Maintenance Plan (In Accordance with 49 CFR 238.107 "Inspection, testing, and maintenance plan") [Draft Report]. PDI Rail Project No. R11-006. San Antonio, TX: PDI Rail Solutions A Division of Protection Development, Incorporated (118 pages).
- Andrews, R. C., Jr. (2011, August). Saratoga and North Creek Railway Training, Qualification, and Designation Program (In Accordance with 49 CFR 238.109 "Training, qualification, and designation program") [Draft Report]. PDI Rail Project No. R11-007. San Antonio, TX: PDI Rail Solutions A Division of Protection Development, Incorporated.
- Andrews, R. C., Jr. (2011, June 11). Saratoga and North Creek Railway Pre-Revenue Service Acceptance Testing Plan (In Accordance with 29 CFR 238.111 "Pre-Revenue Service Acceptance Testing Plan"). PDI Rail Project No. R11-008. San Antonio, TX: PDI Rail Solutions A Division of Protection Development, Incorporated (3 pages).
- Andrews, R. C., Jr. (2009, December 22). Rio Grande Scenic ski train: Joint Emergency Preparedness Plan Revision 1 (In accordance with 29 CFR 239.101 "Emergency Preparedness Plan). PDI Rail Project No. R09-004. San Antonio, TX: PDI Rail Solutions A Division of Protection Development, Incorporated (114 pages).
- Andrews, R. C., Jr., & Payne, G. F. (2009, December 11). *Rio Grande Scenic ski train: Pre- Revenue Service Acceptance Testing Plan Revision 1 (In accordance with 29 CFR 238.111 "Pre-Revenue Service Acceptance Testing Plan)*. PDI Rail Project No. R09-009. San Antonio, TX: PDI Rail Solutions A Division of Protection Development, Incorporated (3 pages).
- Andrews, Bob & Payne, George (2007, November / December). The "Chippewa Creek's" Cross-Country Adventure... *Information Exchange*, 25, 1-6. Railroad Passenger Car Alliance.
- Andrews, R. C., Jr. (2006, September 13). *Music City Star Commuter Service: Fire Safety Analysis* (In accordance with 49 CFR 238.103(d) "Fire Safety" and APTA RP-PS-005-00 "Recommended Practice for Fire Safety Analysis of Existing Passenger Rail Equipment"). PDI Project No. 06-189. San Antonio, TX: Protection Development, Incorporated (78 pages).
- Andrews, R. C., Jr. (2006, March 18). On-Site Fire Safety Survey for Marathon E.G. Production Limited (MEGPL), Atlantic Methanol Production Company (AMPCO), and EG Global LNG

Rev. 19 July 2024 Page 13 of 19

- Services, Limited (EGLNG) January 18 31, 2006 [Bioko Island, Equatorial Guinea]. PDI Project No. 06-017. San Antonio, TX: Protection Development, Incorporated (42 pages).
- Deonarine, L. D. & Andrews, R. C., Jr. (2003, March 31). Foam Requirements for Fighting Fires in Open-Top, Floating Roof Petroleum Storage Tanks A report prepared for the Corpus Christi Fire Department. Corpus Christi, TX: Industrial Emergency Services, L.L.C.
- Andrews, R. C., Jr., Vallone, P. A., & Cochrane, J. R. (2002, August 14). *An independent fire protection & life-safety analysis of the U.S.S. Lexington Museum on the Bay Corpus Christi, Texas.* San Antonio, TX: Cochrane & Associates.
- Andrews, R. C., Jr. (2002, May). *Innovations & challenges in industrial emergency response* [Course Text]. Dammam, Saudi Arabia: Gulf Industrial Emergency Services, Ltd.
- Andrews, R. C., Jr. (2002, January). *Preliminary specifications for a fire response vessel for the Port of Greater Baton Rouge, Louisiana* [draft report]. Corpus Christi, TX: Industrial Emergency Services, L.L.C.
- Andrews, R. C., Jr. (2001, October). A feasibility study to determine the economics of Industrial Emergency Services, L.L.C. purchasing an existing fire training academy in Axis, Alabama. Emmitsburg, MD: National Fire Academy.
- Andrews, R. C., Jr. (Ed.) (2001, March). *IES Disaster Prevention Seminar* [Seminar Text]. Corpus Christi, TX: Industrial Emergency Services, L.L.C.
- Andrews, R. C., Jr. (1992, November-December). The environmental impact of firefighting foams. Industrial Fire Safety, 1, 26-31.
- Andrews, R. C., Jr. (1992, May). The environmental impact of firefighting foam concentrates contemporary management considerations for the chief fire executive. Emmitsburg, MD: National Fire Academy.
- Andrews, R. C., Jr. (1990, June). A study to determine the feasibility of utilizing the incident command system as adopted by the National Fire Academy for the command and control of resources at emergency incidents at refining and petrochemical facilities in Corpus Christi, Texas. Emmitsburg, MD: National Fire Academy.
- Andrews, R. C., Jr. (1989, June). How to document a "save". Industrial Fire World, 4, 19-21.
- Andrews, R. C., Jr. (1985, June). Management for the mid-eighties: how successful fire service leaders are meeting the challenge. *Firehouse*, 10, 98-100+.

Presentations

- Andrews, R. C., Jr. (2022, September 28-29). NFPA / University of Maryland 2022 Ecosystem Symposium (Symposium Chair). The Hotel in College Park, MD.
- Andrews, R. C., Jr. (2022, May 10). Remedial Actions to Assure Fire and Life Safety in Heritage Passenger Cars A USA Case Study. Vth International Conference Modern Trends of Fire Protection in Rolling Stock 10-11 May 2022. Instytut Kolejnictwa. Warsaw Marriott Hotel and The Railway Research Institute. Warsaw, Poland.
- Andrews, R. C., Jr. (2020, Nov. 18). Executive Leadership Lecture Series: Managing the Forks in the Road: Managerial vs. Technical Personal Development (40 years of personal choices).

Rev. 19 July 2024 Page 14 of 19

- [Webinar]. Department of Fire Protection Engineering, A. James Clarke School of Engineering, University of Maryland, College Park, MD. https://fpe.umd.edu/exec-leadership-series
- Andrews, R. C., Jr. (2020, July 5). *The Refurbishment of Rail Vehicles: Scrap or Keep? A USA Case Study.* [Webinar]. 2020 Online AGM and CPD Technical Seminar. Rail Industry Fire Association. http://www.rifa-rail.co.uk/news/2014/10/19/making-handouts-from-seminars-available-to-bona-fide-members.html
- Andrews, R. C., Jr. (2020, February 25). *The Refurbishment of Rail Vehicles: Scrap or Keep? A USA Case Study.* Fire Protection of Rolling Stock 2020. Arena International. Melia Berlin. Berlin, Germany.
- Andrews, R. C., Jr. (2017, March 20). 2016 USA Fire Chief Study Group to Poland A Report to the Membership. 2017 Institution of Fire Engineers USA Branch AGM & Education Conference. Anaheim, CA
- Andrews, R. C., Jr. (2016, September 29). *Use of the ICS System and Mutual Aid in Catastrophic Events*. 2016 USA Fire Chiefs Study Group in Poland Polish-American Seminar in the INFIRENET Project Exchange of Experiences. Co-Sponsored by the Institution of Fire Engineers United States of America Branch and The Main School of Fire Service. Warsaw, Poland.
- Andrews, R. C., Jr. (2014, September 11). Collaborative, Cost-Shared Emergency Response Programs – The Corpus Christi, Texas USA Cooperative Experience – A Possible Solution for Crude-Oil-by-Rail? 2014 Alberta Industrial Fire Protection Association, Bi-Annual September Meeting, Calgary, Alberta Canada
- Andrews, R. C., Jr., & Goldwater, S. O. (2014, March 5). Testimony Before the Commonwealth of Pennsylvania House of Representatives Veterans Affairs and Emergency Preparedness Committee -- Emergency Preparedness and Public Safety Implications for the Transportation of Crude Oil Across the Commonwealth. Eddystone Fire Company #1, Eddystone, PA
- Andrews, R. C., Jr. (2013, March 21). Achieving cost effective fire safety in heritage passenger carriages through innovative application of remediation techniques and countermeasures a US case study. Fire Protection of Rolling Stock 2013, London, U.K.
- Andrews, R. C., Jr. (2013, January 18). *Progress Report Failed Axle Investigation "Baton Rouge" SLRG 9115 800028.* Railroad Passenger Car Alliance (RPCA) Annual Conference, Buffalo, NY.
- Andrews, R. C., Jr. (2006, March 29). Oversees Employment What you always wanted to know? 2006 Industrial Fire World Conference, Baton Rouge, LA.
- Andrews, R. C., Jr. (2002, May 4). *Innovations & Challenges in Industrial Emergency Response.* A seminar conducted by Gulf Industrial Emergency Services, Ltd., Dhahran, Saudi Arabia.
- Andrews, R. C., Jr., Davis, L.W., & Deonarine, L. G. (2001, August 29-31). Command Team Retreat for the Houston (TX) Fire Department. A management retreat facilitated by Industrial Emergency Services, L.L.C., Kemah, TX.
- Andrews, R.C., Jr. (2001, March 23). *If we don't learn from our past mistakes, we are destined to repeat them.* IES Disaster Prevention Seminar. Symposium conducted by Industrial

Rev. 19 July 2024 Page 15 of 19

- Emergency Services, L.L.C. in cooperation with the St. James Mutual Aid Organization, Baton Rouge, LA.
- Andrews, R. C., Jr. (1998, April 20-22). *Live fire training & simulators for today's industrial fire teams.* Industrial Fire Journal Singapore Conference. Symposium sponsored by Industrial Fire Journal, Singapore, Singapore.
- Andrews, R. C., Jr. & White, D. (1992, September 17-19). *Industrial Fire Brigade & Fire Department Interface*. IMS Seminar Issues...Ideas...& Making IMS Work. Symposium hosted by the Phoenix Fire Department, Phoenix, AZ.
- Andrews, R. C., Jr. (1991, May 13-15). Organization for Emergency Response. Second International Oil and Petrochemical Forum. Sponsored by Angus Fire, Reims, France.

Interviews

- Nowlin, S. (2014, July 17). Five Minutes with Bob Andrews, CEO of the Bob Andrews Group. *San Antonio Business Journal*.
- Walters, P. (2001, August). Entrepreneur profile Bob Andrews, President and Fire Chief, Industrial Emergency Services, L.L.C., *Business & Industry Connection*, 18, 20.
- Turnbull, A. (2000, June). Outsourcing Fire Response to Industry The IFJ Interview. IFJ editor Aidan Turnbull interviews IES Fire Chief Bob Andrews about the current US trend in the privatization of industrial fire brigades. *Industrial Fire Journal*, 39, 43-45.
- Turnbull, A. (1997, December January). Texas Refinery Special IFJ talks to Fire Chief Andrews about the role of the Refinery Terminal Fire Company at Corpus Christi, Texas, USA, in fighting storage tank fires. *Industrial Fire Journal*, 25, 42-44

Technical Reviews

- Noll, G. G., Hildebrand, M. S., & Yvorra, J. (2005). *Hazardous Materials: Managing the Incident (Third Edition)*. Chester, MD: Red Hat Publishing Company, Inc.
- Brunacini, A. V., (2002). *Fire Command Second Edition*. Quincy, MA: National Fire Protection Association.
- Emergency Film Group (Producer). (1997). *Petroleum Storage Tanks*. [Motion picture]. (Available from Emergency Film Group, 140 Cooke Street, Edgartown, MA 02539-1928).
- Hildebrand, M.S., & Noll, G. G. (1997). *Storage Tank Emergencies*. Annapolis, MD: Red Hat Publishing.
- Hildebrand, M. S., Noll, G. G., & Yvorra, J. G. (1995). *Hazardous Materials: Managing the Incident (Second Edition*). Stillwater, OK: Fire Protection Publications.

Courses & Conferences Attended (a selection)

Sept. 2022 NFPA / University of Maryland 2022 Ecosystem Symposium September 28-29 September 2022 (Symposium Chair). The Hotel in College Park, MD.

Rev. 19 July 2024 Page 16 of 19

- May 2022 Remedial Actions to Assure Fire and Life Safety in Heritage Passenger Cars A USA Case Study. Vth International Conference Modern Trends of Fire Protection in Rolling Stock 10-11 May 2022. Instytut Kolejnictwa. Warsaw Marriott Hotel and The Railway Research Institute. Warsaw, Poland.
- Nov. 2020 Online Research Ethics Course. Practical Ethics Center at the University of Montana. November 29-30, 2020. Retrieved from: https://ori.hhs.gov/education/products/montana_round1/research_ethics.html
- Nov. 2020 Human Research Social / Behavioral Research Course Refresher Course Temple University. Collaborative Institutional Training Initiative (CITI Program). November 20, 2020.
- Nov. 2020 Human Research Practice Runs Training Basic Course Temple University. Collaborative Institutional Training Initiative (CITI Program). November 19, 2020.
- Jul. 2020 Online AGM and CPD Technical Seminar. Rail Industry Fire Association. [Webinar]. July 9, 2020.
- Feb. 2020 Fire Protection of Rolling Stock 2020. Arena International. Melia Berlin. Berlin, Germany. February 25-26, 2020.
- Dec. 2019 *2019 Passenger Rail Seminar*. Washington, D.C. Federal Bar Association. November 15, 2019.
- Jul. 2017 Annual General Meeting and International Conference "Learning lessons, sharing knowledge, saving lives, reducing losses". Manchester, U.K. Institution of Fire Engineers. July 11-12, 2017
- Mar. 2017 2017 Annual General Meeting and Education Conference. Anaheim, CA. Institution of Fire Engineers USA Branch. March 20, 1017
- Mar. 2017 Fire Protection of Rolling Stock Berlin, Germany. Arena International. March 1-2, 2017
- Sep. 2016 2016 USA Fire Chiefs Study Group in Poland Polish-American Seminar in the INFIRENET Project Exchange of Experiences. Warsaw, Poland. Co-Sponsored by the Institution of Fire Engineers United States of America Branch and The Main School of Fire Service [Poland]. September 26 October 5, 2016.
- Jul. 2016 Annual General Meeting and International Conference "Fire Engineering's Contribution to World Cities". The Guildhall, London, U.K. Institution of Fire Engineers. July 27-28, 2016
- Feb. 2015 NFPA 13 Installation of Sprinkler Systems Seminar Houston, TX. National Fire Protection Association. February 23-25, 2015
- Sep. 2014 Alberta Industrial Fire Protection Association Bi-Annual September Meeting Calgary, Alberta Canada. September 10-11, 2014
- Jun. 2014 *Crude Oil by Rail Conference & Expo* Arlington, VA. Railway Age Magazine. June 12-13, 2014
- Mar. 2013 Fire Protection of Rolling Stock London, U.K. Arena International. March 21-22, 2013

Rev. 19 July 2024 Page 17 of 19

Jun.	2013	2013 APTA Rail Conference – Philadelphia, PA. American Public Transportation Association. June 2-5, 2013
Nov.	2012	Railway & Mass Transit Interiors Technology and Design Expo – Boston, MA. October 24-26, 2012.
Mar.	2012	Fire Protection of Rolling Stock – Brussels, Belgium. Arena International. March 21-22, 2012
Oct.	2011	18th Annual Conference Passenger Trains on Freight Railroads – Washington, D.C. Railway Age Magazine. October 24-25, 2011.
Nov.	2011	Railway Interiors Expo – Cologne, Germany. November 15-17, 2011
Oct.	2009	16th Annual Conference Passenger Trains on Freight Railroads – Washington, D.C. Railway Age Magazine. October 19-20, 2009
Nov.	2008	Railway Interiors Expo – Amsterdam, Netherlands. November 4-6, 2008
Sep.	1981	School of Offshore Operations – Houston, TX, The University of Texas at Austin, Division of Continuing Education, Petroleum Extension Service
Apr.	1981	Graduate, Ansul Fire Training School - Fire Technology Center, Marinette, WI
Nov.	1985	Level 2 of the Supervisory Training Seminar – Bishop, TX., Celanese Chemical Company, Inc.
Feb.	1984	Level 1 of the Supervisory Training Seminar – Bishop, TX., Celanese Chemical Company, Inc.

Memberships

American Politiehond Association

International Association of Fire Chiefs (Life Member)

Institution of Fire Engineers (International & USA Branch)

Society of Fire Protection Engineers

National Fire Protection Association (Life Member)

Combined Law Enforcement Associations of Texas (CLEAT) (Texas Licensed Peace Officer member)

Railroad Passenger Car Alliance (RPCA)

The Union League of Philadelphia

The Petroleum Club of San Antonio

University of Maryland Alumni Association (Life Member)

Rev. 19 July 2024 Page 18 of 19

Dean's Circle – A. James Clark School of Engineering University of Maryland, College Park, Maryland

Church of the Good Samaritan, Paoli, Pennsylvania

Former Memberships

Koninklijke Nederlandse Politiehond Vereniging (KNPV) (Royal Dutch Policedog Association) – Member from 1991 to 2023

Rail Industry Fire Association (RIFA)

Texas Fire Protection Association

Fire Department Safety Officers Association

PHDC Eemland – Baarn, The Netherlands
(KNPV Policedog Training Club in Region Utrecht)

National Police Canine Association

National Narcotic Detector Dog Association

The Institute of Directors, London (2017-2020)

Texas Fire Chiefs Association

Rev. 19 July 2024 Page 19 of 19