

Name: Constantine P. Sarkos
Manager, Fire Safety Branch
FAA William J. Hughes Technical Center
Atlantic City Airport, NJ

Education

B.S., Mechanical Engineering, Rutgers, 1963

M.S., Mechanical Engineering, Rutgers, 1965

Honorary Societies:

Pi Tau Sigma (Mechanical Engineering)

Pi Mu Epsilon (Mathematics)

Tau Beta Pi (Engineering)

Professional Experience

1995 - Present Manager, Fire Safety Section, FAATC (Realignment)

1985 - 1995 Manager, Fire Safety Branch, FAATC

1981 - 1985 Program Manager, Fire Safety Branch, FAATC

1977 - 1981 Technical Program Manager, Fire Safety Branch, FAATC

1973 - 1977 Assistant Technical Program Manager, Fire Safety Branch, FAATC

1969 - 1973 Project Manager, Fire Safety Branch, FAATC

1965 - 1969 Engineer, Theoretical Fluid Mechanics, G.E. Re-entry Systems Department,
King of Prussia, PA

Awards

ARA Award for Safety/Security, 1998

Technical Program Award, 1998

Professional Journal Award, 1998

Superior Achievement Award, 1997

Technology Transfer Award, 1996

U.S. Space Foundation/NASA Hall of Fame, 1996

ARA Technical Excellence Award, 1996

Superior Accomplishment Award, 1995

Aircraft Rescue and Firefighting Working Group Certificate of

Technical Accomplishment, 1994

Civil Reserve Air Fleet Award for Outstanding Contribution to FAA Mission in Support of
Operation Desert Storm/Shield, 1992

AXD Technical Publication Award, 1993

Technical Publication Award, 1993

Superior Accomplishment Award, 1992

Superior Accomplishment Award, 1992

Special Achievement Award, 1992

AXD Vision Award, 1991

DOT Secretary "Way to Go" Pin, 1991

DOT Secretary's Award for Meritorious Achievement, 1987

Special Achievement Award, 1987

Technical Publication Award, 1986
Professional Society Award, 1986
Technical Report Award, 1985
Special Award for Professional Achievement and Excellence, 1984
Quality Increase, 1983
Professional Society Award, 1983
Professional Journal Award, 1981
Professional Journal Award, 1980
Distinguished Employee of the Year (Technical) Award, 1979
Special Achievement Award, 1977

Professional Society Memberships

National Fire Protection Association

Technical Papers and Reports:

Sarkos, C.P., "Past Accomplishments and Future Directions in Aircraft Fire Safety R&D," Proceedings of the Fire and Explosions Conference, Royal Aeronautical Society, London, United Kingdom, October 27, 1999.

Sarkos, C.P., "Future Trends in Aircraft Fire Safety R&D," Proceedings of the International Aircraft Fire and Cabin Safety Research Conference, Atlantic City, NJ, November 16-20, 1998.

Sarkos, C.P., "Fire Test Analysis of Post Transport Aircraft Accidents: Manchester, 1985 and ValuJet, 1976," Proceedings of the International Conference in Aviation Fire Protection, National Fire Protection Association, University of Maryland, September 21-24, 1998.

Blake, D., Marker, T., Hill, R., Reinhardt, J., and Sarkos, C.P., "Cargo Compartment Fire Protection in Large Commercial Transport Aircraft," FAA, Report DOT/FAA/AR-TN98/32, July 1998.

Marker, T.R. and Sarkos, C.P., "Full-Scale Test Evaluation of Aircraft Fuel Fire Burnthrough Resistance Improvements," 42nd International SAMPE Symposium and Exhibition, Anaheim, CA, May 4-8, 1997.

Sarkos, C.P., Hill, R.G., Blake, D. and Marker, T.R., "Evaluation of Halon Replacement Agents in Commercial Aircraft Applications," National Fire Protection Research Foundation, Fire Suppression and Detection Symposium, Orlando, FL, February 13-14, 1997.

Sarkos, C.P., "Future Trends in Aircraft Fire Safety R&D," White House Commission/George Washington University, International Conference on Aviation Safety and Security in the 21st Century, Washington, D.C., January 13-15, 1997.

Sarkos, C.P., "Application of Full-Scale Fire Tests to Characterize and Improve the Aircraft Postcrash Fire Environment", Journal of Toxicology, Vol. II5, Nos. 1-3, December 31, 1996.

Hill, R.G. and Sarkos, C.P., "Evaluation of Halon Replacement Agents in Transport Aircraft", AGARD Meeting on Aircraft Fire Safety, Dresden, Germany, October 14-16, 1996.

Sarkos, C.P., "A Review of Progress and Future Trends in Aircraft Fire Safety R&D", Keynote Address, AGARD Meeting on Aircraft Fire Safety, Dresden, Germany, October 14-16, 1996.

Marker, T.R., Sarkos, C.P. and Hill, R.G., "Water Spray System Development and Evaluation for Enhanced Post Crash Cabin Fire Survivability and In-Flight Fire Protection in Cargo Compartments," AGARD Meeting on Aircraft Fire Safety, Dresden, Germany, October 14-16, 1996.

Sarkos, C.P., "The Effect of Cabin Materials on Aircraft Postcrash Fire Survivability," Society of Plastics Engineers Annual Technical Conference, Indianapolis, IN, May 5-9, 1996.

Sarkos, C.P., "Future Fire Safety R&D," International Conference on Cabin Safety Research," Atlantic City, NJ, November 14-16, 1995.

Sarkos, C.P., Marker, T.R. and Hill, R.G., "Full-Scale Test Effectiveness of Water Spray Systems for Improved Aircraft Fire Safety," Symposium on Fire and Combustion Systems, 1995, ASME International Mechanical Engineering Congress and Exposition, San Francisco, CA, November 12-17, 1995.

Sarkos, C.P., "Implementation of Heat Release Measurements as a Regulatory Requirement for Commercial Aircraft Materials," Paper in "Fire Calorimetry," FAA, Report DOT/FAAA/CT-95/46, July 1995.

Sarkos, C.P., "Heat Exposure and Burning Behavior of Cabin Materials During an Aircraft Postcrash Fuel Fire," Proceedings of International Conference on Fire and Smoke Resistant Materials for Commercial Aircraft Interiors, National Research Council, Publication NMAB-477-2, National Academy Press, Washington, DC, 1995.

Sarkos, C.P., "Status of Halon Replacement Evaluation in Commercial Aircraft and Airport Applications," Fire and Materials 3rd International Conference and Exhibition, Crystal City, VA, October 27-28, 1994.

Sarkos, C.P., Hill, R.G. and Marker, T.R., "Development of an On-Board Water Spray Fire Suppression System for Transport Aircraft", AGARD-IIA Aircraft Flight Safety Symposium, Zhukovsky, Russia, August 31 - September 5, 1993.

Hill, R.G., Marker, T.R., and Sarkos, C.P., "Evaluation and Optimization of an On-Board Water Spray Fire Suppression System in Aircraft"; Water Mist Fire Suppression Workshop, March 1-2, 1993: Proceedings, NIST, Report NISTIR 5207, June 1993.

Hill, R.G., Marker, T.R., and Sarkos, C.P., "Evaluation and Optimization of an On-Board Water Spray Fire Suppression System in Aircraft", Proceedings of the 12th Joint Panel Meeting of the UJNR Panel on Fire Research and Safety, Tsukuba and Tokyo, Japan, October 27 - November 2, 1992.

Hill, R.G., Sarkos, C.P., and Marker, T.R., "Development and Evaluation of an "On-Board Aircraft Water Spray System for Postcrash Fire Protection", SAE Technical Paper 912224, Aerospace Technology Conference and Exposition, Long Beach, CA, September 23-26, 1991.

Hill, R.G., Sarkos, C.P., and Marker, T.R., "Development of a Benefit Analysis for an On-Board Aircraft Cabin Water Spray System", ASTM Special Technical Publication No. 1150, 1992.

Sarkos, C.P., "Test by Fire", Aviation Safety Journal, Vol. 1, No. 3, Summer 1991.

Sarkos, C.P., Webster, H., Geyer, G., Do, D., Wright, J., Collins, J. and Hampton, L., "Full-Scale Fuselage Burnthrough Tests" Proceedings of the European Cabin Safety Conference 1990, CAA, Report CAP 583, April 1991.

Sarkos, C.P., "FAA Development of Improved Fire Test Requirements for Aircraft Interior Materials", Recent Advances in Flame Retardancy of Polymeric Materials Conference, Stamford, CT, May 15-17, 1990.

Sarkos, C.P., "FAA's Cabin Safety Program: Status and Recent Findings", Proceedings of Seventh International Aircraft Cabin Safety Symposium, Southern California Institute, FAA, Napa, CAA, January 22-25, 1990.

Sarkos, C.P., "Full-Scale Fire Testing" Aircraft Interior Materials Fire Performance, Institute for Aviation Research, Wichita State University, Wichita, KS, April 4-5, 1989.

Sarkos, C.P., "Development of Improved Fire Safety Standards Adopted by the Federal Aviation Administration", AGARD Conference Proceedings No. 467, Aircraft Fire Safety, Propulsion and Energetics Panel 73rd Symposium, Sintra, Portugal, May 22-26, 1989.

Sarkos, C.P., and Hill, R.G., "Characteristics of Transport Aircraft Fires Measured by Full-Scale Tests", AGARD Conference Proceedings No. 467, Aircraft Fire Safety, Propulsion and Energetics Panel 73rd Symposium, Sintra, Portugal, May 22-26, 1989.

Sarkos, C.P., "Development of FAA Fire Test Requirements for Cabin Materials Based on the OSU Apparatus", Proceedings of Fire Safety of Aircraft Cabins Conference, DFVLR, Cologne, Germany, April 28-29, 1987.

Sarkos, C.P., "New FAA Regulations Improve Aircraft Fire Safety", ASTM Standardization News, December 1985.

Hill, R.G., Eklund, T.I., and Sarkos, C.P., "Aircraft Interior Panel Test Criteria Derived from Full-Scale Fire Tests, FAA, Report DOT/FAA/CT-85/23. September 1985.

Sarkos, C.P., and Hill, R.G., "Evaluation of Aircraft Interior Panels under Full-Scale Cabin Fire Test Conditions", AIAA Paper 85-0393, AIAA 23rd Aerospace Science Meeting, Reno, NV, January 14-17, 1985.

Sarkos, C.P., Filipczak, R.A., and Abramowitz, A., "Preliminary Evaluation of an Improved Flammability Test Method for Aircraft Materials", FAA, Report DOT/FAA/CT-84/22, December 1984.

Hill, R.G., Brown, L.J., Speitel, L., Johnson, G.R., and Sarkos, C.P., "Aircraft Seat Fire Blocking Layers: Effectiveness and Benefits Under Various Scenarios", FAA, Report DOT/FAA/CT-83/43, February 1984.

Hill, R.G., Speitel, L.C., Huber, C., Johnson, G.R., Filipczak, R.A., Gustavino, T., and Sarkos, C.P., "In-Flight Aircraft Seat Fire Extinguishing Tests (Cabin Hazard Measurements), FAA, Report DOT/FAA/CT-82/111, April 1983.

Sarkos, C.P., and Hill, R.G., "Effectiveness of Seat Cushion Blocking Layer Materials Against Cabin Fires", Society of Automotive Engineers Technical Paper No. 821,484, presented at SAE Aerospace Conference and Exposition, Anaheim, CA, October 25-28, 1982.

Sarkos, C.P., Hill, R.G., and Howell, W.D., "The Development and Application of a Full-Scale Wide Body Test Article to Study the Behavior of Interior Materials During a Postcrash Fuel Fire", AGARD Lecture Series No. 123 on Aircraft Fire Safety, AGARD-LS-123, June 1982, (also Journal of Fire and Flammability, Vol. 13, pp 172-202, July 1982).

Eklund, T.I., and Sarkos, C.P., "The Thermal Impact of External Pool Fires on Aircraft Fuselages", Journal of Fire and Flammability, Vol. 12, pp 231-240, July 1980.

Hill, R.G., and Sarkos, C.P., "Postcrash Fuel Fire Hazard Measurements in a Wide Body Aircraft Cabin, Journal of Fire and Flammability, Vol. 11, pp 151-163, April 1980.

Hill, R.G., Johnson, G.R., and Sarkos, C.P., "Postcrash Fuel Fire Hazard Measurements in a Wide-Body Aircraft Cabin", FAA, Report No. FAA-NA-79-42, December 1979.

Sarkos, C.P., Spurgeon, J.C., and Nicholas, E.B., "Laboratory Fire Testing of Cabin Materials Used in Commercial Aircraft", *Journal of Aircraft*, Vol. 16, No. 2, pp 78-89, February 1979.

Nicholas, E.B., Johnson, R.M., and Sarkos, C.P., "Flammability Tests of Used Aircraft Interior Materials", FAA, Report No. NA-78-71-LR, November 1978.

Sarkos, C.P., and Hill, R.G., "Preliminary Wide Body (C-133) Cabin Hazard Measurements During a Postcrash Fuel Fire", FAA, Report No. NA-78-28-LR, April 1978.

Sarkos, C.P., "Recent Test Results from the FAA/NAFEC Cabin Fire Safety Program", Proceedings of the Third UJNR Panel Meetings on Fire Research and Safety, NBS, Gaithersburg, MD, March 13-17, 1978.

Sarkos, C.P., Spurgeon, J.C., Nicholas, E.B., and Hill, R.G., "Fire Testing of Cabin Materials Used in Commercial Aircraft", FAA, Report No. NA-77-53-LR, September 1977.

Sarkos, C.P., and Johnson, R.M., "A Preliminary Model Study of a Smoke Removal Concept for Cabin Fire", FAA, Report No. NA-77-16-LR, April 1977.

Sarkos, C.P., "Analysis of Public Responses to ANPRM 74-38 Compartment Interior Materials Toxic Gas Emission", FAA, April 1976.

Sarkos, C.P., "Measurement of Toxic Gases and Smoke From Cabin Materials Using the NBS Smoke Chamber and Colorimeter Tubes", FAA, Report No. FAA-RD-76-7, March 1976.

Sarkos, C.P., "Characteristics of Halon 1301 Dispensing Systems for Aircraft Cabin Fire Protection", FAA, Report No. FAA-RD-75-105, September 1975.

Sarkos, C.P., "Characteristics of Halon 1301 Dispensing Systems for Aircraft Cabin Fire Protection", AGARD Conference Proceedings No. 166 on Aircraft Fire Safety, 45th Meeting of the AGARD Propulsion and Energetics Panel, Rome, Italy, April 1975.

Sarkos, C.P., and Spurgeon, J.C., "Progress as of July 25, 1974: Activity 181-521-010, "Develop a Toxic Gas Emission Criteria for Interior Materials", FAA, Interim Report, September 1974.

Sarkos, C.P., "Flammability Characteristics of Materials Removed from the Burned Cabin of a TWA 707 and New and Used Seat Fabrics Supplied by TWA", FAA, Data Report No. 108, May 1974.

Sarkos, C.P., "Use of the NSB Smoke Chamber for Rating the Smoke Behavior of Materials and its Limitations for Predicting the Visibility During a Cabin Fire", FAA, Data Report No. 105, January 1974.

Sarkos, C.P., "On-Board Aircraft Cabin Fire Protection Systems", NFPA Aviation Bulletin No. 398, December 1973.

Sarkos, C.P., "Small-Scale Fire Test of High Temperature Cabin Pressure Sealant and Insulating Materials", FAA, Report No. FAA-RD-71-67, November 1971.

Sarkos, C.P., "Postcrash Fire Testing of Titanium Fuselages", Fire Technology, Vol. 7, No 4, pp. 269-284, November 1971.

Sarkos, C.P., "Titanium Fuselage Environmental Conditions in Postcrash Fires", FAA, Report No. FAA-RD-71-3, March 1971.

Sarkos, C.P., "Evaluation of AVCO/NASA Rigid Foam as a Fire Barrier for Cabin Protection", FAA, Data Report No. 70, April 1970.

Sarkos, C.P., "The Effect of Low-Temperature Ablators on the Properties of Hypersonic Wakes", AGARD Wake Specialists Meeting, Denver, CO, May 1967.

Sarkos, C.P., "Pure Air Wake Flow Field Computations, G.E. Technical Information Series Report.

Technical Presentations:

"Past Accomplishments and Future Directions in Aircraft Fire Safety R&D," Keynote Address, Fire and Explosions Conference, Royal Aeronautical Society," London, United Kingdom, October 27, 1999.

"Development of New Fire Test Criteria for Aircraft Thermal Acoustical Insulation," 1999 Fire Risk and Research Hazard Research Applications Symposium, The Fire Protection Research Foundation, San Diego, CA, June 23-25, 1999.

"Flammability of Jet A in Aircraft Fuel Tanks and New Research" and "Flammability of Thermal Acoustical Insulation – Recent Research," FAA Rotorcraft Directorate Designee Conference, Arlington, TX, May 26-27, 1999.

"Accidents and Research Leading to Improvements in Aircraft Fire Safety," ARFF Working Group Regional III Meeting, Florida Emergency Training Facility, Ocala, FL, May 6, 1999.

"Status of the Development of Performance Standards for Halon Replacement Extinguishing Agents and Thermal Acoustical Insulation", SAE General, Corporate and Regional Aviation Meeting and Exposition," Wichita, KS, April 20-22, 1999.

"A Review of Jet A Flammability in Commercial Aircraft Fuel Tanks" and "Recent Aircraft Cargo Compartment Fire Protection Tests," 27th International Conference on Fire Safety, San Francisco, CA, January 11-15, 1999.

“Future Trends in Aircraft Fire Safety R&D,” International Aircraft Fire and Cabin Safety Research Conference, Atlantic City, NJ, November 16-20, 1998.

“Federal Aviation Administration Initiatives,” 1st NDIA Fire and Explosion Prevention Conference, Ft. Belvoir, VA, October 21, 1998.

“Fire Tests Analysis of Post Transport Aircraft Accidents: Manchester, 1985 and ValuJet, 1996,” National Fire Protection Association, International Conference on Aviation Fire Protection,” University of Maryland, September 21-24, 1998.

“Harmonization of DOT Fire Standards, Performance and Test Procedures,” Panel Chairman, 43rd International SAMPE Symposium Exhibition, Anaheim, CA, June 4, 1998.

“Cargo Compartment Fire Protection in Large Commercial Transport Aircraft,” Fuel System Safety Group Meeting, Coordinating Research Council, Alexandria, VA, May 21, 1998.

“Aircraft Cargo Compartment Fire Protection,” Fire Suppression and Detection Research Application Symposium, National Fire Protection Research Foundation, Orlando, FL, February 25-27, 1998.

“Full-Scale Fire Test Analysis of Post Aircraft Fire Accidents,” 25th International Conference on Fire Safety, San Francisco, CA, January 12-16, 1998.

“Fire Safety Improvements Through R&D,” Enhancing Aircraft Survivability: A Vulnerability Perspective, National Defense Industrial Association, Naval Postgraduate School, Monterey, CA, October 21-23, 1997.

“Research Progress Related to Fire Safety in Civil Transport Aircraft,” Advancement in Commercial Airline Safety Panel, 1997, SAFE Symposium, Phoenix, AZ, September 8-10, 1997.

“Fire Test Analysis of Past Transport Aircraft Accidents: Manchester, 1985 and ValuJet, 1996,” National Fire Protection Association Annual Meeting and Fire Safety Exhibit, Los Angeles, CA, May 18-22, 1997.

“Full-Scale Test Evaluation of Aircraft Fuel Fire Burnthrough Resistance Improvements,” 42nd International SAMPE Symposium and Exhibition, Anaheim, CA, May 4-8, 1997.

“FAA R&D Related to Commuter Fire Safety”, SAE General, Corporate and Regional Aviation Meeting and Exhibition, Wichita, KS, April 29-May 1, 1997.

“Evaluation of Halon Replacement Agents in Commercial Aircraft Applications,” National Fire Protection Research Foundation, Fire Suppression and Detection Symposium, Orlando, FL, February 12-14, 1997.

“Future Trends in Aircraft Fire Safety R&D”, White House Commission/George Washington University, International Conference on Aviation Safety and Security in the 21st Century, Washington, D.C., January 13-15, 1997.

“Past Accomplishments and Future Directions in Aircraft Fire Safety R&D”, Keynote Address, Fire and Explosions Conference, Royal Aeronautical Society”, London, United Kingdom, October 27, 1999.

“Development of New Fire Test Criteria for Aircraft Thermal Acoustical Insulation”, 1999 Fire Risk and Hazard Research Application Symposium, The Fire Protection Research Foundation, San Diego, CA, June 23-25, 1999.

“Flammability of Jet A in Aircraft Fuel Tanks and New Research” and “Flammability of Thermal Acoustical Insulation – Recent Research”, FAA Rotorcraft Directorate Designee Conference, Arlington, TX, May 26-27, 1999.

“Accidents and Research Leading to Improvements in Aircraft Fire safety”, ARFF Working Group Regional III Meeting, Florida Emergency Training Facility, Ocala, FL, May 6, 1999.

“Status of the Development of Performance Standards for Halon Replacement Extinguishing, Agents and Thermal Acoustical Insulation” SAE General, Corporate and Regional Aviation Meeting and Exposition”, Wichita, KS, April 20-22, 1999.

“A Review of Jet A Flammability in Commercial Aircraft Fuel Tanks” and “Recent Aircraft Cargo Compartment Fire Protection Tests”, 27th International Conference on Fire Safety, San Francisco, CA, January 11-15, 1999.

“Future Trends in Aircraft Fire Safety R&D”, International Aircraft Fire and Cabin Safety Research Conference, Atlantic City, NJ, November 16-20, 1998.

“Federal Aviation Administration Initiatives”, 1st NDIA Fire and Explosion Prevention Conference, Ft. Belvoir, VA, October 21, 1998.

“Fire Test Analysis of Past Transport Aircraft Accidents: Manchester, 1985 and ValuJet, 1996”, National Fire Protection Association, International Conference on Aviation Fire Protection”, University of Maryland, September 21-24, 1998.

“Harmonization of DOT Fire Standards, Performance and Test Procedures”, Panel chairman, 43rd International Sampe Symposium and Exhibition, Anaheim, C, June 4, 1998.

“Cargo Compartment Fire Protection in Large Commercial Transport Aircraft”, Fuel System Safety Group Meeting, Coordinating Research Council, Alexandria, VA, May 21, 1998.

“Aircraft cargo Compartment Fire Protection”, Fire Suppression and Detection Research Application Symposium, National Fire Protection Research Foundation, Orlando, FL, February 25-27, 1998.

“Full-Scale Fire test Analysis of past Aircraft Fire Accidents”, 25th International Conference on Fire Safety, San Francisco, CA, January 12-16, 1998.

“Fire Safety Improvements through R&D”, Enhancing Aircraft Survivability: A Vulnerability Perspective, National Defense Industrial Association, Naval Postgraduate School, Monterey, CA, October 21-23, 1997.

"Status of FAA Testing Activities for Halon Replacement Agents in Civil Aviation", CRC-Aviation Group Meetings, Alexandria, VA, April 25-28, 1994.

"FAA Onboard Water Mist System Tests", International Conference on Aviation Fire Protection, Moreton-in-Marsh, England, March 16-18, 1994.

"FAA Program to Develop Certification Criteria for Aircraft Halon Replacement Systems", 1993 International CFC and Halon Alternatives Conference, Washington, DC., October 20-22, 1993.

"Effectiveness of an On-Board Water Spray Fire Suppression in Aircraft", NIST Annual Conference on Fire Research, Rockville, MD, October 18-20, 1993.

"Development of an On-Board Water Spray Fire Suppression System for Transport Aircraft", AGARD/IIA Aircraft Flight Safety Symposium, Zhukovskiy, Russia, August 31-September 5, 1993.

"Evaluation and Optimization of an On-Board Water Spray Fire Suppression System in Aircraft", NIST Water Spray Fire Suppression Workshop, Gaithersburg, MD, March 1-2, 1993.

"Optimization of a Cabin Water Spray System", 18th International Conference on Fire Safety", San Francisco, CA, January 11-15, 1993.

"Evaluation and Optimization of an On-Board Water Spray Fire Suppression System in Aircraft", 12th Meeting of United States-Japan Panel on Fire Research and Safety, Tsukuba, Japan, October 27-November 2, 1992.

"Cabin Water Spray System Program - An Update", National Fire Protection Association 96th Annual Meeting and Fire Safety Exhibit, New Orleans, LA, May 17-21, 1992.

"Development of Improved Fire Test Requirements for Aircraft Interior Materials", Society for the Advancement of Material and Process Engineering, N.J Chapter Meeting, Bridgewater, NJ, May 7, 1992.

"Fire, Smoke and Toxicity - FAA Issues and Initiatives", Suppliers of Advanced Composite Materials Association 8th Annual Meeting, Arlington, VA, May 4-5, 1992.

"Effectiveness and Characteristics of an On-Board Water Spray System Against Postcrash Fires", 17th International Conference on Fire Safety, San Francisco, CA, January 14-17, 1992.

"Airline Fire Safety Research", Invited Lecture at General Electric Aviation Lecture Series, National Air and Space Museum, Washington, D.C., January 16, 1992.

"FAA Development of Fire Test Requirements for Aircraft Interior Materials", Space Station Freedom Materials and Processes Technical Interchange Meeting, Johnson Space Center, Houston, Texas, October 29, 1991.

"Development and Evaluation of an Onboard Aircraft Cabin Water Spray System for Postcrash Fire Protection", SAE Aerospace Technology Conference and Exposition, Long Beach, CA, September 23-26, 1991.

"FAA Full-Scale Tests", Civil Aviation Authority Industry Consultative Conference", London, England, May 29-30, 1991.

"FAA Studies of Fire Suppression in Civil Transport Aircraft", Fire Safety/Survivability Symposium - '90, responding to the Challenges of the Post-Halon Era, U.S. Army Aberdeen Proving Ground, MD, November 6-8, 1990.

"Full-Scale Fuselage Burnthrough Tests", Civil Aviation Authority European Cabin Safety Conference, London, England, September 18-21, 1990.

"FAA's Cabin Fire Safety Program: Status and Recent Findings", Seventh Annual International Aircraft Cabin Safety Symposium", Napa, California, January 22-25, 1990.

"Full-Scale Testing", Conference on Aircraft Interior Materials/Fire Performance, Institute for Aviation Research, Wichita State University, Wichita, Kansas, April 4-5, 1989.

"FAA Overview: Cabin Safety Programs", Fifth Annual Technical Symposium, Weber Aircraft, Los Angeles, CA, April 12-13, 1989.

"The Latest in Combustibility Issues in the FAA", SPI's Coordinating Committee on Fire Safety/1990 Winter Meeting, Scottsdale, AZ, February 5-7, 1990.

"Development of Improved Fire Safety Standards Adopted by the Federal Aviation Administration", AGARD 73rd Symposium of the Propulsion and Energetics Panel on Aircraft Fire Safety, Sintra, Portugal, May 22-26, 1989.

"Characteristics of Transport Aircraft Fires Measured by Full-Scale Tests", AGARD 73rd Symposium of the Propulsion and Energetics Panel on Aircraft Fire Safety, Sintra, Portugal, May 22-26, 1989.

"Status of FAA's Cabin Fire Safety Program", Flight Safety International Aircraft Occupant Safety Conference and Workshop, Arlington, VA, October 31 - November 3, 1988.

"FAA Development of Improved Fire Test Requirements for Seat Cushions and Interior Panels", NFPA International Conference on Aviation Fire Protection, Interlaken, Switzerland, September 22-24, 1987.

"Aircraft Materials Flammability" Society of the Advancement of Material and Process Engineering", Wilmington, DE, January 14, 1987.

"FAA Development of Improved Fire Test Requirements for Aircraft Interior Materials", Defense Fire Protection Association Symposium and Materials Technology Exposition, Arlington, VA, February 22-25, 1988.

"FAA Flammability Test Requirements", FAA Wichita Aircraft Certification Office Engineering Designees Conference, Wichita, KS, June 16, 1987.

"Development of FAA Fire Test Requirements for Cabin Panel Materials Based on the OSU Apparatus" Fire Safety of Aircraft Cabin Conference, DFVLR (German Aerospace Research Establishment), Cologne, Federal Republic of Germany, April 28-29, 1987.

"The Care for Fire Hardening of Aircraft Seating", Fly More Safely with Wool Seminar, the Wool Bureau, Atlanta, GA, January 21, 1986.

"Evaluation of Aircraft Interior Panels Under Full-Scale Fire Test Conditions", SPI 12th Combustibility Symposium, Washington, D.C., April 11-12, 1984.

A Summary of FAA Postcrash Cabin Fire Safety Studies", Flight Safety Foundation Conference and Workshop on Cabin Safety, Arlington, VA, December 11-14, 1984.

"Aircraft Cabin Fire Technology" SAE Committee A-10 Aircraft Oxygen Equipment Meeting, San Antonio, Texas, November 9-10, 1983.

"Application of Seat Fire Blocking Layer Materials Against Cabin Fires", SAE Aerospace Congress and Exposition, Anaheim, CA, October 25-28, 1982.

Effectiveness of Seat Cushion Fire Blocking Layer Materials Against Cabin Fires” SAE Aerospace Congress and Exposition, Anaheim, CA, October 25-28, 1982.

“Development and Application of a Full-Scale Wide Body Test Article to Study the Behavior of Interior Materials During a Postcrash Fuel Fire”, AGARD Lecture Series No. 123 on Aircraft Fire Safety, FAA Headquarters, Washington, D.C., June 15-16, 1982.

Full-Scale Fire Tests on Aircraft Fuselage in Crashworthiness Determination”, SPI 9th combustibility Symposium, Washington, D.C., April 15-16, 1981.

“The FAA Aircraft Cabin fire safety Program”, Eastern Section of the Combustion Institute 1980 Fall Meeting, Princeton University, Princeton, N.J., November 12-14, 1980.

“Fires in Commercial Transport Aircraft”, Workshop on Toxicology of Combustion Products, Naval Research Laboratory, Washington, D.C., October 15-16, 1980.

“The Impact of an External Pool Fire on an Intact Aircraft Fuselage”, Fifth International conference on Fire safety, San Francisco, CA, January 14-18, 1980.

“NAFEC/FAA Cabin Fire Safety Program – Status and recent Findings”, SPI 8th Annual Symposium on Consumer Safety, Houston, TX, March 28-29, 1979.

“Heat Resistance of Evacuation Slide Materials”, 17th Annual SAFE Symposium, Las Vegas, NV, March 3-6, 1979.

“Resistance of Slide Fabrics to Thermal Radiation”, Meeting of SAE Committee S-9, Cabin Safety Provisions, Arlington, TX, October 16-18, 1978.

“FAA Cabin Fire Safety Program”, NASA Fire Safety Meeting, Johnson Space Center, Houston, TX, August 29, 1978.

“Preliminary Wide Body (C-133) Cabin Hazard Measurements during a postcrash Fuel Fire” SAMPE 23rd National Symposium and Exhibition, Anaheim, CA, May 2-4, 1978.

“Recent test Results from the FAA/NAFEC Cabin Safety Program”, Third UJNR Panel Meeting on Fire Research and Safety, National Bureau of Standards, Gaithersburg, MD, March 13-17, 1978.

“NAFEC Cabin Fire Safety Program”, FAA Public hearing: Compartment Interior Materials in Transport Category Airplanes”, FAA Headquarters, Washington, D.C., November 14-18, 1977.

“Fire Testing of Cabin Materials Used in Commercial Aircraft”, Polymeric Materials and Their Use in Transportation”, Polytechnic Institute of New York, Brooklyn, NY, April 27-29, 1977.

“Aircraft Cabin Fire Safety Program at NAFEC”, FAA and Industry Review of Cabin Safety in Air Carrier Operations”, Civil Aeromedical Institute, Oklahoma City, OK, August 31, 1976.

“Characteristics of a Modular and Perforated Tube Halon 1301 System for Aircraft Cabin Fire Protection”, AGARD Propulsion and Energetics Panel 45th Meeting on Aircraft Fire safety, Rome, Italy, April 7-11, 1975.

“Recent FAA Studies on the Smoke and Toxicity of Burning Cabin Materials”, Information Council for Fabric Flammability, Washington, D.C., June 4, 1975.

“On-Board Aircraft Cabin Protection Systems”, 76th NFPA Annual Meeting and 1st Fire Safety Exhibit, Philadelphia, PA, May 15-19, 1972.

“Post-Crash Fire Testing on Titanium Fuselages”, 75th NFPA Annual Meeting, San Francisco, CA, May 17-21, 1971.