

Dr. Peter J. Disimile
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PROFESSIONAL EXPERIENCE:

8/90 - Present	Associate Professor
7/84-8/90	Assistant Professor
6/99 – 7/07	Staff Scientist, US Air Force, 780 TG, Aerospace Survivability & Safety Flight Wright-Patterson AFB, Ohio
9/79-5/80	Fluids Mechanics/Heat Transfer Consultant Fuel Systems Division Engineering Research Center Ford Motor Company Dearborn, Michigan
12/77-9/79	Thermal Design Engineer/Founder American Energy Systems, Inc. Forest Hills, New York
8/73-8/75	Electronic Test Engineer Electronic Technician PRD Electronics, Inc. Syosset, New York

EDUCATION:

Ph.D. Mechanical Engineering, Michigan State University, 1984
M.S. Mechanical Engineering, S.U.N.Y. at Stony Brook, 1978
B.S. Engineering Science S.U.N.Y. at Stony Brook, 1975

HONORS:

AIAA "Most Comprehensive Flow Visualization Animation", 2015
USAF Scientific Advisory Board, Nominee March 2011
VSJ SGI Award for Excellent Visualized Image, 2006
Certificate of Achievement, USAF Aerospace Survivability & Safety Flight, 2004
Bradley Jones Chair, 1987 - 2001
Pre-Junior Professor of the Year, 1996
Sophomore Professor of the Year, 1995
Freshman Professor of the Year, 1993
Biographical Listing: Who's Who in the Midwest
Charles A. Lindbergh Grant Award, 1986
NRC/NBS Postdoctoral Research Associate, 1984

PROFESSIONAL AFFILIATIONS:

American Institute of Aeronautics and Astronautics
American Society of Mechanical Engineers
American Society of Heating, Refrigerating and
Air-Conditioning Engineers (inactive)
The International Society for Optical Engineering (inactive)
Sigma Xi (inactive)
American Society of Engineering Education (inactive)

PROFESSIONAL SERVICE:

Reviewer for several Journals:

Int'l J of Impact Engineering
J of Propulsion & Power
J of Fluid Engineering
J of Computers and Fluids
Atomization and Sprays
J of Visualization
J of Mechanical Sciences
AIAA J.

Reviewer of AIAA and ASME Conferences

Associate Editor of the International Journal of Dynamics of Fluids

Int'l reviewer for the "Engineering and Physical Sciences
Research Council (EPSRC)" of Great Britain (95 - Present)

US Civilian Research and Development Foundation (2005 – Present)

RESEARCH FELLOWSHIPS:

USAF-RDL 1998 Summer Faculty Fellow @ Air Force Research Laboratories,
Wright Aeronautical Laboratories, Survivability Branch

NASA-ASEE 1988 Summer Faculty Fellow @ NASA Lewis Research Center,
Microgravity Combustion Branch

USAF-UES 1986 Summer Faculty Fellow @ Wright Aeronautical Laboratories,
Aeromechanics Branch

USN-ONR 2019 Summer Faculty Fellow @ Naval Surface Warfare Center,
Carderock, Advanced Power & Energy Branch

CONTINUING EDUCATION:

Fluid Mechanic Measurements, University of Minnesota (1985)
Art & Science of Dynamic Flow Measurement, Washington State Univ. (1985)
Flow Induced Oscillations, Leigh University (1987)
Safe Methods of Asbestos Removal, University of Cincinnati (1987)
Flow Visualization, University of Michigan (1988)
Laser System Design, University of Wisconsin (1990)
Laser-Induced Fluorescence & Raman Spectroscopy, SPIE (1990)
Fundamentals of Laser Anemometry, Case Western Reserve University (1991)
Introduction to Applied Optics For College Teachers, Oakland University (1993)
Human Factors Engineering, University of Michigan (1995)
Fire Determination Strategies, University of Cincinnati (1995)
Fire Dynamics, University of Cincinnati (1995)
Fundamentals of Fire & Explosion Hazard Evaluation, AIChE (1997)
Evaluating Characteristics of Vapor Cloud Explosions, Fires,
and BLEVE's, AIChE (1997)
Fire Protection Structure and System Design, University of Cincinnati (1997)
Electromagnetic Fields I, University of Cincinnati (1997)
Optical Communications, University of Cincinnati (1998)
Electric Machines & Power Systems, University of Cincinnati (1998)
Electromagnetic Fields II, University of Cincinnati (1998)
Digital Communications, University of Cincinnati (1999)
Electronics II, University of Cincinnati (1999)
Fundamentals of Optoelectronics, University of Cincinnati (1999)
Microwave Engineering, University of Cincinnati (1999)
Quantum Mechanics, University of Cincinnati (2001)
Introduction into Explosives, CMA (2002)
Shock and Detonations, CMA (2002)
Aircraft Fire Protection/Mishap Investigation, AFP (2003)
Pyrotechnic Chemistry, Purdue University (2005)
Aerospace Survivability, SURVIAC, WPAFB, Ohio (2005)
Explosion Effects and Blast Resistant Design, Virginia Beach (2006)
Measurement Uncertainty, The Instrumentation, Systems, & Automation Society (2006)
Radiation Thermometry, NIST, Gaithersburg, Maryland (2006)

United States Patents:

1. "Fluid Flow Noise Mitigation Structure and Method" Patent No.: US 9,169,750 B2, Inventor: Peter J. Disimile, Oct 27, 2015.
2. "Smart Nozzle Delivery System" Patent No.: US 10,207,133 B2, Peter J. Disimile, February 19, 2019.
3. "Smart Multi-Port Fire Suppression System" Provisional Patent Application, Peter J. Disimile, October 2016.

PUBLICATIONS AND PRESENTATIONS:

Refereed Publications

1. "The Forces Due to the Relative Motion of Two Corrugated Plates," Disimile, P.J. and Wang, C.Y., *The Physics of Fluids* 26(3), March 1983, pp.611-613.
2. "The Effect of Ensemble Averaging on Transverse Vorticity Measurements in Forced Shear Flows," Disimile, P.J., *The Physics of Fluids*, 29(9), September, 1986, pp.3088-3090.
3. "Phase Averaged Transverse Vorticity Measurements in an Excited, Two-Dimensional Mixing Layer," Disimile, P.J., *Journal of the AIAA: Vol. 24 (10)*, October 1986, pp.1621-1627.
4. "Environmental Benefits and Possible Applications of Excited Impinging Jets in the Jet Engine Industry," Disimile, P.J. and Paule, D.M., *Journal of the Washington Academy of Sciences*, Vol. 77 (4), December 1987, pp.145-148.
5. "The Effect of an Excited Impinging Jet on the Local Heat Transfer Coefficient of Aircraft Turbine Blades," Disimile, P.J. and Paule, D.M., 36th Annual International Gas Turbine Conference, 88-GT-66 Amsterdam, June 1988.
6. "The Effect of Periodic Excitation on Turbulent Boundary Characteristics," Disimile, P.J., *Symposium on Hydrodynamic Performance Enhancement by Marine Applications*, Naval Underwater Systems, Newport, Rhodes Island, October 31 – November 1, 1988, pp.151-155.
7. "Flow Visualization in an Impinging Circular Air Jet," Behbahani, A.I., Disimile, P.J. and Aydore, S., 1989 National Heat Transfer Conference, HTD-Vol. 112 Heat Transfer Measurements, Analysis and Flow Visualization, Philadelphia, PA, August 6-9, 1989, pp.143-148.
8. "High Reynolds Number Wedge Induced Separation Lengths at Mach 6" Disimile, P.J. and Scaggs, N.E., *Journal of the AIAA: Vol. 27 (12)*, December 1989, pp. 1827-1828.
9. "Wedge-Induced Turbulent Boundary Layer Separation on a Roughened Surface at Mach 6.0," Disimile, P.J. and Scaggs, N.E., *AIAA Journal of Spacecraft and Rockets: Vol.28 (6)*, November-December 1991, pp. 636-645.
10. "Turbulent Boundary Layer Characteristics Over a Flat Plate/Wedge Configuration at Mach 6," Disimile, P.J. and Scaggs, N.E., *Journal of the AIAA: Vol. 30(1)*, January 1992, pp. 270-272.
11. "Development of a PC Based Laboratory Data Collection and Analysis System," DiMicco, R.G. and Disimile, P.J., *Scientific Computing & Automation*, January 1992, pp. 53-57.
12. "Three-Dimensional Temporal Reconstruction and Analysis of Plume Images," Dhawan, A.P., Disimile, P.J. and Peck III, C., *Journal of Optical Engineering*, Vol. 31, No.11, November 1992, pp. 2366-2373.
13. "The Drag of Three-Dimensional Rectangular Cavities," Savory, E., Toy, N, Disimile, P.J., and Dimicco, R.G., Further Developments in Turbulence Management, edited by K. Krishna Prasad, Kluwer Academic Publishers, *Applied Scientific Research* 50: 1993, pp. 325-346.
14. "The Effect of Impingent Jet Excitation on Curved Surface Heat Transfer," Disimile, P.J., *AIAA Journal of Propulsion and Power*, Vol.10, No.2: March-April, 1994, pp. 293-294.
15. "Two-Phase (Vapor-Liquid) Flow Patterns and Pressure Drop in the Presence of Helical Wire Ribs", Weisman, J., Lan, J. and Disimile, P.J., *The International Journal of Multiphase Flow*, Vol. 20, No. 5, November 1994, pp. 885-899.
16. "Observations On Using Experimental Data As Boundary Conditions For Computation," Orkwis, P.D., Tam, C-J, & Disimile, P.J., *Journal of the AIAA*, Vol. 33, No. 1, January 1995, pp. 176-178.
17. "A New Method for the Eduction of the Natural Coherent Structures in a Fully Turbulent Flow Region: The Life Cycle Method", Aydore, A. and Disimile, P.J., *Journal of the AIAA*, Vol. 33, No. 8, August 1995, pp 1529-1531.

18. "Determination of Starting Shock Velocity in a Supersonic Tunnel" Disimile, P.J. and Toy, N., Journal of the AIAA, Vol. 33, No. 10, October 1995, pp.1981-1983.
19. "Mixing Characteristics of Twin Impinging Circular Jets" Disimile, P.J., Savory, E., and Toy, N., AIAA Journal of Propulsion and Power, Vol. 11, No. 6, November-December 1995, pp 1118-1124.
20. "Transverse Vorticity Observations in Large Coherent Structures" Disimile, P.J., Journal of the AIAA, Vol. 31, No. 12, December 1995, pp. 2427-2428.
21. "Space Vehicle Propulsion Systems: Environmental Hazards of The LEO-Lunar Domain," Bahr, G.K., and Disimile, P.J., AIAA Journal of Spacecraft and Rockets, Vol. 32, No. 6, November-December 1995, pp. 1001-1005.
22. "Comparison of Baldwin-Lomax Turbulence Models For 2-D Open Cavity Computations", Tam, C.J., Orkwis, P.D., and Disimile, P.J., Journal of the AIAA, Vol. 34, No. 3: March 1996, pp629-631.
23. "Comment on Self-Excited Wire Method for the Control of Turbulent Mixing Layers" Disimile, P.J., Journal of the AIAA, Vol. 34, No. 4: April 1996, pp869-870.
24. "The Effect of Fluid Properties on Two-Phase (Vapor-Liquid) Flow Patterns in the Presence of Helical Wire Ribs", Weisman, J., Lan, J. and Disimile, P.J., The International Journal of Multiphase Flow, Vol. 22, No.3, June 1996, pp613-619.
25. "Algebraic Turbulence Model Simulations of Supersonic Open Cavity Flow Physics" Tam, C.J., Orkwis, P.D., and Disimile, P.J., Journal of the AIAA, Vol. 34, No.11: November 1996, pp 2255-2260.
26. "Natural Coherent Structure Dynamics in a Fully Turbulent Axisymmetric Jet Near Field", Aydore, S. and Disimile, P.J., Journal of the AIAA, Vol.35, No.7, July 1997, pp 1171-1178.
27. "The Effect of Yaw on the Frequency of Pressure Oscillations within a Rectangular Cavity at Mach 2", Disimile, P.J., & Orkwis, P.D., Journal of the AIAA, Vol.35, No.7, July 1997, pp 1233-1235.
28. "Two Phase Flow Patterns and Boiling Heat Transfer in Tubes Containing Helical Wire Inserts; Part I - Flow Patterns and Boiling Heat Transfer Coefficients" Lan, J., Disimile, P.J., and Weisman, J., Journal of Enhanced Heat Transfer, 1997, Vol. 4. (4), pp. 269-281.
29. "Two Phase Flow Patterns and Boiling Heat Transfer in Tubes Containing Helical Wire Inserts; Part II - Critical Heat Flux Studies" Lan, J., Disimile, P.J., and Weisman, J., Journal of Enhanced Heat Transfer, 1997, Vol. 4. (4), pp. 283-296.
30. "An Experimental Investigation into the Airflow Characteristics of Laser Drilled Holes" Disimile, P.J., Fox, C.W., and Lee, P., Journal of Laser Applications, Vol. 10, No. 2, April 1998, pp. 78-84.
31. "Sound-Pressure-Level Variations in a Supersonic Rectangular Cavity at Yaw", Disimile, P.J., and Orkwis, P.D., AIAA Journal of Propulsion and Power, Vol.14, No.3: May-June, 1998, pp. 392-398.
32. "Pressure Oscillations in a Subsonic Cavity at Yaw", Disimile, P.J., Toy, N., and Savory, E., Journal of the AIAA, Vol.36, No.7, July 1998, pp 1141-1148.
33. "Local Shear Stress Measurements within a Rectangular Yawed Cavity Using Liquid Crystals" Toy, N., Disimile, P.J., and Savory, E., on-line electronic Journal (<http://www.odeweb.demon.co.uk/Contents/ODE5.HTM>) Optical Diagnostics in Engineering, Vol.3, Part 1, Spring 1999, pp91 - 101.
34. "Effect of Planform Aspect Ratio on Flow Oscillations in Rectangular Cavities" Disimile, P.J., Toy, N., & Savory, E., Transaction of the ASME, Journal of Fluids Engineering, Vol. 122, March 2000, pp32-38.
35. "Liquid Crystal Visualization of the Vortex Flow Field within a Rectangular Yawed Cavity at Mach 2", Toy N, Savory E & Disimile P J, Int. Journal of Flow Visualization and Image Processing, (2001) Vol. 7, no. 3, pp, 269 - 279.

36. "Low-Cost, Real Time, Gas Detection System Using Infrared Laser Diodes" Disimile, P., J., Toy, N., and Fox, C.W., on-line electronic Journal (<http://www.ode-web.demon.co.uk>) Optical Diagnostics in Engineering, Vol.6, Part 1, Summer 2003, pp1 - 6.
37. "Acoustical properties of a long rectangular cavity of constant cross-section immersed in a thick boundary layer" Disimile, P.J., and Toy, N., International Journal of Mechanical Sciences, 46 (2004) 1827 - 1844.
38. "The Transport of Water Sprays Past Generic Clutter Elements Found Within Engine Nacelles", Disimile, P.J., Tucker, .R., Crosswell, B., and Davis, J., Fire Safety Journal, 40(2005), pp 65-78.
39. "Vortex Entrainment and Separation Using Flow Superposition", Swanson, L.A., Davis, J.M., and Disimile, P.J., Journal of Visualization, Vol. 9, No.1, (2006), pp 5.
40. "Vortex Pairing", Swanson, L.A., Davis, J.M., and Disimile, P.J., Journal of Visualization, Vol. 9, No. 2, (2006), pp 130.
41. "Temperature measurements within the luminous region of a burning Ba(NO₃)₂/Al mixture" Disimile, P.J., Prasad, R., and Toy, N., Journal of Pyrotechnics, Issue 23, Summer 2006, pp 10-20.
42. "The Vortex Dominated Flow Field Associated with a Confined Jet in a Crossflow" Disimile, P.J., and Toy, N., International Journal of Dynamics of Fluids, Vol. 2, No 2, 2006, pp155 -169.
43. "Convective flow field above a heated circular plate" Peter J. Disimile and Norman Toy, J of Heat Transfer, August 2007, Vol. 129, pp935.
44. "Qualitative Assessment of a Transient Spray Caused by a Hydrodynamic Ram Event" Disimile, P.J., Davis, J.M., and Pyles, J.M., Journal of Flow Visualization and Image Processing, Vol.14, No.3, Sept 2007, pp287-303.
45. "Examining the potential fire risk from a short duration pyrotechnic event" Disimile, P.J., and Toy, N., Journal of Fire Technology, Vol 44, No1, March 2008, pp77-96.
46. "Wall Cavitation Caused by Projectile Impact" Swanson, L.A., and Disimile, P.J., Journal of Visualization, Vol.11, No.2, April 2008.
47. "Effect of Engine Nacelle Clutter Density on Downstream Water Spray Distributions" Davis, J.M., and Disimile, P.J., Atomization and Sprays, Vol.18, No. 6, 2008, pp553-569.
48. "Hydraulic Jump Formation in Water Sloshing Within an Oscillating Tank", Disimile, P.J., Pyles, J.M., and Toy, N., J of Aircraft, Vol. 46, No. 2, March-April 2009, pp.549-556.
49. "The Hydrodynamic Ram Pressure Generated by Spherical Projectiles" Disimile, P.J., Swanson, L.A., and Toy, N., International J of Impact Engineering, Vol. 36, Issue 6, June 2009, pp. 821-829.
50. "The Flow Field Downstream of a Circular Cylinders Immersed within Thick Boundary Layers" Davis, J.M., Disimile, P.J., and Toy, N., AIAA J, Vol 47, No.6, June 2009, pp.1461-1469.
51. "A Large-Scale Shadowgraph Technique Applied To Hydrodynamic Ram" Disimile, P.J., Toy, N., and Swanson, L.A., Int. Journal of Flow Visualization & Image Processing, 2009, Vol. 16, no. issue 4, pp, 303-332.
52. "Mitigation of shock waves within a liquid filled tank" Disimile, P.J., Davis, J., and Toy, N., International J of Impact Engineering, Vol. 38, Issues 2-3, February-March 2011, pp. 62-72.
53. "Pressure oscillations within a yawed rectangular cavity in subsonic flow", Peter J Disimile, Xinwen Bai, and Norman Toy, International Journal of Engineering Research and Industrial Applications, Vol. 5, No. II, May 2012, pp. 27-50.
54. "Liquid spurt caused by hydrodynamic ram" Disimile, P.J. and Toy, N., International J of Impact Engineering, Vol. 75, Issue 1, January 2015, pp. 65-74.

55. "Geometric Modifications and Their Impact on the Performance of the Vortex Tube" Arun Gopal Rajagopalan and Dr. Peter J Disimile, International Journal on Theoretical and Applied Research in Mechanical Engineering, 2015, Vol. 4, Issue 3, Pg 1- 12.
56. "Spray Transport Past Cylindrical Elements found in a Generic Aircraft Engine Nacelle: A PIV and PDA Comparison", Peter J. Disimile, International Journal of Application or Innovation in Engineering & Management (IJAIEM), Volume, 4, Issue 6, June 2015, pp.
57. "A Computational evaluation of the Impact L/D and Cone Diameter has on Vortex Tube Performance" Arun Gopal Rajagopalan and Dr. Peter J. Disimile, International Journal of Mechanical Engineering and Robotics, Volume 3, Issue 6, 2015.
58. "Near Field Measurements of an Axisymmetric Turbulent Jet at Low Reynolds Numbers: A PIV and CTA Comparison", Brian D. Landers and Peter J. Disimile, International Journal on Theoretical and Applied Research in Mechanical Engineering, 2015, Vol. 4, Issue 4, Pg 10- 17.
59. "Passing Frequency of Vortical Structures in the Near Field of an Axisymmetric Jet" Brian D. Landers and Peter J. Disimile, International Journal of Mechanical Engineering, October 2015, Vol. 2, Issue 10, Pg 14- 18.
60. "The Growth Characteristics of Transient Impinging Axisymmetric Turbulent Jets", Brian D. Landers and Peter J. Disimile, Journal of Flow Visualization & Image Processing 22(1-3), 117-129 (2015).
61. "The Growth Characteristics of a Starting Axisymmetric Turbulent Jet", Brian D. Landers, Peter J. Disimile, and Paul R. Snow, Journal of Visualization, August 2016, Volume 19, Issue 3, pp. 343 - 350.
62. "Development of Inlet Boundary Condition for Accurate Multi-Jet Simulations", Raj Narayan Gopalakrishnan and Peter J. Disimile, IPASJ International Journal of Mechanical Engineering (IJME), Volume 4, Issue 9, September 2016.
63. "Effect of Turbulence Model in Numerical Simulation of Single Round Jet at Low Reynolds Number" Raj Narayan Gopalakrishnan and Peter J. Disimile, International Journal of Computational Engineering Research (IJCER), March 2017, Volume 7, Issue 3, pp. 30 – 44.
64. "Effect of Yaw Angle on Drag Over Clean Rectangular Cavities" Dhaval Shiyani and Peter J. Disimile, International Journal of Computational Engineering Research (IJCER), August 2017, Volume 7, Issue 8, pp. 99 – 113.
65. "The Fluid Thermal Field over a Flat Heated Disk" Brian D. Landers, Peter J. Disimile and Norman Toy, International Journal of Heat and Technology, Volume 35, No.4, December 2017, pp.799. 805.
66. "Effect of position of wall mounted surface protrusion in drag characteristics at low Reynolds number" Raj Narayan Gopalakrishnan and Peter J. Disimile, International Journal of Computational Engineering Research (IJCER), November 2017, Volume 7, Issue 11, pp. 26 – 39.
67. "Study of Geometric Variations on Drag Over Rectangular Cavities at Yaw", Dhaval Shiyani and Peter J. Disimile, International Journal of Computational Engineering Research (IJCER), February 2018, Volume 8, Issue 2, pp. 6 – 18.
68. "CFD Analysis of Twin Turbulent Impinging Round Jets at Different Impingement Angles" Raj Narayan Gopalakrishnan and Peter J. Disimile, <http://www.mdpi.com/journal/fluids>, Fluids, December 2018, 3(4), 79, pp. 1 – 18.
69. "Turbulence Scales in a Compressible Subsonic Boundary Layer at Moderate Reynolds Number" Peter J. Disimile and Norman Toy, IPASJ International Journal of Mechanical Engineering (IJME), Volume 6, Issue 12, December 2018, pp1 to 12.
70. "The imaging of fluid sloshing within a closed tank undergoing oscillations" P.J. Disimile and N. Toy, Results in Engineering, 2 (2019) 100014.

71. "Video analysis of high velocity projectile entering fluid filled tank" P.J. Disimile and N. Toy, Results in Engineering, 2 (2019) 100013.
72. "CFD Analysis of Turbulent Swirling Flow Characteristic in a RANQUE-HILSCH Vortex Tube using a RANS based Turbulence Model" C. B. Karthik Vigneshwar and Peter J. Disimile, International Journal of Engineering Sciences (IJESRT), Volume 8, Issue 6, June 2019, pp74 to 99.
73. "Flowfield in a generic engine Nacelle" Sanjay Shanmugasundaram and Peter J. Disimile, International Journal of Engineering Sciences (IJESRT), Volume #, Issue \$, August 2019, pp### to ##. ACCEPTED.
- 74.

Conference Publications

1. "Transverse Vorticity Measurements in an Excited, Two-Dimensional, Incompressible Planar Mixing Layer." Disimile, P.J., Ph.D. Dissertation, Michigan State University, June 1984.
2. "Phase Averaged Transverse Vorticity Measurements in an Excited, Two-Dimensional Mixing Layer", Disimile, P.J., AIAA 18th Fluid Dynamics Conference AIAA-85-1648, July 1985, Cincinnati, Ohio.
3. "Entrainment Region Phenomena for a Large Plane Shear Layer," Ali, S.K., Klewicki, C.L., Disimile, P.J., Lawson, I. and J.F. Foss, Fifth Symposium on Turbulent Shear Flows, August, 1985, Cornell University, pp.3.7-3.12.
4. "The MSU Free Shear Flow Facility," Disimile, P.J., AIAA 14th Aerodynamic Testing Conference, AIAA-86-0778, March 1986, West Palm Beach, Florida, pp.327-336.
5. "Transverse Vorticity Measurements Using an Array of Four Hot-Wire Probes," Foss, J.F., Klewicki, C.L., and Disimile, P.J., NASA CR178098, May 1986.
6. "Quasi-Instantaneous Transverse Vorticity Measurements in an Excited, Two-Dimensional, Single Stream Mixing Layer," Disimile, P.J., AIAA/ASME 4th Fluid Mechanics Conference, AIAA-86-1113, Atlanta, Georgia, May 1986.
7. "Phase Averaged Transverse Vorticity Measurements in an Excited Two-Dimensional Slit Jet," Curlett, B.P. and Disimile, P.J. AIAA 26th Aerospace Sciences Meeting, AIAA-88-0041, January 11-14, 1988, Reno, Nevada.
8. "The Effect of Surface Roughness on Turbulent Boundary Layer Separation at Mach 6.0," Disimile, P.J. and Scaggs, N.E., 12th US-FRG DEA Mtg. on Viscous and Interacting Flow Field Effects at the David Taylor Naval Research Center, May 3-4, 1988.
9. "The Distribution of Vorticity in a Large Vortical Motion," Disimile, P.J., The 11th Symposium on Turbulence, University of Missouri-Rolla, October 17-19, 1988, pp. A1.1-A1.8.
10. "Behavior in Normal and Reduced Gravity of an Enclosed Liquid/Gas System With Non-Uniform Heating From Above," Ross, H.D., Schiller, D.N., Disimile, P.J. and Sirignano, W.A., AIAA 27th Aerospace Sciences Meeting, AIAA-89-0070, January 9-12, 1989, Reno, Nevada. (Also see NASA TM 101471).
11. "An Investigation into Wedge-Induced Turbulent Boundary Layer Separation on a Uniformly Roughened Surface at Mach 6," Disimile, P.J. and Scaggs, N.E., Proceeding of the AIAA 7th Applied Aerodynamic Conference, AIAA-89-2163-CP, July 31 - August 2, 1989, Seattle, Washington, pp. 32-41.
12. "Flow Characteristics in the Nearfield of an Impinging Jet Issuing From a Long Circular Pipe," Aydore, S., Disimile, P.J., Tsuei, Y.G. and Behbahani, A.I., ASME Fluids Engineering Conference, Forum on Turbulent Flows, FED-Vol. 94, June 4-7, 1990, Toronto, Canada, pp. 67-72.
13. "Steady Flow in a Three-Dimensional Rectangular Cavity Yawed from the Freestream Turbulent Boundary Layer," DiMicco, R.G., and Disimile, P.J., ASME Fluids Engineering Conference, Forum on Turbulent Flows, FED-Vol. 94, June 4-7, 1990, Toronto, Canada, pp. 169-174.
14. "The Effect of Constructive and Destructive Interference on the Downstream Development of Twin Jets in a Crossflow. Part 1: Destructive Interference of Laterally Spaced Jets," DiMicco, R., Fabris, D. and Disimile, P.J., 21st Fluid Dynamics, Plasmadynamics and Lasers Conference, AIAA-90-1623, June 18-20, 1990, Seattle, Washington.
15. "A Multipurpose Aerodynamic Research Facility Utilizing the Abandoned Cincinnati Subway Tubes," Disimile, P.J., Hermann, J. and Heist, T., AIAA 16th Aerodynamic Ground Testing Conference, AIAA-90-1424, June 18-20, 1990, Seattle, Washington.
16. "The Effect of Constructive and Destructive Interference on the Downstream Development of Twin Jets in a Crossflow. Part 2: Constructive Interference of Angularly Displaced Jets," DiMicco, R., Fabris, D. and Disimile, P.J., 26th AIAA/ASME/ASEE Joint Propulsion Conference, AIAA-90-2107, July 16-18, 1990, Orlando, Florida.

17. "Space Vehicle Propulsion Systems: Environmental Space Hazards," Bahr, G. and Disimile, P.J., 26th AIAA/ASME/ASEE Joint Propulsion Conference, AIAA-90-1881, July 16-18, 1990, Orlando, Florida (also see NASA-CR-188094).
18. "Electric Space Propulsion Systems: Environmental Space Hazards," Bahr, G. and Disimile, P.J., AIAA/DGLR/JSASS 21st International Electric Propulsion Conference, AIAA-90-2571, July 16-18, 1990, Orlando, Florida.
19. "The Effect of Separation on Turbulent Boundary Layer Characteristics Over a Smooth Surface at Mach 6," Scaggs, N.E. and Disimile, P.J., Proceedings of the AIAA 8th Applied Aerodynamic Conference, AIAA-90-3028-CP, August 20-22, 1990, Portland, Oregon, pp.273-283.
20. "A High Severity Space Hazard: Orbital Debris," Bahr, G. and Disimile, P.J., AIAA Space Programs and Technologies Conference, AIAA-90-3865, September 25-28, 1990, Huntsville, Alabama.
21. "Three Dimensional Flow in a Rectangular Cavity" DiMicco, R.G., Disimile, P.J., Lueders, K., Toy, N. and Savory, E., 12th Symposium on Turbulence, University of Missouri-Rolla, September 24-26, 1990, pp. A13-1, A13-8.
22. "The Development of Twin-Jets Issuing Into a Crossflow," Disimile, P.J., DiMicco, R.G., Toy, N. and Savory, E., 12th Symposium on Turbulence, University of Missouri-Rolla, September 24-26, 1990, B2-1 to B2-7.
23. "An Investigation into the Flow Behavior of a Single Phase Gas System and a Two Phase Gas/Liquid System in Normal Gravity Nonuniform Heating from Above," Disimile, P.J. and Heist, T.J., NASA CR 185304, October 1990.
24. "Unsteady Flow in a Three-Dimensional Rectangular Cavity Immersed in a Subsonic Crossflow," Disimile, P.J., DiMicco, R.G., Lueders, K., Savory, E. and Toy, N., ASME Fluids Engineering Conference, Forum on Unsteady Flows, FED-Vol. 102, November 25-27, 1990, Dallas, Texas, pp.45-48.
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66. "Characterization of a 2D pool Fire simulator" Disimile, P.J., and Davis, J., 30th Annual Dayton-Cincinnati Aerospace Science and Technology, March 8, 2005, Dayton, Ohio.
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68. "Convective flow field above a heated circular plate" Disimile, P.J., and Toy, N., ASME IMEC&E, Visualization of Heat Transfer Photogallery, Chicago, November 2006.
69. "Hot Surface Ignition" Toy, N., and Disimile, P.J., ASME IMEC&E, Visualization of Heat Transfer Photogallery, Chicago, November 2006.
70. "CFD Investigation of Flow Past Idealized Engine Nacelle Clutter" Caspers, M.S., Maple, R.C., and Disimile, P.J., 32Pnd Annual Dayton-Cincinnati Aerospace Science and Technology, March 6th, 2007, Dayton, Ohio.
71. "The Flow Field Downstream of Circular Cylinders Immersed within Thick Boundary Layers", John Davis, Peter Disimile, and Norman Toy, 35th Annual Dayton-Cincinnati Aerospace Science Symposium, session 13, March 9th , 2010.
72. "Methodologies for Turbulent Boundary Layer Modification in Compressible Backward-Facing Step Flow", Peter Disimile, John Pyles, Norman Toy, and John Davis, 35th Annual Dayton-Cincinnati Aerospace Science Symposium, session 13, March 9th , 2010.
73. "Evaluation of Solid Propellant Gas Generators for Fire Suppression in Engine Nacelles", Peter Disimile, John Pyles, and Norman Toy, 35th Annual Dayton-Cincinnati Aerospace Science Symposium, session 18, March 9th , 2010.
74. "Pool Fire Stability Downstream of Surface Mounted Circular Cylinders" John Davis, Peter Disimile, and Norman Toy, 35th Annual Dayton-Cincinnati Aerospace Science Symposium, session 25, March 9th , 2010.
75. "Aero-Optic Characteristics of a High Speed Compressible Backward-Facing Step Flow" Peter Disimile, John Pyles, Norman Toy, and David McGinnis, 35th Annual Dayton-Cincinnati Aerospace Science Symposium, session 45, March 9th , 2010.
76. "Coupled Wave Dynamics and Spray Production under a Simulated Subcritical Roll Oscillation" Peter Disimile, John Pyles, and Norman Toy, 35th Annual Dayton-Cincinnati Aerospace Science Symposium, session 45, March 9th , 2010.
77. "CFD Investigation and Analysis of Hot Surface Ignition" Dhaval Shiyani and Peter J. Disimile, 39th Annual Dayton-Cincinnati Aerospace Science Symposium, session 116, March 5th, 2014.
78. "Heat Transfer from an Open Cavity Submerged within in a Subsonic Turbulent Boundary Layer" Kurt Wagner and Peter J. Disimile, 39th Annual Dayton-Cincinnati Aerospace Science Symposium, session 119, March 5th, 2014.
79. "Geometric Modification and Impact on the Performance of a Vortex Tube" Arun Gopal Rajagopalan and Peter J. Disimile, 39th Annual Dayton-Cincinnati Aerospace Science Symposium, session 119, March 5th , 2014.
80. "Computational Simulation of the Hot Surface Flow-Field" Dhaval Shiyani and Peter J. Disimile, US-German Technical Exchange Program on Fuel System Failure Effects Meeting @ IABG, Ottobrunn, Germany, April 23rd and 24th, 2014 (RESTRICTED).

81. "Intelligent Fire Protection System Technologies" Peter J. Disimile and David McGinnis, Army Research Laboratories/TARDEC , October 14th and 15th,2015, APG Aberdeen, Maryland.
82. "Advancements in Smart Fire Protection" Peter J. Disimile and David McGinnis, The 8th Triennial International Aircraft Fire and Cabin Safety Research (TIAF&CSR) Conference, Atlantic City, New Jersey, USA, October 24th – 27th, 2016.
83. "Intelligent High-Speed Fire Ball Suppression Technology" Peter J. Disimile and David McGinnis, *Systems Fire Protection Information Exchange* Army Research Laboratories/TARDEC, May 10th and 11th, 2017, APG Aberdeen, Maryland.
84. "Transition of Intelligent Fire Suppression Systems" Peter J. Disimile, Joint Aircraft Survivability Program Review @ Nellis AFB, Nevada, September 18th to 20th, 2018 (RESTRICTED).
85. "Safety & Survivability: Fire and Explosion Mitigation" Peter J. Disimile, NAVSEA Naval Surface Warfare Center, Carderock, 15July2019.
86. "Overview of RDT&E Fire and Explosion Activities", Peter J. Disimile, NAVSEA Advanced Power and Energy, NAVSEA NSWC-CD, June 27th, 2019