

Lawrence S. Ukeiley

University of Florida
REEF
1350 N. Poquito Rd
Shalimar, FL 32579
850-833-9350 ext 244

EDUCATION:

Clarkson University, Potsdam, New York 13699
Ph.D. - Mechanical Engineering, October 1995

Clarkson University, Potsdam, New York 13699
Master of Science - Mechanical Engineering, May 1991

Alfred University, Alfred, New York 14802
Bachelor of Science - Mechanical Engineering, May 1989

WORK/RESEARCH EXPERIENCE:

- 2006 – present *Assistant Professor, Department of Mechanical and Aerospace Engineering, University of Florida – Research and Engineering Education Facility.*
- 2004 – 2006 *Senior Research Scientist, National Center for Physical Acoustics.*
- 1999- 2004 *Research Scientist, National Center for Physical Acoustics and Research Assistant Professor of Mechanical Engineering, University of Mississippi*
Duties include developing new laboratories in support of NCPA research efforts which include an Anechoic Jet Lab, Small Scale Supersonic Wind Tunnel and 12” Trisomic Wind Tunnel. Additional duties include soliciting independent support for research and graduate students; teach graduate level classes and advising students in support of the Aeroacoustics Emphasis in the School of Engineering and conducting research in support of many national programs that support DOD efforts currently existing in the NCPA such as:
- *AFOSR/AFRL – POD analysis of resonating cavity flows; Development of low-dimensional models for compressible flows; Experimental analysis of cavity flows using optical (PIV & Schlieren) and dynamic surface pressure measurements; Development and evaluation of dynamic load suppression techniques at both model scale and full scale flight tests conducted in conjunction with Australian RAAF in July 2004; Conduct experiments of beam propagation through turbulent flows with and without flow control to quantify scale effects.*
 - *ONR – Model scale testing of jet noise suppression techniques for carrier landing simulations; Conduct full-scale fly over tests of simulated carrier landing scenarios, Transition model scale tests to full scale hardware and evaluate feasibility; conducted full scale evaluation of noise suppression techniques (summer 2004) which eliminated shock noise .*
 - *US ARMY SMDC – Conduct experiments for evaluating concepts for enhanced mixing in SCRAMjet combustors; Develop facilities for conducting experiments consistent with the needs of the SMDC.*
- 1997-1999 *Post Doctoral Associate, National Research Council/NASA LaRC*
Designed and conducted experiments to study the dynamics of large scale structures in transonic jets with an ultimate goal of developing active control schemes for noise reduction. The experiments were conducted using hot-wire anemometry, particle image velocimetry and more conventional probes for pressure and temperature. Supervised undergraduate and graduate students in NASA’s summer programs.
- 1995-1997 *Post Doctoral/Research Scientist, BEAM Technologies*
Responsible for several research contracts and SBIR’s. Developed control strategies for large CFD codes run on super computers. Assisted in the development of mathematical commercial software using C++.
- 1993-1995 *Teaching/Research Assistant, Clarkson University*

Responsible for Mechanical and Aeronautical Engineering senior lab class. Duties included assisting students with running labs, grading lab reports and lecturing. Research involved the development of a dynamical systems model for a turbulent plane mixing layer.

1992-1993

Research Fellow, CEAT/LEA, Poitiers France

Conducted an extensive experimental effort to measure the two-point correlation tensor in a plane turbulent mixing layer. Multi-point hot-wire anemometer techniques were utilized to acquire the database. Applied the Proper Orthogonal Decomposition on the acquired database to obtain the basis set for a dynamical systems model.

1989-1992

Research Assistant, Clarkson University

Conducted experiments to examine coherent structures in a lobed mixer flowfield. Developed and built arrays of hot-wire probes. Applied scalar version of the Proper Orthogonal Decomposition to acquired database. Guided and supervised undergraduate research projects funded by the Cornell-Clarkson Space Grant Consortium.

RESEARCH GRANTS AWARDED:

AFOSR, PI, Shear Layer Dynamics in Resonating Cavity Flows, \$401,909, 4/1/01 – 9/30/04

AFOSR, Co-PI with M. Glauser at Syracuse University, Low Dimensional Methods for Jet Noise Control, \$291,046 - UM part \$115,000, 12/1/01-11/14/04.

AFRL/VAAI, Co-PI with J. Seiner, Phase II STTR with CRAFT Tech, Directed Energy Beam Improvement, UM part \$150,000.

AFOSR, Co-PI with J. Seiner, Phase II STTR with CRAFT Tech, Flow Control for Directed Energy Beam Improvement, UM part \$150,000

AFOSR, Co-PI with M. Glauser at Syracuse University, Low Dimensional Methods for Examination of Noise from Hot Jets, UM part \$117,000, 1/1/05-10/31/07.

AFRL/VAAI, Co-PI With J. Seiner, Joint with CRAFT Tech and Florida State University, Separation Enhancement and Acoustic Reduction, UM part \$395,000, 12/1/04 – 5/31/06.

PROFESSIONAL SOCIETIES:

ASME – Member Fluid Mechanics Technical Committee, Co-Organizer of the Symposium on the Measurement and Modeling of Large Scale Turbulent Structures (2002, 2005), Lead Organizer of the Forum on High Speed Jets (2003, 2004)

AIAA – Senior Member

APS - Member

TEACHING EXPERIENCE:

Fall 2003 University of Mississippi, ENGR 720 Advanced Turbulence

Fall 2000, 2002 University of Mississippi, ENGR 613 Experimental Methods for Aeroacoustics and Aerodynamics
Developed and instructed experimental methods course for newly formed emphasis in aeroacoustics.

Spring 2000,2002 University of Mississippi, ENGR 711 Introduction to Turbulence

Fall 2001 University of Mississippi, ENGR 609 Time Series Analysis

Summer 1994 Clarkson University, ME 411 Introduction to Heat Transfer.

WORKSHOPS/SHORT COURSES ATTENDED:

March 2003 **Invited Panel Member** of Workshop on Flow Control for Agile Autonomous Flight, Sponsored by AFOSR and Held at University of Florida Graduate Engineering and Research Center.

November 1998 **Invited Presenter** at the United Technology Workshop on Flow Control.

August 1998 ICASE Workshop on Wavelet Applications, Hampton, VA.

October 1992 ERCOFTAC Workshop on Structure Identification in Free Turbulent Shear Flows, Poitiers, France.

GRADUATE STUDENTS DIRECTED:

Nathan Murray, M.S. (2003)/Ph.D. (expected 2006)

Richa Mann, Ph.D (expected 2006)

Harold Whiffen, M.S. (2006)

Kiran K. Konde, M.S. (2003) (Co-advisor J. Seiner)

RESEARCH INTERESTS:

Turbulence
Nonlinear Systems
Aeroacoustics

Reduced Order Modeling
Experimental Techniques
Heat Transfer

HONORS:

NASA Space Grant Research Fellow
Chateaubriand Fellowship

AIAA/Gordon C. Oates Graduate Scholarship
NRC Post-Doctoral Fellowship

REVIEWER:

Physics of Fluids
ASME Journal of Fluids Engineering
NSF
AFOSR

ASME Fluids Engineering Div.
AIAA Journal
Theoretical and Computational Fluid Dyn.
Fluids and Structures

Journal Publications & Hardbound Volumes:

Ukeiley, L. S., and Murray, N. E., (2005) "Velocity and Surface Pressure Measurements in an Open Cavity," **Experiments in Fluids**, Vol. 38, No. 5, pp. 656-671.

Ukeiley, L. S. and Ponton, M. K. (2004) "On the Near Field Pressure of a Transonic Axisymmetric Jet," **International Journal of Aeroacoustics**, Vol. 3, No. 1, pp. 43-66.

Ukeiley, L. S., Ponton, M. K., Seiner, J. M. and Jansen, B. (2004) "Suppression of Pressure Loads in Cavity Flows," **AIAA Journal**, Vol. 42, No. 1, pp. 70-79.

Murray, N. E. and Ukeiley, L. S. (2003) "Estimation of the Flowfield from Surface Pressure Measurements in an Open Cavity," **AIAA Journal**, Vol 41 No. 5, pp 969-972.

Ukeiley, L., Cordier, L., Delville, J., Glauser, M. and Bonnet, J.P. (2001) "Examination of Large Scale Structures in a Turbulent Plane Mixing Layer. Part 2: Dynamical Systems Model," **Journal of Fluid Mechanics**, Vol. 441, pp. 67-108.

Ponton, M. K., Horine, J. E., Ukeiley, L. S. and Seiner, J. M. (2001) "Understanding the Role of Self-Efficacy in Engineering Education," **Journal of Engineering Education**, April, pp. 247-251.

Glauser, M.N., Taylor, J. A., Ukeiley, L. S., George, W. K. and Citriniti, J. H. (2000) "A Low-Dimensional Description of the Axisymmetric Turbulent Jet: An Update," **ERCFTAC Bulletin**, Vol. 46, pp. 53-61.

Delville, J., Ukeiley, L., Cordier, L., Bonnet, J.P. and Glauser, M. (1998) "Examination of Large Scale Structures in a Turbulent Plane Mixing Layer. Part 1: Proper Orthogonal Decomposition," **Journal of Fluid Mechanics**, Vol. 39, pp 91-122.

Ukeiley, L. and Glauser, M. (1998) "Multi-Point Measurements and Low-Dimensional Models: Tools for the Characterization and Control of Turbulent Flows," In IUTAM Symposium on Simulation and Identification of Organized Structure in Flows, Kluwer Academic Publishers (editors, Sorenson, Aubry and Hopfinger) pp. 433-447.

Bonnet, J.P., Delville, J., Glauser, M.N., Antonia, R.A., Bisset, D.K., Cole, D.R., Fiedler, H.E., Garem, J.H., Hilberg, D., Jeong, J., Kevlahan, N.K.R., Ukeiley, L.S. and Vincendeau, E. (1998) "Collaborative Testing of Eddy Structure Identification Methods in Free Turbulent Shear Flows," **Experiments in Fluids**, Vol. 25, pp. 197-228.

Glauser, M., Ukeiley, L. and Wick, D. (1996) "Investigation of Turbulent Flows via Pseudo Flow Visualization, Part 2 Lobed Mixer Layer," **Experimental Thermal and Fluid Sciences**, Vol. 13. pp. 167-177.

Bonnet, J.P., Cole, D.R., Delville, J., Glauser, M.N. and Ukeiley, L.S. (1994) "Stochastic Estimation and Proper Orthogonal Decomposition Complementary Techniques for Identifying Structure," **Experiment in Fluids**, Vol. 17, pp. 307-314.

Wick, D., Glauser, M. and Ukeiley, L. (1994) "Investigation of Turbulent Flows via Pseudo Flow Visualization, Part 1 Axisymmetric Jet Mixing Layer," **Experimental Thermal and Fluid Sciences**, Vol. 9 No. 4. pp. 391-404.

Ukeiley, L., Cole, D., and Glauser, M. (1993) "An Examination of the Axisymmetric Jet Using Coherent Structure Detection Techniques," In *Eddy Structure Identification in Free Turbulent Shear Flows*, Kluwer Academic Publishers (editors, J.P. Bonnet and M.N. Glauser) pp. 325-336.

Ukeiley, L., Glauser, M. and Wick, D. (1993) "Coherent Structure Downstream Evolution in a Lobed Mixer Flow," **AIAA Journal**, Vol. 31 No. 8. pp. 1392-1397.

Ukeiley, L., Varghese, M., Glauser, M. and Valentine, D. (1992) "Multifractal Analysis of a Lobed Mixer Flowfield Utilizing the Proper Orthogonal Decomposition," **AIAA Journal**, Vol. 30 No 5. pp. 1260-1267.

Meeting Papers, Proceedings & Reports:

Ukeiley, L., and Murray, N., (2005) "Estimation of Time dependent Flow Properties in an Open Cavity," ASME Paper FEDSM2005-77147.

Greska, B., Krothapalli, A., Seiner, J., Jansen, B. and Ukeiley, L., (2005) "Effects of Microjet Injection on an F404 Jet Engine," AIAA Paper 2005-3047.

Seiner, J., Ukeiley, L. and Jansen, B., (2005) "Aero-Performance Efficient Noise Reduction for the F-404-400 Engine," AIAA Paper 2005-3048.

Murray, N., and Ukeiley, L., (2005) "Wall-Pressure Modes in Subsonic Cavity Flows," AIAA Paper 2005-2801.

Tinney, C., Glauser, M. and Ukeiley, L., (2005) "The Evolution of the Most Energetic Modes in a High Subsonic Mach Number Turbulent Jet," AIAA Paper 2005-0417.

Tinney, C., Ukeiley, L. and Glauser, M., (2004) "Noise Identification in a Mach 0.85 Jet using Modified Low-Dimensional Techniques," Paper No. 101, Proceedings of the Tenth European Turbulence Conference.

Sinha, N. and Arunajatesan, S., and Seiner, J.M. and Ukeiley, L. (2004) "Large Eddy Simulation of Aero-Optic Flowfields and Flow Control Application," AIAA Paper 2004-2448.

Ukeiley, L., Mann, R., Tinney, C., Glauser, M., (2004) "Spatial Correlations in a Transonic Jet" AIAA Paper 2004-2654.

Seiner, J., Ukeiley, L., Jansen, B., Kannepalli, C. and Dash, S., (2004) "Noise Reduction Technology for F/A- 18 E/F Aircraft," AIAA Paper 2004-2972.

Murray, N., Ukeiley, L., (2004) "Low-Dimensional Estimation of Cavity Flow Dynamics," AIAA Paper 2004-0681.

Tinney, C., Glauser, M., Coughlin, T. and Ukeiley, L., (2004) "Designing an Anechoic Chamber for the Experimental Study of High Speed Heated Jets," AIAA Paper 2004-0010.

Seiner, J., Jansen, B., Ukeiley, L., Dash, S., Kenzakowski, D. and Krothapalli, A., (2003) "Noise Suppression for Military Aircraft," Paper # 234, EuroNoise.

Seiner, J. M., Jansen, B. J. and Ukeiley, L. S., (2003) "Acoustic Fly-Over Studies of F/A E/F Aircraft During FCLP Mission," AIAA Paper 2003-3330.

Seiner, J. M., Gui, L., Ukeiley, L. and Jansen, B. (2003) "Particle Laden Jet PIV Experiments and Simulations," 9th Spirits JANNAF Meeting.

Ukeiley, L. S., Ponton, M. K., Seiner, J. M. and Jansen, B., (2003) "Suppression of Pressure Loads in Resonating Cavities Through Blowing," AIAA Paper 2003-0181.

Ukeiley, L. S., Kannepalli, C. and Arunajatesan, S. (2002) "Development of Low Dimensional Models for Control of Compressible Flows." 41st IEEE Conference on Decision and Control, Las Vegas, NV (INVITED).

Murray, N. E. and Ukeiley, L. S. (2002) "Estimating the Shear Layer Velocity Field Above an Open Cavity From Surface Pressure Measurements," AIAA Paper 2002-2866.

Seiner, J. M., Ukeiley, L. S., Ponton, M. K. and Jansen, B. J. (2002) "Progress in Experimental Measure of Turbulent Flow for Aeroacoustics," AIAA Paper 2002-2402.

Ukeiley, L., Ponton, M., Seiner, J. and Jansen, B. (2002) "Suppression of Pressure Loads in Cavity Flows," AIAA Paper 2002-0661.

Seiner, J., Ukeiley, L. and Papp, J. (2001) "Application of Simultaneous PIV and Laser Speckle Studies of Jet Turbulence," 17th ICA, Rome.

Seiner, J., Ukeiley, L., Ponton, M. and Papp, J. (2001) "Jet Turbulence Measurements of Aeroacoustic Source Using Stereo PIV," AIAA Paper 2001-2184.

Ponton, M., Seiner, J., Ukeiley, L. and Jansen, B. (2001) "A New Anechoic Chamber Design for Testing High-Temperature Jet flows," AIAA Paper 2001-2190.

Ukeiley, L., Kannepalli, C., Arunajatesan, S. and Sinha, N. (2001) "Low-Dimensional Description of Variable Density Flows," AIAA Paper 2001-0515.

Taylor, J., Ukeiley, L. and Glauser, M. (2001) "A Low-Dimensional Description of the Compressible Axisymmetric Shear Layer," AIAA Paper 2001-0292.

Ukeiley, L., Seiner, J., Arunajatesan, S., Sinha, N. and Dash, S. (2000) "Low-Dimensional Description of Resonating Cavity Flow," AIAA Paper 2000-2459.

Sinha, N., Arunajatesan, S. and Ukeiley, L. (2000) "High Fidelity Simulation of Weapons Aeroacoustics Using Active Flow Control," AIAA Paper 2000-1968.

Ukeiley, L.S. (2000) "Examination of Quadrupole Sources in a Transonic Jet," AIAA Paper 2000-0084.

Ukeiley, L.S., Seiner, J.M. and Ponton, M.K. (1999) "Azimuthal Structure of an Axisymmetric Jet Mixing Layer," ASME paper FEDSM99-7252.

Glauser, M., Eaton, E., Taylor, J., Cole, D., Ukeiley, L., Citriniti, J., George, W. and Stokes, S. (1999) "Low-Dimensional Descriptions of Turbulent Flows: Experiment and Modeling," AIAA paper 99-3699.

Seiner, J.M., Ukeiley, L.S., and Ponton, M.K. (1999) "Jet Noise Source Measurements Using PIV," AIAA Paper 99-1869.

Ponton, M., Ukeiley, L. and Lee, S. (1999) "Aeroacoustic Data for a High Reynolds Number Axisymmetric Subsonic Jet," NASA TM-1999-209336.

Ukeiley, L.S. and Seiner, J.M. (1998) "Examination of Large Scale Structures in a Transonic Jet Mixing Layer," ASME paper FEDSM98-5234.

Glauser, M. and Ukeiley, L. (1997) "Multi-Point Measurements and Low-Dimensional Models; Tools for the Characterization and Control of Turbulent Flows," IUTAM Symposium on Simulation and Identification of Organized Structures in Flows, Lyngby, Denmark (INVITED).

Ukeiley, L. and Glauser, M. (1995) "Dynamics of Large Scale Structures in a Plane turbulent Mixing Layer," Clarkson University Report No. MAE-311.

Glauser, M., Cole, D., Ukeiley, L., Bonnet, J. and Delville, J. (1993) "Stochastic Estimation and Proper Orthogonal Decomposition: Complementary Techniques for Identifying Structure," Ninth Symposium on Turbulent Shear

Flows, Koyoto, Japan.

Delville, J. and Ukeiley, L. (1993) "Vectorial Proper Orthogonal Decomposition, Including Spanwise Dependency, in a Plane Fully Turbulent Mixing Layer," Ninth Symposium on Turbulent Shear Flows, Koyoto, Japan.

Delville, J., Vincendeau, E., Ukeiley, L., Garem, J. and Bonnet, J.P. (1993) "Etude experimental de la structure d'une couche de mélange plane turbulente en fluide incompressible. Application de la Decomposition Orthogonale aux Valeurs Propres," Convention DRET 90-171 Rapport Final.

Ukeiley, L., Cole, D., and Glauser, M. (1992) "An Examination of the Axisymmetric Jet Using Coherent Structure Detection Techniques," IUTAM Symposium on Eddy Structure Identification In Free Turbulent Shear Flows, Poitiers, France.

Ukeiley, L. (1992) "Downstream Evolution of Large Scale Structures in a Lobed Mixer Flow," AIAA Northeast Regional Student Conference.

Ukeiley, L., Glauser, M. and Wick, D. (1991) "A One-Dimensional Proper Orthogonal Decomposition of the Downstream Flow Field of a Lobed Mixer," Eighth Symposium on Turbulent Shear Flows, Munich, Germany.

Wick D. and Ukeiley, L. (1991) "A Comprehensive Analysis of the Near Field Jet Mixing Layer and the Flowfield Downstream of a Lobed Mixer Using a Pseudo Flow Visualization Method," AIAA Northeast Regional Student Conference.

Ukeiley, L., Wick, D. and Glauser, M. (1991) "Coherent Structure Identification in a Lobed Mixer," ASME Paper No. 91-GT-307.

Ukeiley, L., Varghese, M., Glauser, M. and Valentine, D. (1991) "An Examination of Coherent Structures in a Lobed Mixer Using Multifractal Measures in Conjunction With The Proper Orthogonal Decomposition," AIAA Paper 91-0521.

Ukeiley, L., Wick, D. and Glauser, M. (1990) "A Novel Hot-Wire Rake Design," ASME FED-Vol 97 pp.87 -92.

Hollworth, B.R., Maxwell, K.A. and Ukeiley, L.S (1990) "Impingement Cooling of Electronics: Effects of Venting Through the Circuit Board," Joint AIAA/ASME Thermophysics and Heat Transfer Conference, Seattle, Washington.

Published Abstracts & Presentations

Ukeiley, L., and Murray, N., "Toward Active Control of Cavity Flows Using Pressure Based Estimation Techniques," 35th AIAA Fluid Dynamics Conference and Exhibit, June 2005.

Ukeiley, L. and Murray, N., "Low-Dimensional Approaches for Aeroacoustics," International Symposium on Recent Advances in Aeroacoustics and Flow-Combustion Control, January 2005.

Ukeiley, L. and Murray, N. "On the Relationship Between Surface Pressure in a Cavity and the Shear Layer Above It," Bulletin of the American Physical Society, Vol. 48, No. 10, (2003).

Ukeiley, L., "Experimental Studies of Open Cavity Flows," University of Florida, October 2003.

Ukeiley, L., "Low-Dimensional Experimental Approaches for Aeroacoustics Research," Alfred University, February 2003.

Murray, N. and Ukeiley, L. "Predicting Time Dependent Behavior of the Shear Layer Above an Open Cavity," Bulletin of the American Physical Society, Vol. 47, (2002).

Ukeiley, L., Ponton, M. and Seiner, J. "Space-Time Correlations in an Axisymmetric Jet," Bulletin of the American Physical Society, Vol. 47, (2002).

Ukeiley, L., "Unsteady Features of Transonic Jets," ASME FED Summer annual Meeting, 2002.

Ukeiley, L. "Low-Dimensional Descriptions of Aeroacoustic Flows," Notre Dame University, March 2002.

Ukeiley, L. "Low-Dimensional Descriptions of Aeroacoustic Flows." McMaster University, March 2002.

Ukeiley, L., Ponton, M., and Seiner, J. "Analysis of PIV Data of an Axisymmetric Jet," Bulletin of the American Physical Society, Vol. 46, 2001.

Ukeiley, L. "Low-Dimensional Descriptions of Aeroacoustic Flows," Vanderbilt University, February 2001.

Ukeiley, L., Seiner, J., Sinha, N. and Arunajatesan, S. "Low-Dimensional Description of Cavity Flows," Bulletin of the American Physical Society, Vol. 45, (2000).

Ukeiley, L., Ponton, M. and Rich, M. (1999) "Examination of Near-Field Pressures Around an Axisymmetric Jet," Bulletin of the American Physical Society, Vol. 44, (1999).

Ukeiley, L. "Analysis of Large Scale Structures in an Axisymmetric Jet," Illinois Institute of Technology, March, 1999.

Ukeiley, L. "Analysis of Large Scale Structures in an Axisymmetric Jet," University of Mississippi, March, 1999.

Ukeiley, L. "Analysis of Large Scale Structures in an Axisymmetric Jet," University of New Mexico, March, 1999.

Ukeiley, L. and Seiner, J. "Evolution of Large Scale Structures in a Round Jet," Bulletin of the American Physical Society, Vol. 43, (1998)

Ukeiley, L. and Seiner, J. "Analysis of Large Scale Structures in a Transonic Axisymmetric Jet," UTRC Flow Control Workshop, Hartford, CT, November, 1998. (INVITED)

Ukeiley, L. and Seiner, J. "Examination of Large Scale Structures in a Transonic Jet," Bulletin of the American Physical Society, Vol. 42, (1997).

Ukeiley, L., Bonnet, J.P., Cordier, L., Delville, J. and Glauser, M. "Dynamics of Large Scale Structures in a Plane Turbulent Mixing Layer," POD-Galerkin Models for the Dynamics and Control of Complex Flows, Ithaca, NY, October 1997.

Ukeiley, L., Berkooz, G., Sherry, J., Glauser, M. and Seiner, J. "Experimental Investigation of Large Scale Structures in a Transonic Jet," Bulletin of the American Physical Society, Vol. 41, (1996).

Ukeiley, L. and Berkooz, G. "Enhanced Mixing of a Simulated Round Jet," ASME Winter Annual Meeting, Atlanta, GA, November 1996.

Ukeiley, L., Glauser, M., Cordier, L. Manceau, R., Delville, J. and Bonnet, J.P. "A Dynamical Model for a Plane Turbulent Mixing Layer," Bulletin of the American Physical Society, Vol. 40, (1995).

Ukeiley, L., Glauser, M., Delville, J., Cordier, L. and Bonnet, J.P. "Dynamics of Large Scale Structures in a Plane Turbulent Mixing Layer," Bulletin of the American Physical Society, Vol. 39, (1994).

Ukeiley, L., Delville, J., Bonnet, J.P. and Glauser M. "Large Scale Dynamics in a Plane Turbulent Mixing Layer," Society of Engineering Science 31st Annual Technical Meeting, College Station, Texas. October 1994.

Delville, J., Ukeiley, L., Cordier, L., Bonnet, J.P. and Glauser M. "A Dynamical Systems Approach for Dominant Scales in a Plane Turbulent Mixing Layer," Euromech Colloquium 328 TU Berlin. October 1994.

Ukeiley, L., Delville, J., Bonnet, J.P. and Glauser M. "A Dynamical Systems Model for Large Scales in a Plane Turbulent Mixing Layer," 12th U.S. National Congress of Applied Mechanics, Seattle, Washington. June 1994.

Ukeiley, L., Delville, J., Bonnet, J.P. and Glauser M. "An Examination of Large Scale Dynamics in a Plane Turbulent Mixing Layer," Bulletin of the American Physical Society, Vol. 38, (1993).

Glauser, M., Ukeiley, L., Cole, D., Delville, J., and Bonnet, J.P. "An Application of Complementary Coherent Structure Detection Techniques," Bulletin of the American Physical Society, Vol. 37, (1992).

Cole, D., Ukeiley, L. and Glauser, M. "A Comparison of Coherent Structure Detection Techniques in the Axisymmetric Jet Mixing Layer," Bulletin of the American Physical Society, Vol. 36, (1991).

Ukeiley, L., Wick, D. and Glauser, M. "A Study of a Lobed Mixer Flow Utilizing The Proper Orthogonal Decomposition," Bulletin of the American Physical Society, Vol. 35, (1990).

Wick, D., Ukeiley, L., Glauser, M. and Valentine, D. "Examination of the Turbulent Flow Field Downstream of a Lobed Mixer Using a Pseudo Flow Visualization Method," Bulletin of the American Physical Society, Vol. 35, (1990).

Ukeiley, L., "An Application of Proper Orthogonal Decomposition in conjunction With a Pseudo Flow Visualization Method to a Lobed Mixer," AIAA Northeast Regional Student Conference, 1990.

Wick, D., Ukeiley, L., Glauser, M. and Eckerle, W. "An Application of a Pseudo Flow Visualization to a Lobed Mixer," Bulletin of the American Physical Society, Vol. 34, (1989).