Richard C. Lind, Jr.

Department of Mechanical and Aerospace Engineering
University of Florida
231 Aerospace Building
Gainesville, FL 32611
(352) 392-6745
ricklind@ufl.edu

Education

Sep 1995 Ph.D. in Aerospace Engineering - University of Minnesota
thesis - *Linear Matrix Inequalities for Robust Control*

Nov 1993 M.S. in Aerospace Engineering - University of Minnesota
thesis - *Control Design via Optimal Scaling*

Jun 1990 B.S. in Physics - University of Minnesota
Jun 1990 B.S. in Astrophysics - University of Minnesota

Professional Experience

8/07-present University of Florida - Associate Professor
Department of Aerospace Engineering

8/01-7/07 University of Florida - Assistant Professor
Department of Aerospace Engineering

8/98-7/01 NASA - Research Engineer
Dryden Flight Research Center - Structural Dynamics Branch

5/98-8/98 U.S. Air Force - Visiting Scientist
Wright-Patterson Air Force Base - Flight Controls Branch

12/95-5/98 NASA - PostDoctoral Research Fellow
Dryden Flight Research Center - Structural Dynamics Branch

9/95-12/95 University of Minnesota - PostDoctoral Research Assistant
University of Minnesota Aerospace Engineering Department

1/92-9/95 University of Minnesota - Graduate Research Assistant
University of Minnesota Aerospace Engineering Department

7/92-1/94 Alliant TechSystems - Research Engineer
Underseas System Division - Advanced Systems Department

9/90-12/91 University of Minnesota - Graduate Teaching Assistant
University of Minnesota Aerospace Engineering Department

7/89-8/90 Honeywell, Inc. - Research Engineer
Underseas System Division - Advanced Systems Department

6/88-7/89 Bandolier Lab for High Energy Physics - UnderGraduate Research Assistant
University of Minnesota Physics Department

12/87-6/90 Minnesota Supercomputer Institute - UnderGraduate Research Assistant
University of Minnesota Astronomy Department

Awards

2007 SAE Ralph R. Teetor Educational Award
2006 AIAA Associate Fellow
2000 NASA Dryden Project of the Year (with D. Voracek)
1999 NASA Dryden Paper of the Year (with M. Brenner)
1999 NASA Dryden Project of the Year (with M. Brenner)
1998 NASA Dryden Engineer of the Year
1995-97 NASA PostDoctoral Research Fellowship
1995-97 National Research Council PostDoctoral Research Fellowship
1994-95 University of Minnesota Graduate Research Fellowship
1992-93 Minnesota Space Grant Consortium Fellowship

Highlights

2007 Demonstrated morphing technologies as invitee at reception for U.S. House of Representatives during evening of the State of the Union Address
2004 Demonstrated control using only morphing for actuation and vision-based feedback for sensing through flight test of a micro air vehicle
2001 Demonstrated flutterometer validity through design and flight test of the Aerostructures Test Wing on an F-15

Professional Service

2010-2010 Member of *AIAA Atmospheric Flight Mechanics Technical Committee*

Serving as General Chair for 2012 AIAA AFM Conference in Boston, MA

2009-2010 Associate Editor for *International Journal of Aerospace Engineering*

2003-2010 Member of *AIAA Structural Dynamics Technical Committee*

Served as SDTC representative for 2010 AIAA SDM conference and was responsible for organizing the review and acceptance of 211 abstracts along with distributing into 33 sessions and assigning chairs for the 4-day conference

2000-2010 Editorial Board for *AIAA Progress in Aeronautics and Astronautics* book series

2002-2010 Reviewer for proposals (*AFOSR, NASA, National Research Council, National Science Foundation, National Sciences and Engineering Research Council (Canada), Engineering and Physical Sciences Research Council (England), University of Missouri*)

1994-2010 Reviewer for journals (*Aeronautical Journal; AIAA Journal; ASME Journal of Dynamic Systems, Measurement and Control; Bioinspiration & Biomimetics; Canadian Aeronautics and Space Journal; IEEE Spectrum; IEEE Transactions on Automatic Control; IEEE Transactions on Control Systems Technology; IEEE Transactions on Systems, Man and Cybernetics; International Journal of Aerospace Engineering; International Journal of Robotics and Automation; International Journal of Robust and Nonlinear Control; International Journal on Systems Science; Journal of Aerospace Engineering; Journal of Aircraft; Journal of Fluids and Structures; Journal of Guidance Control and Dynamics; Journal of Vibration and Control; Latin America Applied Research; Nonlinear Dynamics; Transactions of the Society for Modeling and Simulation International*)

1994-2007 Reviewer for conferences (*AIAA Atmospheric Flight Mechanics Conference; AIAA Guidance, Navigation and Control Conference; AIAA Structures, Structural Dynamics, and Materials Conference; ASME International Mechanical Engineering Congress and Exposition; American Control Conference; IEEE International Conference on Control Applications; IEEE International Conference on Robotics and Automation; IEEE Conference on Decision and Control; IEEE World Congress on Computational Intelligence*)

Professional Teaching

Vision-Based Control for Autonomous Vehicles
(2-day short course with A. Kurdila and N. Gans)

Aug 09 AIAA GNC Conference (Chicago, IL)
Aug 07 AIAA GNC Conference (Hilton Head, SC)

Technologies for Micro Air Vehicles in Urban Battlefields
(1-day short course with M. Abdulrahim)

Mar 05 IDGA on Combat and Micro UAV (Washington, DC)

Robust Aeroservoelastic Stability Analysis
(3-day short course with M. Brenner)

Apr 02 AIAA SDM Conference (Denver, CO)
Nov 01 Delft University (Delft, The Netherlands)
Nov 99 Royal Australian Air Force (Adelaide, Australia)

State of the Art Practices in Aeroelasticity
(2-day short course with T. Strganac, J. Lassiter, C. Cesnik, S. Cole, W. Silva, A. Kurdila, E. Reichenbach, G. Sengupta, J. Heeg)

Apr 10 AIAA SDM Conference (Orlando, FL)
Apr 08 AIAA SDM Conference (Chicago, IL)
Apr 06 AIAA SDM Conference (Newport, RI)
Apr 04 AIAA SDM Conference (Palm Springs, CA)
Apr 02 AIAA SDM Conference (Denver, CO)
Apr 01 AIAA SDM Conference (Seattle, WA)
Apr 00 AIAA SDM Conference (Atlanta, GA)
Apr 99 AIAA SDM Conference (St. Louis, MO)

Wavelets for Analysis of Dynamic Systems
(1-day short course with L. Lintereur)

Sep 00 Caterpillar, Inc. (Peoria, IL)

University of Florida Teaching

Undergraduate	Stability and Control of Aircraft	(2001,2002,2003,2004,2005,2006,2007,2008,2009,2010)
	Multivariable Control of Aircraft	(2002)
	Independent Study	(2003,2006,2009,2010)
	Aerospace Design I	(2010)
	Aerospace Design II	(2010,2011)
Graduate	Graduate Seminar	(2002)
	Multivariable Control of Aircraft	(2002)
	Robust Control Synthesis	(2003,2005,2007,2009)
	Control System Theory	(2004,2006,2008)

University of Florida Service

2007-2008 MAE Strategic Planning Committee

2007-2010 MAE Search Committee

2006-2008 MAE Awards Committee

2006-2010 MAE Undergraduate Advisor

2006-2007 MAE Graduate Recruitment Committee

University of Florida Student Organizations

2004-2010 Faculty Advisor for AIAA

University of Florida Student Advising

Student Awards

2010	Ahmed Jorge	University of Florida Outstanding Gator 4-Year Engineer
2009	Michelle Ditto	University of Florida Outstanding Gator 4-Year Engineer
2009	Sanketh Bhat	University of Florida Outstanding International Student Award

Student Publication Awards

2009	Baron Johnson	Best Student Paper at AIAA Atmospheric Flight Mechanics Conference
2006	Daniel Grant	Best Student Paper at AIAA Atmospheric Flight Mechanics Conference
2006	Mujahid Abdulrahim	Best Paper in Session at SAE World Congress
2006	Mujahid Abdulrahim	Best Paper in Session at IEEE American Control Conference
2004	Mujahid Abdulrahim	Best Paper at AIAA Southest Regional Student Conference (graduate)
2004	Mujahid Abdulrahim	Best Paper at AIAA National Student Conference (undergraduate)
2003	Mujahid Abdulrahim	Best Paper at AIAA Southeast Regional Student Conference (undergrad)

Student Fellowships

2010-2013	Abraham Pachikara	NSF Graduate Research Fellowship
2010-2013	Ahmed Jorge	NASA Graduate Student Research Program
2009-2013	Abraham Pachikara	University of Florida Alumni Fellowship
2008-2012	Stephen Sorley	University of Florida Alumni Fellowship
2008-2012	Dong Tran	University of Florida Alumni Fellowship
2007-2011	Baron Johnson	University of Florida Alumni Fellowship
2007-2011	Robert Love	University of Florida Alumni Fellowship
2007-2011	Brian Roberts	University of Florida Alumni Fellowship
2006-2010	Daniel Grant	University of Florida Alumni Fellowship
2004-2008	Ryan Causey	NASA Graduate Student Research Program
2004-2008	Amanda Roderick	University of Florida Alumni Fellowship
2002-2006	Rob Eick	University of Florida Alumni Fellowship

University of Florida Student Advising

Student Summer Programs

2009	Brian Roberts	NSF East Asia and Pacific Summer Institute
2008	Abraham Pachikara	NASA KSC Internship
2007	Kim Wright	NASA Undergraduate Scholars Research Program
2007	Andrew Simon	Harris Summer Intern
2006	Joe Kehoe	Office of Naval Research Summer Intern
2006	Adam Watkins	Office of Naval Research Summer Intern
2005	Joe Kehoe	Office of Naval Research Summer Intern
2004	Ryan Causey	Air Force Research Laboratory Summer Intern
2001	Rob Eick	NASA Academy

Student Scholarship Programs

2008	Abraham Pachikara	Collins Engineering Scholarship
2008	Abraham Pachikara	EADS/Airbus NA Scholarship
2008	Abraham Pachikara	C. Addison Pound Scholarship
2007	Kimberly Wright	Women in Aviation - Delta Airlines Scholarship
2006	Kimberly Wright	UF Undergraduate Research Scholars Program
2006	Dong Tran	UF Undergraduate Research Scholars Program
2006	Daniel Grant	UF Undergraduate Research Scholars Program

Student Visitors

2008	Michael Creagh (University of Queensland, Australia)
2008	Sebastien Michel (Institue Superieur de Technologie, Toulouse, France)
2007	Rob Janssen (Eindhoven University of Technology, Eindhoven, Netherlands)
2005	Fredrik Edelbrink and Rikard Magnusson (Royal Institute of Technology, Stockholm, Sweden)
2004	Jenny Nordstrom and Jenny Poovi (Royal Institute Institute of Technology, Stockholm, Sweden)
2002	Joao Mortagua (Delft University, Delft, Netherlands)

Undergraduate Senior Design (Computer Science Department)

Dec 2009	Michael Wilder
Dec 2008	Brett Jones
Dec 2007	Santiago Obando
May 2007	Kristofer Vitt, Ralph Etienne
Aug 2006	Armando Santos
May 2006	Kevin Belza, David Pisciotta, Monique Garcia-Corkern
Dec 2005	Tuong Tran
Aug 2005	Marcio Maia
May 2005	Andrew Change, Matthew Jaeh, John Iskandar, Juan Cardona, Aaron Crespo
Dec 2004	Tony Tam, Rebekah Colon

University of Florida Student Advising

Masters Students

Mar 2009	Ryan Hurley	*"3-Dimensional Trajectory Generation for Flight within an Obstacle-Rich Environment"*
Mar 2009	Robert Love	*"Analysis of Aeroelastic Flapping-Wing Signals for Micro Air Vehicles"*
Mar 2009	Brian Roberts	*"Turn Performance and Flight Dynamics of a Pterosaur and Pterosaur-Inspired Variable-Placement Vertical Tail Aircraft"*
Mar 2009	Dan Grant	*"Modeling and Dynamics Analysis of a Multi-Joint Morphing Aircraft"*
Mar 2009	Baron Johnson	*"High Angle-of-Attack Flight Characteristics of a Small UAV with a Variable-Size Vertical Tail"*
Oct 2008	Sanketh Bhat	*"Control-Oriented Analysis of Aerothermoelasticity for a Hypersonic Vehicle"*
May 2007	Eric Branch	*"Multi-Vehicle Cooperative Control for Vision-Based Environment Mapping"*
Oct 2005	Amanda Roderick	*"Vision-Based Navigation using Multi-Rate Feedback from Optic Flow and Scene Reconstruction"*
Nov 2004	Ken Boothe	*"Dynamic Modeling and Flight Control of Morphing Air Vehicles"*
Nov 2004	Joe Kehoe	*"Autopilot Development for a Micro Air Vehicle using Vision-Based Attitude Estimation"*
Oct 2004	Jason Jackowski	*"Nonlinear Simulation of a Micro Air Vehicle"*
Sep 2004	Mujahid Abdulrahim	*"Dynamic Characteristics of Morphing Micro Air Vehicles"*
Oct 2003	Ryan Causey	*"A Lateral Vision-Based Control Autopilot for Micro Air Vehicles using a Horizon Detection Approach"*
Oct 2003	Helen Garcia	*"Control of Micro Air Vehicles using Wing Morphing"*
Sep 2003	Kristin Fitzpatrick	*"Applications of Linear Parameter-Varying Control for Aerospace Systems"*
Jul 2003	Rob Eick	*"A Reconfiguration Scheme for Flight Control Adaptation to Fixed-Position Actuator Failure"*
Mar 2003	Joe Dupuis	*"Ground Vibration Test of Airplane Pylon-Store Dynamics using Laser Doppler Vibrometer and Accelerometer Techniques"*
Sep 2002	Anukul Goel	*"Control Strategies for Supercavitating Vehicles"*
Sep 2002	Anand Jammulamadaka	*"Modeling, Dynamics, and Control of High-Speed Supercavitating Vehicles"*

University of Florida Student Advising

Doctoral Students

	Brian Roberts	Expected degree date December 2011
	Eric Duron	Expected degree date December 2012
	Ryan Hurley	Expected degree date June 2012
	Paul Wilson	Expected degree date June 2012
	David Eaton	Expected degree date June 2012
	Dong Tran	Expected degree date December 2012
	Stephen Sorley	Expected degree date December 2012
	Abraham Pachikara	Expected degree date May 2013
	Ryan Carter	Expected degree date June 2013
	Jay Northington	Expected degree date June 2013
	Ed Daughtery	Expected degree date December 2013
	Jud Babcock	Expected degree date December 2013
	Ahmed Jorge	Expected degree date June 2014
August 2011	Robert Love	*An Experimentally-Based Procedure for Aeroservoelastic Model Identification and Control Synthesis for Morphing and Flapping Wings"*
May 2011	Daniel Grant	*A Linear Input-Varying Framework for Modeling and Control of Morphing Aircraft"*
May 2011	Baron Johnson	*"Trajectory Planning for Effective Close-Proximity Sensing with Agile Vehicles"*
Dec 2010	Sanketh Bhat	*"Control-Oriented Design of Systems with Operating Ranges to Optimize Closed-Loop Performance"*
Mar 2009	Crystal Pasiliao	*"Temporal Analysis of Transonic Flow Field Characteristics Associated with Limit Cycle Oscillations"*
May 2008	Sean Regisford	*"Structural Dynamics and Control of an Articulated Micro Air Vehicle"*
Aug 2007	Mujahid Abdulrahim	*"Maneuvering Control and Configuration Adaptation of a Biologically-Inspired Morphing Aircraft"*
Aug 2007	Ryan Causey	*"Vision-Based Control for Flight Relative to Dynamic Environments"*
Aug 2007	Joseph Kehoe	*"Trajectory Generation for Effective Sensing of a Close Proximity Environment"*
Aug 2007	Adam Watkins	*"Vision-Based Map Building and Trajectory Planning to Enable Autonomous Flight through Urban Environments*
Aug 2005	Anukul Goel	*"Robust Control of Supercavitating Vehicles in the Presence of Dynamic and Uncertain Cavity,"*

Patents

1. R. Lind, D. Grant and D. Eaton, "Morphing Aircraft," U.S. Patent Application Serial No. PCT/US09/54917, filed on April 25, 2009.

2. R. Lind and M. Brenner, "Flutterometer," *On-Line μ Method for Robust Flutter Prediction in Expanding a Safe Flight Envelope for an Aircraft Model Under Flight Test*, United States Patent 6216063, April 10, 2001.

Books

1. R. Lind, M. Brenner and S. Dunn, *Data-Based Analysis of Aeroservoelastic Dynamics*, AIAA, in preparation.

2. R. Lind (editor), *Vision-Based Control of Autonomous Vehicles*, AIAA, in preparation.

3. R. Lind and M. Brenner, *Robust Aeroservoelastic Stability Analysis*, Springer-Verlag, London, April 1999.

Book Chapters

1. J. Cooper, R. Lind and J. Wright, "Aeroelastic Testing and Certification," *Encyclopedia of Aerospace Enginering*

2. S. Chatterjee, B. Roberts and R. Lind, " in *Design and Nature V: Comparing Design in Nature with Science and Engineering*, C.A. Brebbia and A. Carpi (editor), WIT Press, June 2010, pp.

Journal Publications

1. D. Tran and R. Lind, "Parametrizing Stability Derivatives and Flight Dynamics with Wing Deformation," *International Journal of Micro Air Vehicles*, in review.

2. S. Sorley, A. Chakravarthy and R. Lind, "Data-Based Identification of Time-Varying Poles," *Journal of Guidance, Control and Dynamics*, in review.

3. S. Bhat and R. Lind, "Linear Parameter-Varying Control for Variations in Thermal Gradients across Hypersonic Vehicles," *Journal of Aerospace Engineering*, in review.

4. S. Bhat and R. Lind, "Control-Oriented Design using Surrogate-Based Optimization and Existence Conditions for Robust Performance," *AIAA Journal*, accepted for publication.

5. A. Chakravarthy, D.T. Grant and R. Lind, "Time-Varying Dynamics of a Micro Air Vehicle with Variable-Sweep Morphing," *Journal of Guidance, Control and Dynamics*, accepted for publication.

6. A.J. Pachikara, J.J. Kehoe and R. Lind, "A Path-Parametrization Approach using Trajectory Primitives for 3-Dimensional Motion Planning," *Journal of Aerospace Engineering*, accepted for publication.

7. A.R. Arvai, J.J. Kehoe and R. Lind, "Vision-Based Navigation using Multi-Rate Feedback from Optic Flow and Scene Reconstruction," *The Aeronautical Journal*, Vol. 115, No. 1169, July 2011, pp. 411-420.

8. R.D. Love and R. Lind, "Time-Frequency Analysis of Aeroelastic Deflections of Flapping Wings," *International Journal of Micro Air Vehicles*, Vol. 3, No. 2, June 2011, pp. 89-100.

9. B. Roberts, R. Lind and S. Chatterjee, "Flight Dynamics of a Pterosaur-Inspired Aircraft Utilizing a Variable-Placement Vertical Tail," *Bioinspiration and Biomimetics*, Vol. 6, No. 2, June 2011, paper number 026010.

10. D.T. Grant, M. Abdulrahim and R. Lind, "Design and Analysis of Biomimetic Joints for Morphing of Micro Air Vehicles," *Bioinspiration and Biomimetics*, Vol. 5, No. 4, December 2010, paper number 045007.

11. D.T. Grant, M. Abdulrahim and R. Lind, "Flight Dynamics of a Morphing Aircraft Utilizing Independent Multiple-Joint Wing Sweep," *International Journal of Micro Air Vehicles*, Vol. 2, No. 2, June 2010, pp. 91-106.

12. B. Johnson and R. Lind, "Characterizing Wing Rock as a Function of Size and Configuration of Vertical Tail," *Journal of Aircraft*, Vol. 47, No. 2, March-April 2010, pp. 567-576.

13. N.R. Gans, W.E. Dixon, R. Lind and A. Kurdila, "A Hardware in the Loop Simulation Platform for Vision-Based Control of Unmanned Air Vehicles," *Mechatronics*, Vol. 19, No. 7, October 2009, pp. 1043-1056.

14. R. Lind, "Flutter Margins for Multi-Mode Unstable Couplings with Associated Flutter Confidence," *Journal of Aircraft*, Vol. 46, No. 5, September-October 2009, pp. 1563-1568.

15. K. Wright and R. Lind, "Sensor Emplacement on Vertical Surfaces with Biologically-Inspired Morphing from Bats," *Journal of Aircraft*, Vol. 46, No. 4, July-August 2009, pp. 1450-1454.

16. D.H. Baldelli, J. Zeng, R. Lind and C. Harris, "Flutter-Prediction Tool for Flight-Test-Based Aeroelastic Parameter-Varying Models," *Journal of Guidance, Control and Dynamics*, Vol. 32, No. 1, January-February 2009, pp. 158-171.

17. D.H. Baldelli, R. Lind and M. Brenner, "Control-Oriented Flutter Limit-Cycle-Oscillation Prediction Framework," *Journal of Guidance, Control and Dynamics*, Vol. 31, No. 6, November-December 2008, pp. 1634-1643.

18. B. Stanford, M. Abulrahim, R. Lind and P. Ifju, "Investigation of Membrane Actuation for Roll Control of a Micro Air Vehicle," *Journal of Aircraft*, Vol. 44, No. 3, May-June 2007, pp. 741-749.

19. T.P. Webb, R.J. Prazenica, A.J. Kurdila and R. Lind, "Vision-Based State Estimation for Autonomous Micro Air Vehicles," *Journal of Guidance, Control and Dynamics*, Vol. 30, No. 3, May-June 2007, pp. 816-826.

20. Y. Xu, N. Fitz-Coy, R. Lind and A. Tatsch, "μ Control for Satellites Formation Flying," *Journal of Aerospace Engineering*, Vol. 20, No. 1, January 2007, pp. 10-21.

21. J.J. Kehoe, R.S. Causey, M. Abdulrahim and R. Lind, "Waypoint Navigation for a Micro Air Vehicle using Vision-Based Attitude Estimation," *The Aeronautical Journal*, Vol. 110, No. 1114, December 2006, pp. 821-829.

22. R. Lind, R.J. Prazenica, M.J. Brenner and D.H. Baldelli, "Identifying Parameter-Dependent Volterra Kernels to Predict Aeroelastic Instabilities," *AIAA Journal*, Vol. 43, No. 12, December 2005, pp. 2496-2502.

23. D.H. Baldelli, R.C. Lind and M. Brenner, "Robust Aeroelastic Match-Point Solutions using Describing Function Method," *Journal of Aircraft*, Vol. 42, No. 6, November-December 2005, pp. 1597-1605.

24. D.H. Baldelli, R. Lind and M. Brenner, "Nonlinear Aeroelastic/ Aeroservoelastic Modeling by Block-Oriented Identification," *Journal of Guidance, Control and Dynamics*, Vol. 28, No. 5, September-October 2005, pp. 1056-1064.

25. R. Lind and J.P. Mortagua, "Reducing Conservatism in Flutterometer Predictions using Volterra Modeling with Modal Parameter Estimation," *Journal of Aircraft*, Vol. 42, No. 4, July-August 2005, pp. 998-1004.

26. R. Albertani, P. Hubner, P. Ifju, R. Lind and J. Jackowski, "Wind Tunnel Testing of Micro Air Vehicles at Low Reynolds Numbers," *SAE 2004 Transactions : Journal of Aerospace*, Vol. 113, No. 1, July 2005, pp. 1474-1486.

27. J.J. Kehoe, R. Causey, R. Lind and A.J. Kurdila, "Maneuvering and Tracking for a Micro Air Vehicle using Vision-Based Feedback," *SAE 2004 Transactions : Journal of Aerospace*, Vol. 113, No. 1, July 2005, pp. 1694-1703.

28. M. Abdulrahim, K. Boothe, R. Lind and P. Ifju, "Flight Characterization of Micro Air Vehicles using Morphing for Agility and Maneuvering," *SAE 2004 Transactions : Journal of Aerospace*, Vol. 113, No. 1, July 2005, pp. 1704-1712.

29. R. Lind, R.J. Prazenica and M.J. Brenner, "Estimating Nonlinearity using Volterra Kernels in Feedback with Linear Models," *Nonlinear Dynamics*, invited paper for special issue on nonlinear system identification, Vol. 39, No. 1, January 2005, pp. 3-23.

30. M. Abdulrahim, H. Garcia and R. Lind, "Flight Characteristics of Shaping the Membrane Wing of a Micro Air Vehicle," *Journal of Aircraft*, Vol. 42, No. 1, January-February 2005, pp. 131-137.

31. K. Fitzpatrick, Y. Feng, R. Lind, A.J. Kurdila and D.W. Mikolaitis, "Flow Control in a Driven Cavity Incorporating Excitation Phase Differential," *Journal of Guidance, Control and Dynamics*, Vol. 28, No. 1, January-February 2005, pp. 63-70.

32. R. Lind, D. Voracek, R. Truax, T. Doyle, S. Potter, and M. Brenner, "A Flight Test to Demonstrate Flutter and Evaluate the Flutterometer," *The Aeronautical Journal*, Vol. 107, No. 1076, October 2003, pp. 577-588.

33. R. Lind, "Flight Test Evaluation of Flutter Prediction Methods," *Journal of Aircraft*, Vol. 40, No. 5, September-October 2003, pp. 964-970.

34. R. Lind, "Flight Testing with the Flutterometer," *Journal of Aircraft*, Vol. 40, No. 3, May-June 2003, pp. 574-579.

35. R.J. Prazenica, R. Lind, and A.J. Kurdila, "Uncertainty Estimation from Volterra Kernels for Robust Flutter Analysis," *Journal of Guidance, Control, and Dynamics*, Vol. 26, No. 2, March-April 2003, pp. 331-339.

36. R. Lind, "Linear Parameter-Varying Modeling and Control of Structural Dynamics with Aerothermoelastic Effects," *Journal of Guidance, Control, and Dynamics*, Vol. 25, No. 2, July-August 2002, pp. 733-739.

37. J.D. Johnson, J. Lu, A.P. Dhawan, and R. Lind, "Real-Time Identification of Flutter Boundaries using the Discrete Wavelet Transform," *Journal of Guidance, Control, and Dynamics*, Vol. 25, No. 2, March-April 2002, pp. 334-339.

38. R. Lind, "Match-Point Solutions for Robust Flutter Analysis," *Journal of Aircraft*, Vol. 39, No. 1, January-February 2002, pp. 91-99.

39. R. Lind, K. Snyder and M. Brenner, "Wavelet Analysis to Characterize Nonlinearities and Predict Limit Cycles of an Aeroelastic System," *Mechanical Systems and Signal Processing*, Vol. 15, No. 2, March 2001, pp. 337-356.

40. R. Lind and M. Brenner, "Flutterometer : An On-Line Tool to Predict Robust Flutter Margins," *Journal of Aircraft*, Vol. 37, No. 6, November-December 2000, pp. 1105-1112.

41. M. Brenner and R. Lind, "Wavelet-Processed Flight Data for Robust Aeroservoelastic Stability Margins," *Journal of Guidance, Control, and Dynamics*, Vol. 21, No. 6, November-December 1998, pp. 823-829.

42. R. Lind, L. Freudinger and D. Voracek, "Comparison of Aeroelastic Excitation Mechanisms," *Journal of Aircraft*, Vol. 35, No. 5, September-October 1998, pp. 830-832.

43. R. Lind and M. Brenner, "Incorporating Flight Data into a Robust Aeroelastic Model," *Journal of Aircraft*, Vol. 35, No. 3, May-June 1998, pp. 470-477.

44. R. Lind and M. Brenner, "Robust Flutter Margins of an F/A-18 Aircraft from Aeroelastic Flight Data," *Journal of Guidance, Control, and Dynamics*, Vol. 20, No. 3, May-June 1997, pp. 597-604.

45. G. Balas, R. Lind and A. Packard, "Optimally Scaled $\mathcal{H}_\infty$ Full Information Control Synthesis with Real Uncertainty," *Journal of Guidance, Control, and Dynamics*, Vol. 19, No. 4, July-August 1996, pp. 854-862.

Conference Publications

1. R.D. Love and R. Lind, "Identification and Control of Wavelet-Based Aeroservoelastic Models from Experimental Flapping Wing Deflections," *AIAA Guidance, Navigation and Control Conference*, Toronto, ON, August 2010, AIAA-2010-7504.

2. B.C. Roberts, R. Lind, J. Babcock, M. Marino and S. Watkins, "Effects of Wing Design on Aerodynamics of MAV's in Turbulent Flow," *AIAA Guidance, Navigation and Control Conference*, Toronto, ON, August 2010, AIAA-2010-7819.

3. B. Johnson and R. Lind, "Improving Tree-Based Trajectories through Order Reduction/Expansion and Surrogate Models," *AIAA Guidance, Navigation and Control Conference*, Toronto, ON, August 2010, AIAA-2010-8020.

4. J. Zheng, P.C. Chen, R. Lind and C. Harris, "Parameter-Varying Estimation Toolbox for Flutter Prediction," *AIAA Guidance, Navigation and Control Conference*, Toronto, ON, August 2010, AIAA-2010-8115.

5. A.J. Pachikara and R. Lind, "Motion Planning in Constrainted Airspace using Circular and Oval Helices as Trajectory Primitives," *AIAA Guidance, Navigation and Control Conference*, Toronto, ON, August 2010, AIAA-2010-8202.

6. D.T. Grant and R. Lind, "Optimal Tracking of Time-Varying Modes for Control of Morphing Aircraft," *AIAA Guidance, Navigation and Control Conference*, Toronto, ON, August 2010, AIAA-2010-8203.

7. D.T. Tran and R. Lind, "Parametrizing Stability Derivatives and Flight Dynamics with Wing Deformation," *AIAA Guidance, Navigation and Control Conference*, Toronto, ON, August 2010, AIAA-2010-8227.

8. R.D. Hurley, R. Lind and J. Kehoe, "Motion Planning in Urban Environments to Achieve Sensor Quality Metrics," *AIAA Guidance, Navigation and Control Conference*, Toronto, ON, August 2010, AIAA-2010-8313.

9. S. Bhat and R. Lind, "Control-Oriented Design of Operating Range for Linear Parameter-Varying Systems for Closed-Loop Performance," *AIAA Guidance, Navigation and Control Conference*, Toronto, ON, August 2010, AIAA-2010-8412.

10. S. Bhat, F. Viana, R. Lind and R. Haftka, "A Framework for Control-Oriented Design using H-Infinity Synthesis and Surrogate-Based Optimization," *AIAA Structures, Structural Dynamics and Materials Conference*, Orlando, FL, April 2010, AIAA-2010-3089.

11. S. Chatterjee, B. Roberts and R. Lind, "Pterodrone: A Pterodactyl-Inspired Unmanned Air Vehicle that Flies, Walks, Climbs and Sails," *Design and Nature*, Pisa, Italy.

12. B. Johnson and R. Lind, "Characterizing Wing Rock as a Function of Size and Configuration of Vertical Tail," *AIAA Atmospheric Flight Mechanics Conference*, Chicago, IL, August 2009, AIAA-2009-6151.

13. B. Roberts and R. Lind, "Flight Dynamics of a Pterosaur-Inspired Aircraft Utilizing a Variable-Placement Vertical Tail," *AIAA Atmospheric Flight Mechanics Conference*, Chicago, IL, August 2009, AIAA-2009-5846.

14. R. Love and R. Lind, "Identification of Aeroservoelastic Models from Experimental Flapping-Wing Deformations," **invited paper**, *AIAA Atmospheric Flight Mechanics Conference*, Chicago, IL, August 2009, AIAA-2009-5711.

15. D.T. Grant, A. Chakravarthy and R. Lind, "Modal Interpretation of Time-Varying Eigenvectors of Morphing Aircraft," *AIAA Atmospheric Flight Mechanics Conference*, Chicago, IL, August 2009, AIAA-2009-5848.

16. M.A. Creagh and R. Lind, "Comparison of Reference Frames in the Linearisation of Flight Dynamics for Spinning Vehicles," *AIAA Atmospheric Flight Mechanics Conference*, Chicago, IL, August 2009, AIAA-2009-5841.

17. S. Bhat and R. Lind, "Linear Parameter-Varying Control for Variations in Thermal Gradients across Hypersonic Vehicles," *AIAA Guidance, Navigation and Control Conference*, Chicago, IL, August 2009, AIAA-2009-5952.

18. R. Hurley, R. Lind and J.J. Kehoe, "A Mixed Local-Global Solution to Motion Planning within 3-D Environments," *AIAA Guidance, Navigation and Control Conference*, Chicago, IL, August 2009, AIAA-2009-6297.

19. A.J. Pachikara, J.J. Kehoe and R. Lind, "A Path-Parametrization Approach using Trajectory Primitives for 3-Dimensional Motion Planning," *AIAA Guidance, Navigation and Control Conference*, Chicago, IL, August 2009, AIAA-2009-5625.

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