

Richard C. Lind, Jr.

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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

- 8/01-present 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

Professional Teaching

Vision-Based Control for Autonomous Vehicles

(2-day short course with A. Kurdila and W. Dixon)

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)

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)

Professional Service

2003-2006 Member of *AIAA Structural Dynamics Technical Committee*

2000-2006 Editorial Board for *AIAA Progress in Aeronautics and Astronautics* book series

2002-2005 Reviewer for proposals (*National Science Foundation, Engineering and Physical Sciences Research Council (England), University of Missouri*)

1994-2005 Reviewer for journals (*Aeronautical Journal; AIAA Journal; ASME Journal of Dynamic Systems, Measurement and Control; IEEE Transactions on Automatic Control; IEEE Transactions on Control Systems Technology; IEEE Transactions on Systems, Man and Cybernetics; International Journal of Robust and Nonlinear Control; International Journal on Systems Science; 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*)

1994-2005 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 Conference on Decision and Control*)

Professional Consulting

2005-2007 Tao Systems

2002-2007 Zona

2000-2002 Boeing

2000 Caterpillar

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

University of Florida Teaching

Undergraduate	Stability and Control of Aircraft	(2001,2002,2003,2004,2005,2006)
	Multivariable Control of Aircraft	(2002)
	Independent Study	(2003,2006)
Graduate	Graduate Seminar	(2002)
	Multivariable Control of Aircraft	(2002)
	Robust Control Synthesis	(2003,2005,2007)
	Control System Theory	(2004,2006)

University of Florida Service

2006-2007 Awards Committee

2006-2007 Graduate Recruitment Committee

2006-2007 Undergraduate Advisor

University of Florida Student Organizations

2007 Faculty Advisor for SFTE

2004-2007 Faculty Advisor for AIAA

University of Florida Student Advising

Student Fellowships

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

Student Summer Programs

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

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 Awards

2006	Daniel Grant	Best Paper at AIAA Atmospheric Flight Mechanics competition
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	Rob Eick	Best Paper at UF MAE paper conference
2003	Mujahid Abdulrahim	Best Presentation at UF MAE paper conference
2003	Mujahid Abdulrahim	Best Paper at AIAA Southeast Regional Student Conference (undergrad)
2002	Rob Eick	Best Paper at UF MAE paper conference
2002	Mujahid Abdulrahim	Best Presentation at UF MAE paper conference

Undergraduate Senior Design (Computer Science Department)

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

Doctoral Students

	Ryan Causey	Expected degree date June 2007
	Adam Watkins	Expected degree date June 2007
	Joe Kehoe	Expected degree date August 2007
	Mujahid Abdulrahm	Expected degree date August 2007
	Crystal Pasiliao	Expected degree date December 2008
	Paul Wilson	Expected degree date December 2008
Aug 2005	Anukul Goel	<i>"Robust Control of Supercavitating Vehicles in the Presence of Dynamic and Uncertain Cavity,"</i>
May 2005	Anand Jammulamadaka	<i>"Nonlinear Dynamics and Control of High-Speed Supercavitating Vehicles,"</i>

Masters Students

	Sanketh Bhat	Expected degree date May 2008
	Daniel Grant	Expected degree date December 2007
	Eric Branch	Expected degree date May 2007
Oct 2005	Amanda Roderick	<i>"Vision-Based Navigation using Multi-Rate Feedback from Optic Flow and Scene Reconstruction"</i>
Nov 2004	Ken Boothe	<i>"Dynamic Modeling and Flight Control of Morphing Air Vehicles"</i>
Nov 2004	Joe Kehoe	<i>"Autopilot Development for a Micro Air Vehicle using Vision-Based Attitude Estimation"</i>
Oct 2004	Jason Jackowski	<i>"Nonlinear Simulation of a Micro Air Vehicle"</i>
Sep 2004	Mujahid Abdulrahim	<i>"Dynamic Characteristics of Morphing Micro Air Vehicles"</i>
Oct 2003	Ryan Causey	<i>"A Lateral Vision-Based Control Autopilot for Micro Air Vehicles using a Horizon Detection Approach"</i>
Oct 2003	Helen Garcia	<i>"Control of Micro Air Vehicles using Wing Morphing"</i>
Sep 2003	Kristin Fitzpatrick	<i>"Applications of Linear Parameter-Varying Control for Aerospace Systems"</i>
Jul 2003	Rob Eick	<i>"A Reconfiguration Scheme for Flight Control Adaptation to Fixed-Position Actuator Failure"</i>
Mar 2003	Joe Dupuis	<i>"Ground Vibration Test of Airplane Pylon-Store Dynamics using Laser Doppler Vibrometer and Accelerometer Techniques"</i>
Sep 2002	Anukul Goel	<i>"Control Strategies for Supercavitating Vehicles"</i>
Sep 2002	Anand Jammulamadaka	<i>"Modeling, Dynamics, and Control of High-Speed Supercavitating Vehicles"</i>

Undergraduate Honors Students

Dec 2006	Daniel Grant	<i>"Flight Dynamics of a Morphing Aircraft utilizing Independent Multiple-Joint Wing Sweep,"</i>
Mar 2002	Rob Eick	<i>"Gain-Scheduled Control for the F/A-18 Active Aeroelastic Wing"</i>

Patents

1. 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 review.
2. A. Kurdila, M. Zabaranin and R. Lind, *Applications of Convex Functions Analysis*, Springer-Verlag, in review.
3. R. Lind and M. Brenner, *Robust Aeroservoelastic Stability Analysis*, Springer-Verlag, London, April 1999.

Journal Publications

1. R.S. Causey, R. Lind and A.J. Kurdila, "Sensor Modeling for Vision-Based Feedback," *Journal of Guidance, Control and Dynamics*, in review.
2. B. Stanford, M. Abdulrahim, R. Lind and P. Ifju, "Design and Optimization of Morphing Mechanisms for Highly Flexible Micro Air Vehicles," *Journal of Aircraft*, in review.
3. R.S. Causey, R. Lind and R.J. Prazenica, "Effects of Camera Uncertainty on Vision-Based Feedback," *Journal of Dynamic Systems, Measurement and Control*, in review.
4. R. Lind and K. Boothe, "Controllers for Disturbance Rejection for a Linear Input-Varying Class of Morphing Aircraft," *Journal of Aerospace Engineering*, in review.
5. A. Jammulamadaka, A. Goel, R. Lind, A.J. Kurdila and J. Dzielski, "Robust Control of High-Speed Supercavitating Vehicles with Hyrdodynamic Uncertainty," *Journal of Vibration and Control*, in review.
6. 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*, accepted for publication.
7. 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*, accepted for publication.
8. 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.
9. 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.
10. 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.
11. 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.

12. 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.
13. 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.
14. 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.
15. 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.
16. 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.
17. 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.
18. 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.
19. 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.
20. R. Lind, "Flight Test Evaluation of Flutter Prediction Methods," *Journal of Aircraft*, Vol. 40, No. 5, September-October 2003, pp. 964-970.
21. R. Lind, "Flight Testing with the Flutterometer," *Journal of Aircraft*, Vol. 40, No. 3, May-June 2003, pp. 574-579.
22. 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.
23. 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.
24. 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.
25. R. Lind, "Match-Point Solutions for Robust Flutter Analysis," *Journal of Aircraft*, Vol. 39, No. 1, January-February 2002, pp. 91-99.
26. 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.

27. 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.
28. 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.
29. 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.
30. 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.
31. 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.
32. G. Balas, R. Lind and A. Packard, "Optimally Scaled \mathcal{H}_∞ 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. J.J. Kehoe and R. Lind, "Mission Planning for UAV Sensing Tasks in Close Proximity Environments," *SAE Aerotech Conference*, Los Angeles, CA, September 2007, in review.
2. R.S. Causey and R. Lind, "Target State Estimation for Autonomous Aerial Refueling using a Monocular Camera Configuration," *SAE Aerotech Conference*, Los Angeles, CA, September 2007, in review.
3. E. Branch, A.S. Watkins and R. Lind, "Optimal Mapping using Multiple Aircraft based on Sensor Coverage and Maneuvering Capabilities," *AIAA Guidance, Navigation and Control Conference*, **invited paper**, Hilton Head, SC, August 2007, in review.
4. R.S. Causey, S.S. Mehta, R. Lind and W.E. Dixon, "Target Motion Estimation for Autonomous Vehicles using a Monocular Camera Configuration," *AIAA Guidance, Navigation and Control Conference*, **invited paper**, Hilton Head, SC, August 2007, in review.
5. J.J. Kehoe and R. Lind, "Trajectory Generation for Effective Sensing," *AIAA Guidance, Navigation and Control Conference*, Hilton Head, SC, August 2007, in review.
6. K. Wright and R. Lind, "Investigating Sensor Emplacement on Vertical Surfaces for a Biologically-Inspired Morphing Design from Bats," *AIAA Atmospheric Flight Mechanics Conference*, Hilton Head, SC, August 2007, in review.
7. D.T. Grant and R. Lind, "Effects of Time-Varying Inertias on Flight Dynamics of an Asymmetric Variable-Sweep Morphing Aircraft," *AIAA Atmospheric Flight Mechanics Conference*, Hilton Head, SC, August 2007, in review.
8. D.T. Grant, M. Abdulrahim and R. Lind, "Sensor Pointing using Biomimetic Joints and Structures on Morphing Micro Air Vehicles," *International Forum on Aeroelasticity and Structural Dynamics*, Stockholm, Sweden, June 2007, accepted.
9. D. Baldelli, R. Lind and M. Brenner, "Efficient Control-Oriented Flutter/LCO Prediction Tool," *International Forum on Aeroelasticity and Structural Dynamics*, Stockholm, Sweden, June 2007, accepted.
10. R. Lind and D. Baldelli, "Parameter-Varying Estimation of Aeroelastic Dynamics," *International Forum on Aeroelasticity and Structural Dynamics*, Stockholm, Sweden, June 2007, accepted.

11. D.T. Grant, M. Abdulrahim and R. Lind, "The Role of Morphing to Enhance Mission Capability of Micro Air Vehicles," *World Forum on Smart Materials and Smart Structures Technology*, **invited paper**, Chongqing and Nanjing, China, May 2007, accepted.
12. D. Baldelli, R. Lind and M. Brenner, "Efficient Control-Oriented Flutter/LCO Prediction Tool," *AIAA Structures, Structural Dynamics and Materials Conference*, Honolulu, HI, April 2007, AIAA-2007-1796.
13. D.T. Grant, M. Abdulrahim and R. Lind, "Enhancing Mission Capability for Micro Air Vehicles using Biomimetic Joints and Structures," *Australian International Aerospace Congress*, Melbourne, Australia, March 2007, accepted.
14. O. Bilgen, D. Inman, A. Kurdila and R. Lind, "Active Materials for Wing Morphing Micro Air Vehicles," *AUVSI Unmanned Systems North America Conference*, Orlando, FL, August 2006, accepted for publication.
15. J.J. Kehoe, A.S. Watkins, R.S. Causey and R. Lind, "State Estimation using Optical Flow from Parallax-Weighted Feature Tracking," *AIAA Guidance, Navigation and Control Conference*, **invited paper**, Keystone, CO, August 2006, AIAA-2006-6721.
16. J.J. Kehoe, A.S. Watkins and R. Lind, "A Time-Varying Hybrid Model for Dynamic Motion Planning of an Unmanned Air Vehicle," *AIAA Guidance, Navigation and Control Conference*, **invited paper**, Keystone, CO, August 2006, AIAA-2006-6104.
17. M. Abdulrahim and R. Lind, "Using Avian Morphology to Enhance Aircraft Maneuverability," *AIAA Guidance, Navigation and Control Conference*, **invited paper**, Keystone, CO, August 2006, AIAA-2006-6643.
18. A.S. Watkins, J.J. Kehoe and R. Lind, "SLAM for Flight through Urban Environments using Dimensionality Reduction," *AIAA Guidance, Navigation and Control Conference*, Keystone, CO, August 2006, AIAA-2006-6720.
19. D.T. Grant, M. Abdulrahim and R. Lind, "Flight Dynamics of a Morphing Aircraft utilizing Independent Multiple-Joint Wing Sweep," *AIAA Atmospheric Flight Mechanics Conference*, Keystone, CO, August 2006, AIAA-2006-6505.
20. M. Abdulrahim and R. Lind, "Modeling and Control of Micro Air Vehicles with Biologically-Inspired Morphing," *American Control Conference*, **invited paper**, Minneapolis, MN, June 2006, pp. 2718-2723.
21. J.J. Kehoe, R.S. Causey, A. Arvai and R. Lind, "Partial Aircraft State Estimation from Optical Flow using Non-Model-Based Optimization," *American Control Conference*, **invited paper**, Minneapolis, MN, June 2006, pp. 2868-2873.
22. B. Stanford, M. Abdulrahim, R. Lind and P. Ifju, "An Experimental and Numerical Aeroelastic Analysis of a Morphing-Wing Micro Air Vehicle," *AIAA Structures, Structural Dynamics and Materials Conference*, Newport, RI, May 2006, AIAA-2006-2162.
23. J.J. Kehoe, R.S. Causey, M. Abdulrahim and R. Lind, "Waypoint Navigation for a Micro Air Vehicle using Vision-Based Attitude Estimation," *AIAA Guidance, Navigation and Control Conference*, San Francisco, CA, August 2005, AIAA-2005-6400.
24. T.P. Webb, R.J. Prazenica, A.J. Kurdila and R. Lind, "Vision-Based State Estimation for Uninhabited Aerial Vehicles," *AIAA Guidance, Navigation and Control Conference*, San Francisco, CA, August 2005, AIAA-2005-5869.

25. A. Roderick, J.J. Kehoe and R. Lind, "Vision-Based Navigation using Multi-Rate Feedback from Optic Flow and Feature Estimation," *AIAA Guidance, Navigation and Control Conference*, San Francisco, CA, August 2005, AIAA-2005-6093.
26. R.S. Causey, R. Lind, R.J. Prazenica and A. Kurdila, "Effects of Camera Uncertainty on Vision-Based Feedback," *AIAA Guidance, Navigation and Control Conference*, San Francisco, CA, August 2005, AIAA-2005-6097.
27. M. Abdulrahim and R. Lind, "Control and Simulation of a Multi-Role Morphing Micro Air Vehicle," *AIAA Guidance, Navigation and Control Conference*, San Francisco, CA, August 2005, AIAA-2005-6481.
28. R. Albertani, B. Stanford, J.P. Hubner, R. Lind and P. Ifju, "Experimental Analysis of Deformation for Flexible-Wing Micro Air Vehicles," *International Forum on Aeroelasticity and Structural Dynamics*, June 2005, IF-099.
29. K. Boothe, K. Fitzpatrick and R. Lind, "Controllers for Disturbance Rejection for a Linear Input-Varying Class of Morphing Aircraft," *International Forum on Aeroelasticity and Structural Dynamics*, June 2005, IF-098.
30. S. Dunn, M. Brenner, J. Cooper, C. Denegri, L. Huttshell, I. Kaynes, R. Lind, D. Poirel, W. Silva and R. Yurkovich, "Progress on an International Collaborative Program on Improved Procedures for the Analysis of Flight Flutter Test Data," accepted to *International Forum on Aeroelasticity and Structural Dynamics*, June 2005, IF-011.
31. D. Baldelli, R. Lind and M. Brenner, "Data-Based Robust Match-Point Solutions using Describing Function Method," *AIAA Structures, Structural Dynamics, and Materials Conference*, Austin, TX, April 2005, AIAA-2005-1857.
32. R. Albertani, B. Stanford, J. Hubner, R. Lind and P. Ifju, "Experimental Analysis of Deformation for Flexible-Wing Micro Air Vehicles," *AIAA Structures, Structural Dynamics and Materials Conference*, Austin, TX, April 2005, AIAA-2005-2231.
33. K. Boothe, K. Fitzpatrick and R. Lind, "Controllers for Disturbance Rejection for a Linear Input-Varying Class of Morphing Aircraft," *AIAA Structures, Structural Dynamics and Materials Conference*, Austin, TX, April 2005, AIAA-2005-2374.
34. R. Albertani, J. Jackowski, P. Ifju and R. Lind, "Wind Tunnel Testing of Micro Air Vehicles at Low Reynolds Numbers," *SAE World Aviation Congress*, Reno, NV, SAE-2004-01-3090, November 2004.
35. M. Abdulrahim, K. Boothe, R. Lind and P. Ifju, "Flight Characterization of Micro Air Vehicles using Morphing for Agility and Maneuvering," *SAE World Aviation Congress*, Reno, NV, SAE-2004-01-3138, November 2004.
36. J. Kehoe, J. Grzywna, R. Causey, R. Lind, M. Nechyba and A. Kurdila, "Maneuvering and Tracking for a Micro Air Vehicle using Vision-Based Feedback," *SAE World Aviation Congress*, Reno, NV, SAE-2004-01-3137, November 2004.
37. D.H. Baldelli, R. Lind and M. Brenner, "Data-Based Nonlinear Aeroelastic Modeling," *Congress of the International Council of the Aeronautical Sciences*, Yokohama, Japan, ICAS-2004-8.11.3, August 2004.
38. T.P. Webb, R.J. Prazenica, A.J. Kurdila and R. Lind, "Vision-Based State Estimation for Autonomous Micro Air Vehicles," *AIAA Guidance, Navigation and Control Conference*, Providence, RI, AIAA-2004-5349, August 2004.

39. M. Abdulrahim and R. Lind, "Flight Testing and Response Characteristics of a Variable Gull-Wing Morphing Aircraft," *AIAA Guidance, Navigation and Control Conference*, Providence, RI, AIAA-2004-5113, August 2004.
40. R. Lind, M. Abdulrahim, K. Boothe and P. Ifju, "Morphing for Flight Control of Micro Air Vehicles," *European Micro Air Vehicle Conference*, Braunschweig, Germany, July 2004.
41. J.J. Kehoe, R. Causey, M. Abdulrahim, R. Lind, J.W Grzywina, J. Plew and M.C. Nechyba, "Waypoint Navigation for a Micro Air Vehicle using Vision-Based Attitude Estimation," *European Micro Air Vehicle Conference*, Braunschweig, Germany, July 2004.
42. J. Jackowski, K. Boothe, R. Albertani, R. Lind and P. Ifju, "Modeling the Flight Dynamics of a Micro Air Vehicle," *European Micro Air Vehicle Conference*, Braunschweig, Germany, July 2004.
43. M. Abdulrahim, H. Garcia, G.F. Ivey and R. Lind, "Flight Testing a Micro Air Vehicle using Morphing for Aeroservoelastic Control," *AIAA Structures, Structural Dynamics, and Materials Conference*, Palm Springs, CA, AIAA-2004-1674, April 2004.
44. R. Lind, R.J. Prazenica, M.J. Brenner and D.H. Baldelli, "Identifying Parameter-Dependent Volterra Kernels to Predict Aeroelastic Instabilities," *AIAA Structures, Structural Dynamics, and Materials Conference*, Palm Springs, CA, AIAA-2004-1517, April 2004.
45. D.H. Baldelli, P.C. Chen, D.D. Liu, R. Lind and M. Brenner, "Nonlinear Aeroelastic Modeling by Block-Oriented Identification," *AIAA Structures, Structural Dynamics, and Materials Conference*, Palm Springs, CA, AIAA-2004-1938, April 2004.
46. H. Garcia, M. Abdulrahim and R. Lind, "Roll Control for a Micro Air Vehicle using Active Wing Morphing," *AIAA Guidance, Navigation and Control Conference*, Austin, TX, AIAA-2003-5347, August 2003.
47. K. Fitzpatrick, Y. Feng, R. Lind, A.J. Kurdila and D.W. Mikolaitis, "Flow Control in a Driven Cavity Incorporating Excitation Phase Differential," *AIAA Guidance, Navigation and Control Conference*, Austin, TX, AIAA-2003-5350, August 2003.
48. Y. Feng, A.J. Kurdila, R. Lind and D.W. Mikolaitis, "Linear Parameter-Varying Flow Control for a Driven Cavity using Reduced-Order Models", *AIAA Guidance, Navigation and Control Conference*, Austin, TX, AIAA-2003-5351, August 2003.
49. M. Abdulrahim and R. Lind, "Investigating Segmented Trailing-Edge Surfaces for Full Authority Control of a UAV," *AIAA Atmospheric Flight Mechanics Conference*, Austin, TX, AIAA-2003-5312, August 2003.
50. M. Abdulrahim, H. Garcia, J. Dupuis and R. Lind, "Flight Characteristics of Wing Shaping for a Micro Air Vehicle with Membrane Wings," *International Forum on Aeroelasticity and Structural Dynamics*, IFASD-US-24, June 2003.
51. R.J. Prazenica, M.J. Brenner and R. Lind, "Nonlinear Volterra Kernel Identification for the F/A-18 Active Aeroelastic Wing," *International Forum on Aeroelasticity and Structural Dynamics*, IFASD-US-32, June 2003.
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