

CONFERENCE PAPERS

89. TREGIDGO, L., WANG, Z. and GURSUL, I., “Fluid-Structure Interactions for a Low Aspect-Ratio Membrane Wing at Low Reynolds Numbers”, AIAA Conference, Hawaii, June 2011.
88. TREGIDGO, L., WANG, Z. and GURSUL, I., “Low Aspect Ratio Membrane Wing Undergoing Transient Pitching Motion at a Low Reynolds Number”, AIAA Conference, Hawaii, June 2011.
87. GURSUL, I., Invited Talk, “Fluid-Structure Interactions at low Reynolds Numbers”, Workshop on Biomimetics Aero/Hydrodynamic Applications”, University of Strathclyde, 15th June 2011.
86. WANG, Z. and GURSUL, I., “An Experimental Study of the Formation and Unsteady Characteristics of Inlet Vortices”, AIAA 2011-988, 49th AIAA Aerospace Sciences Meeting including the New Horizons Forum and Aerospace Exposition, 4 - 7 January 2011, Orlando, Florida.
85. HU, T., WANG, Z., GURSUL, I., “Control of Self-Excited Roll Oscillations of Low-Aspect-Ratio Wings Using Acoustic Excitation”, AIAA-2011-36, 49th AIAA Aerospace Sciences Meeting including the New Horizons Forum and Aerospace Exposition, 4 - 7 January 2011, Orlando, Florida.
84. GURSUL, I., Plenary Talk, “Fluid-Structure Interactions for Micro Air Vehicles”, 11th International Symposium on Fluid-Structure Interaction and Flow-Induced Noise in Industrial Applications”, ASME Fluids Division Summer Meeting, Montreal, 1-5 August 2010.
83. CALDERON, D.E., WANG, Z., and GURSUL, I., “Effect of Wing Geometry on the Lift of a Plunging Finite Wing”, AIAA-2010-4459, 40th Fluid Dynamics Conference and Exhibit, 28 June – 1 July 2010, Chicago, Illinois.
82. CLEAVER, D.J., WANG, Z., and GURSUL, I., “Vortex Mode Bifurcation and Lift Force of a Plunging Airfoil at Low Reynolds Numbers”, AIAA-2010-390, 48th AIAA Aerospace Sciences Meeting Including the New Horizons Forum and Aerospace Exposition, Orlando, Florida, Jan. 4-7, 2010.
81. CALDERON, D.E., WANG, Z., and GURSUL, I., “Lift Enhancement of a Rectangular Wing Undergoing a Small Amplitude Plunging Motion”, AIAA-2010-386, 48th AIAA Aerospace Sciences Meeting Including the New Horizons Forum and Aerospace Exposition, Orlando, Florida, Jan. 4-7, 2010.

80. ROJRATSIRIKUL, P., WANG, Z., and GURSUL, I., “Unsteady Aerodynamics of Low Aspect Ratio Membrane Wings”, AIAA-2010-729, 48th AIAA Aerospace Sciences Meeting Including the New Horizons Forum and Aerospace Exposition, Orlando, Florida, Jan. 4-7, 2010.
79. CLEAVER, D.J., WANG, Z., and GURSUL, I., “Lift Enhancement on Oscillating Airfoils”, AIAA-2009-4028, 39th AIAA Fluid Dynamics Conference, San Antonio, Texas, June 22-25, 2009.
78. ROJRATSIRIKUL, P., WANG, Z., and GURSUL, I., “Effect of Pre-Strain and Excess Length on Unsteady Fluid-Structure Interactions of Membrane Airfoils”, AIAA-2009-0578, 47th Aerospace Sciences Meeting, 5-8 January 2009, Orlando, FL.
77. CLEAVER, D.J., WANG, Z., and GURSUL, I., “Delay of Stall by Small Amplitude Airfoil Oscillations at Low Reynolds Numbers”, AIAA-2009-0392, 47th Aerospace Sciences Meeting, 5-8 January 2009, Orlando, FL.
76. GRESHAM, N.T., WANG, Z., and GURSUL, I., “Aerodynamics of Free-to-Roll Low Aspect Ratio Wings”, AIAA-2009-0543, 47th Aerospace Sciences Meeting, 5-8 January 2009, Orlando, FL.
75. GURSUL, I., “Fluid-Structure Interaction Research at the University of Bath”, AFOSR Workshop on Aeroelasticity, Unsteady Aerodynamics, and Fluid-Structure Interaction, February 11-12, 2008, Arlington, VA.
74. GRESHAM, N.T., WANG, Z., and GURSUL, I., “Vortex Dynamics of Delta Wings Undergoing Self-Excited Roll Oscillations”, AIAA-2008-4176, 38th AIAA Fluid Dynamics Conference, 23-26 June 2008, Seattle.
73. MARLES, D., MARGARIS, P., and GURSUL, I., “Effect of an Axial Jet on Aircraft Wake Vortices”, International Workshop on Fundamental Issues Related to Aircraft Trailing Wakes, 27-29 May 2008, Marseille, France.
72. ROJRATSIRIKUL, P., WANG, Z., and GURSUL, I., “Unsteady Aerodynamics of Membrane Airfoils”, (Invited Paper) AIAA-2008-0613, 46th AIAA Aerospace Sciences Meeting and Exhibit, 7-10 January 2008, Reno, NV.
71. WILLIAMS, N.M., WANG, Z., GURSUL, I., “Active Flow Control on a Nonslender Delta Wing”, AIAA-2008-0740, 46th AIAA Aerospace Sciences Meeting and Exhibit, 7-10 January 2008, Reno, NV.

70. GURSUL, I., Invited Lecture: “Vortex Flows of Unmanned Air Vehicles”, AIAC-2007-003, Ankara International Aerospace Conference, September 10-12, 2007, METU Ankara, Turkey.
69. GURSUL, I., “Self-Excited Roll Oscillations of Nonslender Wings”, AFOSR Contractors Meeting, 6-9 August 2007, Long Beach.
68. MARLES, D. and GURSUL, I., “Effect of a Jet on Vortex Merging”, AIAA-2007-4364, 37th AIAA Fluid Dynamics Conference and Exhibit, Miami, FL, June 25-28, 2007.
67. MCCLAIN, A., WANG, Z., VARDAKI, E. and GURSUL, I., “Unsteady Aerodynamics of Free-to-Roll Nonslender Delta Wings”, AIAA-2007-1074, 45th AIAA Aerospace Sciences Meeting and Exhibit, 8-11 January 2007.
66. MARGARIS, P., and GURSUL, I., “Vortex Topology of Wing Tip Blowing”, AIAA-2007-1122, 45th AIAA Aerospace Sciences Meeting and Exhibit, 8-11 January 2007.
65. MARGARIS, P., MARLES, D., and GURSUL, I., "Experiments on Interaction of a Jet with a Trailing Vortex", AIAA-2007-1123, 45th AIAA Aerospace Sciences Meeting and Exhibit, 8-11 January 2007.
64. GURSUL, I., VARDAKI, E., MARGARIS, P., and WANG, Z., “Control of Wing Vortices”, Conference on Active Flow Control, September 27-29, 2006, Berlin, Germany.
63. HEATHCOTE, S., WANG, Z., and GURSUL, I., “Effect of Spanwise Flexibility on Flapping Wing Propulsion”, AIAA-2006-2870, 36th AIAA Fluid Dynamics Conference and Exhibit, San Francisco, California, June 5-8, 2006.
62. GURSUL, I., WANG, Z., and VARDAKI, E., “Review of Flow Control Mechanisms of Leading-Edge Vortices”, AIAA-2006-3508, 3rd AIAA Flow Control Conference, San Francisco, California, June 5-8, 2006.
61. GURSUL, I., VARDAKI, E. and WANG, Z., “Active and Passive Control of Reattachment on Various Low-Sweep Wings”, AIAA-2006-506, 44th AIAA Aerospace Sciences Meeting and Exhibit, 9-12 January 2006, Reno, NV.
60. LYNN, R. and GURSUL, I., “Vortex Dynamics on a Generic UCAV Configuration”, AIAA-2006-0061, 44th AIAA Aerospace Sciences Meeting and Exhibit, 9-12 January 2006, Reno, NV.

59. WANG, Z. and GURSUL, I., "Effects of Jet/Vortex Interaction on Delta Wing Aerodynamics", 1st International Conference on Innovation and Integration in Aerospace Sciences, 4-5 August 2005, Queen's University Belfast, Northern Ireland, UK.
58. MARGARIS, P. and GURSUL, I., "Wing Tip Vortex Control Using Synthetic Jets", CEAS/KATnet Conference on Key Aerodynamic Technologies, 20-22 June 2005, Bremen, Germany.
57. GURSUL, I., "Propulsion Related Vortical Flow Issues for Unmanned Air Vehicles", Propulsion Systems for Unmanned Aircraft, Institution of Mechanical Engineers, 14 April 2005, Bristol.
56. HEATHCOTE, S. and GURSUL, I., "Flexible Flapping Airfoil Propulsion at Low Reynolds Numbers", AIAA-2005-1405, 43rd Aerospace Sciences Meeting and Exhibit, 10-13 January 2005, Reno, NV.
55. TAYLOR, G.S., KROKER, A. and GURSUL, I., "Passive Flow Control over Flexible Nonslender Delta Wings", AIAA-2005-0865, 43rd Aerospace Sciences Meeting and Exhibit, 10-13 January 2005, Reno, NV.
54. VARDAKI, E., GURSUL, I. and TAYLOR, G., "Physical Mechanisms of Lift Enhancement for Flexible Delta Wings", AIAA-2005-0867, 43rd Aerospace Sciences Meeting and Exhibit, 10-13 January 2005, Reno, NV.
53. VARDAKI, E. and GURSUL, I., "Vortex Flows on a Rolling Nonslender Delta Wing", AIAA-2004-4729, 22nd AIAA Applied Aerodynamics Conference, 16-19 August 2004, Providence, Rhode Island.
52. TAYLOR, G.S. and GURSUL, I., "Lift Enhancement over a Flexible Delta Wing", AIAA-2004-2618, 2nd AIAA Flow Control Conference, June 2004, Portland.
51. MARGARIS, P. and GURSUL, I., "Effect of Steady Blowing on Wing Tip Flowfield", AIAA-2004-2619, 2nd AIAA Flow Control Conference, June 2004, Portland.
50. HEATHCOTE, S. and GURSUL, I., "Jet Switching Phenomenon for a Plunging Airfoil", AIAA-2004-2150, 34th AIAA Fluid Dynamics Conference and Exhibit, June 2004, Portland.
49. GURSUL, I., 2004, Invited Paper: "Vortex Flows on UAVs: Issues and Challenges", AIAA-2004-0892, 42nd Aerospace Sciences Meeting and Exhibit, January 3-8, Reno, Nevada.

48. WHITEHEAD, J. and GURSUL, I., 2004, "Interaction of Synthetic Jet Propulsion with Wing Aerodynamics at Low Reynolds Numbers", AIAA-2004-0093, 42nd Aerospace Sciences Meeting and Exhibit, January 3-8, Reno, Nevada.
47. TAYLOR, G. and GURSUL, I., 2004, "Unsteady Vortex Flows and Buffeting of a Low Sweep Delta Wing", AIAA-2004-1066, 42nd Aerospace Sciences Meeting and Exhibit, January 3-8, Reno, Nevada.
46. GURSUL, I., 2003, "Unsteady Aspects Of Leading-Edge Vortices", NATO RTO Report, AVT-080.
45. GURSUL, I. and ALLAN, M., 2003, "Delta Wing Aerodynamics – Requirements from CFD and Experiments", Integrating CFD and Experiments in Aerodynamics, 8-9th September, 2003, Glasgow.
44. GURSUL, I., 2003, "Flow-Structure Interaction on Flexible UCAV Wings", Air Force Office of Scientific Research 2003 Contractors' Meeting in Unsteady Aerodynamics and Hypersonics, September 10-12, 2003, Destin, Florida.
43. GURSUL, I., 2003, "Review of Unsteady Vortex Flows over Delta Wings", AIAA-2003-3942, AIAA Applied Aerodynamics Conference, 23-26 June, Orlando, FL.
42. WHITEHEAD, J. and GURSUL, I., 2003, "Aerodynamics and Propulsion of Synthetic Jet Based Micro Air Vehicles", AIAA-2003-4004, AIAA Fluid Dynamics Conference, 23-26 June, Orlando, FL.
41. LAMBERT, C. and GURSUL, I., 2003, "Fin Buffeting over Various Delta Wings", AIAA-2003-3529, AIAA Applied Aerodynamics Conference, 23-26 June, Orlando, FL.
40. TAYLOR, G.S., SCHNORBUS, T. and GURSUL, I., 2003, "An Investigation of Vortex Flows over Low Sweep Delta Wings", AIAA-2003-4021, AIAA Fluid Dynamics Conference, 23-26 June, Orlando, FL.
39. HEATHCOTE, S.F. and GURSUL, I., 2003, "Flexible Flapping Wing Propulsion at Zero Freestream Velocity", AIAA-2003-3446, AIAA Fluid Dynamics Conference, 23-26 June, Orlando, FL.
38. GURSUL, I., 2003, "Vortex Flows on UAVs: Issues and Challenges", Invited Paper, Royal Aeronautical Society Aerospace Aerodynamics Research Conference, 10-12 June, London.

37. WOODING, C.L. and GURSUL, I., 2003, "Unsteady Aerodynamics of Low Aspect Ratio Wings at Low Reynolds Numbers", Royal Aeronautical Society Aerospace Aerodynamics Research Conference, 10-12 June, London.
36. LEE, Y.L. and GURSUL, I., 2003, "An Investigation of Unsteady Interactions of a Vortex Pair over Delta Wings", AIAA-2003-0423, 41st Aerospace Sciences Meeting and Exhibit, Reno, 6-9 January, Reno, NV.
35. GRAY, J., GURSUL, I. and BUTLER, R., 2003, "Aeroelastic Response of a Flexible Delta Wing Due to Unsteady Vortex Flows", AIAA-2003-1106, 41st Aerospace Sciences Meeting and Exhibit, 6-9 January, Reno, NV.
34. TAYLOR, G., GURSUL, I. and GREENWELL, D., 2003, "An Investigation of Support Interference in High Angle of Attack Testing", AIAA-2003-1105, 41st Aerospace Sciences Meeting and Exhibit, 6-9 January, Reno, NV.
33. GURSUL, I., 2002, "Vortex Flows on UAVs: Issues and Challenges", Workshop on Aerodynamic Issues of Unmanned Air Vehicles, University of Bath, November 4-5.
32. PHILLIPS, S., LAMBERT, C., and GURSUL, I., 2002, "Effect of a Trailing-Edge Jet on Fin Buffeting", AIAA-2002-3065, 1st AIAA Flow Control Conference, 24-26 June, St. Louis, Missouri.
31. GURSUL, I., TAYLOR, G., and WOODING, C.L., 2002, "Vortex Flows over Fixed-Wing Micro Air Vehicles", Invited Paper, AIAA-2002-0698, 40th AIAA Aerospace Meeting and Exhibit, 14-17 January, Reno, NV.
30. LAMBERT, C. and GURSUL, I., 2001, "Buffeting of a Flexible Fin Over a Delta Wing", AIAA-2001-2426, 19th AIAA Applied Aerodynamics Conference, 11-14 June, Anaheim, CA.
29. TAYLOR, G., GURSUL, I. and GREENWELL, D., 2001, "Static Hysteresis of Vortex Breakdown Due to Support Interference", AIAA-2001-2452, 19th AIAA Applied Aerodynamics Conference, 11-14 June, Anaheim, CA.
28. GREENWELL, D.I. and GURSUL, I., 2000, "Effect of Tracer Particle Characteristics on Visualisation of Delta Wing Vortices", 9th International Symposium on Flow Visualization, Edinburgh, Scotland, UK, August 22-25.
27. GURSUL, I. and XIE, W., 2000, "Interaction of Vortex Breakdown with an Oscillating Fin", AIAA-2000-0279, 38th Aerospace Sciences Meeting and Exhibit, January 10-13, Reno, NV.

26. GURSUL, I., 2000, "A Proposed Mechanism for the Time Lag of Vortex Breakdown Location in Unsteady Flows", AIAA-2000-0787, 38th Aerospace Sciences Meeting and Exhibit, January 10-13, Reno, NV.
25. GURSUL, I., 2000, "Interaction of Vortex Breakdown with a Flexible Fin and its Control", AFOSR Unsteady Aerodynamics and Hypersonics 2000 Contractors Meeting, September 6-7, Monterey, California.
24. REISENTHHEL, P.H., XIE, W., GURSUL, I., and BETTENCOURT, M.T., 1999, "An Analysis of Fin Motion Induced Vortex Breakdown", AIAA-99-0136, 37th Aerospace Sciences Meeting and Exhibit, January 11-14, Reno, NV.
23. GURSUL, I. and XIE, W., 1998, "Physics of Buffeting Flows over Delta Wings", AIAA 98-0688, 36th Aerospace Sciences Meeting and Exhibit, Reno, NV.
22. DENG, Q. and GURSUL, I., 1997, "Effect of Oscillating Leading-Edge Flaps on Vortices Over a Delta Wing", AIAA 97-1972, 4th AIAA Shear Flow Control Conference, June 29-July 2, Snowmass Village, CO.
21. MENKE, M. and GURSUL, I., 1997, "Self-Excited Oscillations of Vortex Breakdown Location over Delta Wings", AIAA 97-0744, 35th Aerospace Sciences Meeting and Exhibit, January 6-10, 1997, Reno, NV.
20. McCORMICK, S. and GURSUL, I. 1996 "Effect of Shear Layer Control on Leading Edge Vortices", AIAA 96-0541, 34th Aerospace Sciences Meeting and Exhibit, January 15-18, 1996, Reno, NV.
19. MENKE, M., YANG, H. and GURSUL, I., 1996 "Further Experiments on Fluctuations of Vortex Breakdown Location", AIAA 96-0205, 34th Aerospace Sciences Meeting and Exhibit, January 15-18, 1996, Reno, NV.
18. GURSUL, I., YANG, H. and DENG, Q. 1995 "Control of Vortex Breakdown with Leading-Edge Devices", AIAA 95-0676, 33rd Aerospace Sciences Meeting and Exhibit, January 9-12, 1995, Reno, NV.
17. GURSUL, I., MENKE, M. and YANG, H., 1995 "Unsteady Nature of Vortex Breakdown Location", Bulletin of the American Physical Society, vol. 40, no. 12, pp. 2044.
16. SRINIVAS, S., GURSUL, I. and BATTA, G. 1994 "Active Control of Vortex Breakdown over Delta Wings", AIAA 94-2215, 25th AIAA Fluid Dynamics Conference, June 20-23, 1994, Colorado Springs, Colorado.

15. GURSUL, I. and YANG, H. 1994 "Vortex Breakdown over a Pitching Delta Wing", AIAA 94-0536, 32nd Aerospace Sciences Meeting and Exhibit, January 10-13, 1994, Reno, Nevada.
14. GURSUL, I. and YANG, H. 1994 "Experiments on Fluctuations of Vortex Breakdown Location", Bulletin of the American Physical Society, vol. 39, no. 9, pp. 1946-1947.
13. GURSUL, I. 1993 "Effect of Nonaxisymmetric Forcing on a Swirling Jet with Vortex Breakdown", AIAA 93-3251, AIAA Shear Flow Conference, July 6-9, 1993, Orlando, Florida.
12. GURSUL, I. and HO, C.M. 1993 "Vortex Breakdown over Delta Wings in Unsteady Free Stream", AIAA 93-0555, 31st Aerospace Sciences Meeting and Exhibit, January 11-14, 1993, Reno, Nevada.
11. GURSUL, I. 1992 "Unsteady Flow over Delta Wings at High Angle-of-Attack", Bulletin of the American Physical Society, vol. 37, no. 8, pp. 1711.
10. GURSUL, I. 1992 "Vortex Breakdown over Unsteady Wings", AFOSR Workshop on Supermaneuverability: Physics of Unsteady Separated Flows at High Angle-of-Attack, Lehigh University, April 9-10.
9. HO, C.M., LIN, H. and GURSUL, I. 1992 "Delta Wings in Unsteady Flow", The Fifth Asian Congress of Fluid Mechanics, Korea, August 10-14, 1992.
8. BAO, Y., GURSUL, I. and LEE, C. J. 1991 "Computational Study of an Unsteady, Separated 2-D Flow and Vortex Lift at low Mach Number", 4th International Symposium on Computational Fluid Dynamics, September 9-12, 1991, Davis, California.
7. GURSUL, I., LIN, H. and HO, C.M. 1991 "Vorticity Dynamics of 2-D and 3-D Wings in Unsteady Free Stream", AIAA-91-0010, 29th Aerospace Sciences Meeting, January 7-10, 1991, Reno, Nevada.
6. GURSUL, I., LIN, H. and HO, C.M. 1991 "Vortex Dynamics of Delta Wings in Unsteady Free Stream", Bulletin of the American Physical Society, vol. 36, no. 10, pp. 2702.
5. GURSUL, I., LIN, H. and HO, C.M. 1990 "An Airfoil with $C_L > 10$ ", Bulletin of the American Physical Society, vol. 35, no. 10, pp. 2318.
4. HO, C.M., GURSUL, I., SHIH, C. and LIN, H. 1990 "Vorticity Balance on 2-D and

3-D Unsteady Airfoils”, Workshop on Physics of Forced Unsteady Separation, NASA Ames Research Center.

3. GURSUL, I. and HO, C.M. 1989 “Experiments on Two- and Three-Dimensional Lifting Surfaces in an Unsteady Free Stream”, Bulletin of the American Physical Society, vol. 34, no. 10, pp. 2307.

2. GURSUL, I. and ROCKWELL, D. 1987 “Vortex Street-Leading Edge Interaction”, Bulletin of the American Physical Society, vol. 32, pp. 2093.

1. OZGUR, C. and GURSUL, I. 1986 “An Investigation of the Flywheel Effect on the Waterhammer Caused by Power Failure in Pump Systems”, TN 1, Proceedings of the 5th International Conference on Pressure Surges, Hannover, F.R. Germany.