

## **PUBLICATIONS REGARDING CAMRAD II**

Johnson, W. "CAMRAD II, Comprehensive Analytical Model of Rotorcraft Aerodynamics and Dynamics." Johnson Aeronautics, 1992.

Johnson, W. "Technology Drivers in the Development of CAMRAD II." American Helicopter Society Aeromechanics Specialists Conference, San Francisco, CA, January 1994.

Johnson, W. "Rotorcraft Aeromechanics Applications of a Comprehensive Analysis." HeliJapan 1998: AHS International Meeting on Rotorcraft Technology and Disaster Relief, Gifu, Japan, April 1998.

Johnson, W. "CAMRAD II, Comprehensive Analytical Model of Rotorcraft Aerodynamics and Dynamics, Rotorcraft Applications." Johnson Aeronautics, 1993.

Archinal, T.D.; Wilson, J.C.; and Brooks, T.F. "The Design and Analysis of a Radially Forward Swept Planform Rotor." American Helicopter Society Aeromechanics Specialists Conference, San Francisco, CA, January 1994.

Johnson, W. "Technology Drivers in the Development of CAMRAD II." American Helicopter Society Aeromechanics Specialists Conference, San Francisco, CA, January 1994.

Johnson, W. "A General Free Wake Geometry Calculation for Wings and Rotors." American Helicopter Society 51st Annual Forum, Ft. Worth, TX, May 1995.

Aoyama, T.; Kondo, N.; Aoki, M.; Nakamura, Y.; and Saito, S. "Calculation of Rotor Blade-vortex Interaction Noise Using Parallel Super Computer." Twenty-Second European Rotorcraft Forum, Brighton, UK, September 1996.

Kobiki, N.; Tsuchihashi, A.; Murashige, A.; and Yamakawa, E. "Elementary Study for the Effect of HHC and Active Flap on Blade Vortex Interaction." Twenty-Third European Rotorcraft Forum, Dresden, Germany, September 1997.

Kondo, N.; Nishimura, H.; Nakamura, H.; Aoki, M.; Tsujiuchi, T.; Yamakawa, E.; Aoyama, T.; and Saito, S. "Preliminary Study of a Low Noise Rotor." Twenty-Third European Rotorcraft Forum, Dresden, Germany, September 1997.

Kondo, N.; Tsujiuchi, T.; Nakamura, H.; Aoyama, T.; and Saito, S. "Aerodynamic Analysis of Helicopter Rotor by Coupling CFD and Trim Calculation." 15th NAL Symposium on Aircraft Computational Aerodynamics, Tokyo, Japan, June 1997.

Murashige, A.; Tsuchihashi, A.; Tsujiuchi, T.; and Yamakawa, E. "Blade-Tip Vortex Measurement by PIV." Twenty-Third European Rotorcraft Forum, Dresden, Germany, September 1997.

Schimke, D.; Janker, P.; Blaas, A.; Kube, R.; Schewe, G.; and Kessler, C. "Individual Blade Control by Servo-Flap and Blade Root Control. A Collaborative Research and Development Programme." Twenty-Third European Rotorcraft Forum, Dresden, Germany, September 1997.

Dieterich, O. "Application of Modern Control Technology for Advanced IBC Systems." Twenty-Fourth European Rotorcraft Forum, Marseilles, France, September 1998.

Higman, J.P., and Machida, S. "Key Issues on Dynamic Load and Response of the Rotor Blade with Anhedral Tip." HeliJapan 1998: AHS International Meeting on Rotorcraft Technology and Disaster Relief, Gifu, Japan, April 1998.

Johnson, W. "Rotorcraft Aeromechanics Applications of a Comprehensive Analysis." HeliJapan 1998: AHS International Meeting on Rotorcraft Technology and Disaster Relief, Gifu, Japan, April 1998.

Johnson, W. "Rotorcraft Aerodynamic Models for a Comprehensive Analysis." American Helicopter Society 54th Annual Forum, Washington, D.C., May 1998.

Johnson, W. "Rotorcraft Dynamics Models for a Comprehensive Analysis." American Helicopter Society 54th Annual Forum, Washington, D.C., May 1998.

Kobiki, N.; Tsuchihashi, A.; Murashige, A.; and Yamakawa, E. "Study for the Effect of Active Flap on Blade Vortex Interaction." HeliJapan 1998: AHS International Meeting on Rotorcraft Technology and Disaster Relief, Gifu, Japan, April 1998.

Nakamura, H.; Nishimura, H.; Kondo, N.; Yamakawa, E.; Aoyama, T.; and Saito, S. "Effect of Blade Geometry on BVI Noise in Various Flight Conditions." HeliJapan 1998: AHS International Meeting on Rotorcraft Technology and Disaster Relief, Gifu, Japan, April 1998.

Nguyen, K., and Johnson, W. "Evaluation of Dynamic Stall Models with UH-60A Airloads Flight Test Data." American Helicopter Society 54th Annual Forum, Washington, D.C., May 1998.

Nishimura, H.; Kondo, N.; Nakamura, H.; Tsujiuchi, T.; Yamakawa, E.; Aoyama, T.; and Saito, S. "Comparison Between Calculated Rotor Noise and Experimental Data Obtained by DNW Test." Twenty-Fourth European Rotorcraft Forum, Marseilles, France, September 1998.

Ochi, A.; Shima, E.; Aoyama, T.; and Saito, S. "Parallel Numerical Computation of Helicopter Rotor by Moving Overlapped Grid Method." HeliJapan 1998: AHS International Meeting on Rotorcraft Technology and Disaster Relief, Gifu, Japan, April 1998.

Ochi, A.; Shima, E.; Yamakawa, E.; Aoyama, T.; and Saito, S. "Aerodynamic and Aeroacoustic Analysis of BVI by Moving Overlapped Grid Method." Twenty-Fourth European Rotorcraft Forum, Marseilles, France, September 1998.

Schimke, D.; Janker, P.; Wendt, V.; and Junker, B. "Wind Tunnel Evaluation of a Full Scale Piezoelectric Flap Control Unit." Twenty-Fourth European Rotorcraft Forum, Marseilles, France, September 1998.

Shimizu, T. "Helicopter Noise Reduction Research — Accomplishments at Fuji Heavy Industries." HeliJapan 1998: AHS International Meeting on Rotorcraft Technology and Disaster Relief, Gifu, Japan, April 1998.

Tsuchihashi, A.; Murashige, A.; Tsujiuchi, T.; Ochi, A.; and Yamakawa, E. "Experimental Study of Blade-Tip Vortex." HeliJapan 1998: AHS International Meeting on Rotorcraft Technology and Disaster Relief, Gifu, Japan, April 1998.

Wilbur, M.L. "Development of a Rotor-Body Coupled Analysis for an Active Mount Aeroelastic Rotor Testbed." NASA TP 1998-208433, June 1998.

Acree, C.W., Jr.; Peyran, R.J.; and Johnson, W. "Rotor Design for Whirl Flutter: An Examination of Options for Improving Tiltrotor Aeroelastic Stability Margins." American Helicopter Society 55th Annual Forum, Montreal, Canada, May 1999.

Cesnik, C.E.S.; Shin, S.; Wilkie, W.K.; Wilbur, M.L.; and Mirick, P.H. "Modeling, Design, and Testing of the NASA/Army/MIT Active Twist Rotor Prototype Blade." American Helicopter Society 55th Annual Forum, Montreal, Canada, May 1999.

Kobiki, N.; Murashige, A.; Tsuchihashi, A.; Hasegawa, Y.; Kondo, N.; Nishimura, H.; Tsujiuchi, T.; Inagaki, K.; and Yamakawa, E. "Correlation Between Analyses and Wind Tunnel Test Results — What ATIC Has Done So Far." American Helicopter Society 55th Annual Forum, Montreal, Canada, May 1999.

Konstanzer, P., and Kroplin, B. "Performance Considerations in the Control of Helicopter Vibration." SPIE 6th International Symposium on Smart Structures and Materials, Newport Beach, CA, 1999.

Maier, T.H.; Sharpe, D.L.; and Abrego, A.I. "Aeroelastic Stability for Straight and Swept-Tip Rotor Blades in Hover and Forward Flight." American Helicopter Society 55th Annual Forum, Montreal, Canada, May 1999.

Tarzanin, F.; Young, D.K.; and Panda, B. "Advanced Aeroelastic Optimization Applied to an Improved Performance, Low Vibration Rotor." American Helicopter Society 55th Annual Forum, Montreal, Canada, May 1999.

Wilkie, W.K.; Wilbur, M.L.; and Mirick, P.H. "Aeroelastic Analysis of the NASA/Army/MIT Active Twist Rotor." American Helicopter Society 55th Annual Forum, Montreal, Canada, May 1999.

Acree, C.W., Jr.; Peyran, R.J.; and Johnson, W. "Improving Tiltrotor Whirl-Mode Stability with Rotor Design Variations." Twenty-Sixth European Rotorcraft Forum, The Hague, Netherlands, September 2000.

Brentner, K.S., and Jones, H.E. "Noise Prediction for Maneuvering Rotorcraft." AIAA Paper No. 2000-2031, June 2000.

Duque, E.P.N.; Johnson, W.; vanDam, C.P.; Cortes, R.; and Yee, K. "Numerical Predictions of Wind Turbine Power and Aerodynamic Loads for the NREL Phase II Combined Experimental Rotor." AIAA Paper No. 2000-0038, January 2000.

Fulton, M.V. "Design of the Active Elevon Rotor for Low Vibration." American Helicopter Society Aeromechanics Specialists' Meeting, Atlanta, GA, November 2000.

Johnson, W. "Calculation of Tilt Rotor Aeroacoustic Model (TRAM DNW) Performance, Airloads, and Structural Loads." American Helicopter Society Aeromechanics Specialists' Meeting, Atlanta, GA, November 2000.

Kitaplioglu, C.; Betzina, M.; and Johnson, W. "Blade-Vortex Interaction Noise of an Isolated Full-Scale XV-15 Tilt-Rotor." American Helicopter Society 56th Annual Forum, Virginia Beach, VA, May 2000.

Kondo, N.; Nakamura, H.; Aoyama, T.; Saito, S.; and Yamakawa, E. "Validation of a Helicopter Noise Prediction System." American Helicopter Society 56th Annual Forum, Virginia Beach, VA, May 2000.

Kondo, N.; Ochi, A.; Nakamura, H.; Aoyama, T.; Saito, S.; and Yamakawa, E. "Validation of Rotor Aerodynamic and Acoustic Prediction Methods Using ATIC 2nd Model Rotor." Twenty-Sixth European Rotorcraft Forum, The Hague, Netherlands, September 2000.

Kufeld, R.M., and Johnson, W. "The Effects of Control system Stiffness Models on the Dynamic Stall Behavior of a Helicopter." *Journal of the American Helicopter Society*, 45:4 (October 2000).

Maier, T.H., and Abrego, A.I. "Analytical Model Sensitivity Study for Aeroelastic Stability of Straight and Swept-Tip Rotor Blades." Twenty-Sixth European Rotorcraft Forum, The Hague, Netherlands, September 2000.

Straub, F.K.; Kennedy, D.K.; Domzalski, D.B.; Hassan, A.A.; Ngo, H.; Anand, V.; and Birchette, T. "Smart Material Actuated Rotor Technology — SMART." AIAA Paper No. 2000-1715, April 2000.

Wilbur, M.L.; Yeager, W.T., Jr.; Wilkie, W.K.; Cesnik, C.E.S.; and Shin, S. "Hover Testing of the NASA/Army/MIT Active Twist Rotor Prototype Blade." American Helicopter Society 56th Annual Forum, Virginia Beach, VA, May 2000.

Acree, C.W., Jr. "Effects of Rotor Design Variations on Tiltrotor Whirl-Mode Stability." American Helicopter Society Tiltrotor/Runway Independent Aircraft Technology and Applications Specialists' Meeting, Arlington, TX, March 2001.

Acree, C.W., Jr.; Peyran, R.J.; and Johnson, W. "Rotor Design Options for Improving Tiltrotor Whirl-Flutter Stability Margins." *Journal of the American Helicopter Society*, 46:2 (April 2001).

D'Alascio, A.; Castellin, C.; Costes, M.; and Pahlke, K. "Aerodynamics of Helicopter. Application of the Navier-Stokes Codes Developed in the Framework of the Joined German/French CFD Research Program CHANCE." Twenty-Seventh European Rotorcraft Forum, Moscow, Russia, September 2001.

Johnson, W. "Calculation of the Aerodynamic Behavior of the Tilt Rotor Aeroacoustic Model (TRAM) in the DNW." American Helicopter Society 57th Annual Forum, Washington, D.C., May 2001.

Johnson, W. "Airloads and Wake Geometry Calculations for an Isolated Tiltrotor Model in an Wind Tunnel." Twenty-Seventh European Rotorcraft Forum, Moscow, Russia, September 2001.

Jones, H.E., and Kunz, D.L. "Comprehensive Modeling of the Apache in CAMRAD II." American Helicopter Society Structure Specialists' Meeting, Williamsburg, VA, October 2001.

Kunz, D.L., and Jones, H.E. "Modeling and Simulation of the Apache Rotor System in CAMRAD II." American Helicopter Society Structure Specialists' Meeting, Williamsburg, VA, October 2001.

Mannchen, T., and Well, K.H. "Helicopter Vibration Reduction Using Periodic Robust Control." AIAA Paper No. 2001-4034, August 2001.

Murashige, A.; Kobiki, N.; Tsuchihashi, A.; Tsujiuchi, T.; Inagaki, K.; and Yamakawa, E. "Final Report of ATIC Model Rotor Test at DNW." American Helicopter Society 57th Annual Forum, Washington, D.C., May 2001.

Ota, T.; Hashiguchi, Y.; Tsukahara, T.; Obukata, M.; and Nakadate, M. "BVI Noise Reduction Research with Canard Blade Tip." American Helicopter Society 57th Annual Forum, Washington, D.C., May 2001.

Straub, F.K., and Charles, B.D. "Aeroelastic Analysis of Rotors With Trailing Edge Flaps Using Comprehensive Codes." Journal of the American Helicopter Society, 46:3 (July 2001).

Acree, C.W., Jr. "Rotor Design Options for Improving V-22 Whirl-Mode Stability." American Helicopter Society 58th Annual Forum, Montreal, Canada, June 2002.

Betzina, M.D. "Rotor Performance of an Isolated Full-Scale XV-15 Tiltrotor in Helicopter Mode." American Helicopter Society Aerodynamics, Acoustics, and Test and Evaluation Technical Specialists Meeting, San Francisco, CA, January 2002.

Bousman, W.G. "Airfoil Design and Rotorcraft Performance." American Helicopter Society 58th Annual Forum, Montreal, Canada, June 2002.

Brentner, K.S.; Perez, G.; Bres, G.A.; and Jones, H.E. "Toward a Better Understanding of Maneuvering Rotorcraft Noise." American Helicopter Society 58th Annual Forum, Montreal, Canada, June 2002.

D'Alascio, A.; Castellin, C.; Costes, M.; and Pahlke, K. "Aerodynamics of Helicopter. Application of the Navier-Stokes Codes Developed in the Framework of the Joined German/French CFD Research Program CHANCE." CEAS Aerospace Aerodynamics Research Conference, Cambridge, United Kingdom, June 2002.

Enenkl, B.; Kloppel, V.; and Preissler, D. "Full Scale Rotor With Piezoelectric Actuated Blade Flaps." Twenty-Eighth European Rotorcraft Forum, Bristol, United Kingdom, September 2002.

Floros, M.W.; Johnson, W.; and Scully, M.P. "Advanced Rotor Aerodynamics Concepts With Application to Large Rotorcraft." American Helicopter Society Aerodynamics, Acoustics, and Test and Evaluation Technical Specialists Meeting, San Francisco, CA, January 2002.

Johnson, W. "Influence of Wake Models on Calculated Tiltrotor Aerodynamics." American Helicopter Society 58th Annual Forum, Montreal, Canada, June 2002.

Kitaplioglu, C., and Johnson, W. "Comparison of Full-Scale XV-15 Blade-Vortex Interaction Noise Calculations with Wind Tunnel Data." American Helicopter Society Aerodynamics, Acoustics, and Test and Evaluation Technical Specialists Meeting, San Francisco, CA, January 2002.

Kobiki, N., and Murashige, A. "A Study on Blade Torsion Characteristics — Comparison and Evaluation of Analysis with DNW Test Results." HeliJapan 2002: AHS International Meeting on Advanced Rotorcraft Technology and Life Saving Activities, Utsunomiya, Japan, November 2002.

Lim, J.W., and Yu, Y.H. "Prediction of Blade-Vortex Induced Airloads with a Multiple-Trailer Free Wake Model." HeliJapan 2002: AHS International Meeting on Advanced Rotorcraft Technology and Life Saving Activities, Utsunomiya, Japan, November 2002.

Mannchen, T., and Well, K.H. "Influence of the Number of Rotor Blades on Helicopter Active Vibration Reduction Potential." Twenty-Eighth European Rotorcraft Forum, Bristol, United Kingdom, September 2002.

McAlister, K.W., and Heineck, J.T. "Measurements of the Early Development of Trailing Vorticity from a Rotor." NASA TP 2002-211848, July 2002.

Opoku, D.G.; Triantos, D.G.; Nitzsche, F.; and Voutsinas, S.G. "Rotorcraft Aerodynamic and Aeroacoustic Modelling Using Vortex Particle Methods." ICAS Paper No. 2002-299, September 2002.

Shen, J., and Chopra, I. "Actuation Requirements for a Swashplateless Helicopter Control System With Trailing-Edge Flaps." AIAA Paper No. 2002-1444, April 2002.

Shen, J., and Chopra, I. "Ultralight Helicopter With Trailing-Edge Flap for Primary Control." HeliJapan 2002: AHS International Meeting on Advanced Rotorcraft Technology and Life Saving Activities, Utsunomiya, Japan, November 2002.

Wilbur, M.L.; Yeager, W.T., Jr.; and Sekula, M.K. "Further Examination of the Vibratory Loads Reduction Results From the NASA/Army/MIT Active Twist Rotor Test." American Helicopter Society 58th Annual Forum, Montreal, Canada, June 2002.

Yamauchi, G.K.; Johnson, W.; and Wadcock, A.J. "Vortex Wake Geometry of a Model Tilt Rotor in Forward Flight." HeliJapan 2002: AHS International Meeting on Advanced Rotorcraft Technology and Life Saving Activities, Utsunomiya, Japan, November 2002.

Yeo, H., and Lim, J.W. "Application of a Slotted Airfoil for UH-60A Helicopter Performance." American Helicopter Society Aerodynamics, Acoustics, and Test and Evaluation Technical Specialists Meeting, San Francisco, CA, January 2002.

Yeo, H., and Shinoda, P.M. "Investigation of Rotor Loads and Vibration at Transition Speed." American Helicopter Society 58th Annual Forum, Montreal, Canada, June 2002.

Duque, E.P.N.; Burklund, M.D.; and Johnson, W. "Navier-Stokes and Comprehensive Analysis Performance Predictions of the NREL Phase VI Experiment." Journal of Solar Energy Engineering, 125:4 (November 2003).

JanakiRam, R.; Smith, R.; Charles, B.; and Hassan, A. "Aerodynamic Design of a New Affordable Main Rotor for the Apache Helicopter." American Helicopter Society 59th Annual Forum, Phoenix, AZ, May 2003.

Johnson, W.; Yamauchi, G.K.; Derby, M.R.; and Wadcock, A.J. "Wind Tunnel Measurements and Calculations of Aerodynamic Interactions Between Tiltrotor Aircraft." AIAA Paper No. 2003-47, January 2003.

Lim, J.W.; Tung, C.; Yu, Y.H.; Burley, C.L.; Brooks, T.; Boyd, D.; van der Wall, B.; Schneider, O.; Richard, H.; Raffell, M.; Beaumier, P.; Bailly, J.; Delrieux, Y.; Pengel, K.; and Mercker, E. "HART-II: Predictions of Blade-Vortex Interaction Loading." Twenty-Ninth European Rotorcraft Forum, Friedrichshafen, Germany, September 2003.

Lim, J.W.; Yu, Y.H.; and Johnson, W. "Calculation of Rotor Blade-Vortex Interaction Airloads Using an Multiple-Trailer Free-Wake Model." Journal of Aircraft, 40:6 (November-December 2003).

Opoku, D.G., and Nitzsche, F. "Acoustic Validation of a New code Using Particle Wake Aerodynamics and Geometrically-Exact Beam Structural Dynamics." Twenty-Ninth European Rotorcraft Forum, Friedrichshafen, Germany, September 2003.

Shen, J. "Comprehensive Aeroelastic Analysis of Helicopter Rotor With Trailing-Edge Flap for Primary Control and Vibration Control." Doctor of Philosophy Thesis, University of Maryland, 2003.

Shen, J., and Chopra, I. "Aeroelastic Stability of Trailing-Edge Flap Helicopter Rotors." Journal of the American Helicopter Society, 48:4 (October).

Shen, J.; Chopra, I.; and Johnson, W. "Performance of Swashplateless Ultralight Helicopter Rotor With Trailing-Edge Flaps for Primary Flight Control." American Helicopter Society 59th Annual Forum, Phoenix, AZ, May 2003.

Yeo, H. "Calculation of Rotor Performance and Loads Under Stalled Conditions." American Helicopter Society 59th Annual Forum, Phoenix, AZ, May 2003.

Yin, J., and Delfs, J. "Improvement of DLR Rotor Aeroacoustic Code (APSIM) and Its Validation with Analytic Solution." Twenty-Ninth European Rotorcraft Forum, Friedrichshafen, Germany, September 2003.

Acree, C.W., Jr. "Effects of Blade Sweep on V-22 Whirl Flutter and Loads." American Helicopter Society 4th Decennial Specialist's Conference on Aeromechanics, San Francisco, CA, January 2004.

Acree, C.W., Jr., and Hoffman, K. "Whirl Flutter Studies for a SSTOL Transport Demonstrator." American Helicopter Society 4th Decennial Specialist's Conference on Aeromechanics, San Francisco, CA, January 2004.

Acree, C.W., Jr.; Peyran, R.J.; and Johnson, W. "Rotor Design Options for Improving XV-15 Whirl-Flutter Stability Margins." NASA TP 2004-212262, March 2004.

Acree, C.W., Jr. "A CAMRAD II Model of the V-22 for Whirl-Flutter Analysis." NASA TM 2004-212801, July 2004.

Boyd, D.D., Jr.; Burley, C.L.; and Conner, D.A. "Full Scale Rotor Aeroacoustic Predictions and the Link to Model Scale Rotor Data." American Helicopter Society 4th Decennial Specialist's Conference on Aeromechanics, San Francisco, CA, January 2004.

Floros, M.W.; Gold, N.P.; and Johnson, W. "An Exploratory Aerodynamic Limits Test with Analytical Correlation." American Helicopter Society 4th Decennial Specialist's Conference on Aeromechanics, San Francisco, CA, January 2004.

Floros, M.W., and Johnson, W. "Performance Analysis of the Slowed-Rotor Compound Helicopter Configuration." American Helicopter Society 4th Decennial Specialist's Conference on Aeromechanics, San Francisco, CA, January 2004.

Floros, M.W., and Johnson, W. "Stability Analysis of the Slowed-Rotor Compound Helicopter Configuration." American Helicopter Society 60th Annual Forum, Baltimore, MD, June 2004.

Johnson, W. "Model for Vortex Ring State Influence on Rotorcraft Flight Dynamics." American Helicopter Society 4th Decennial Specialist's Conference on Aeromechanics, San Francisco, CA, January 2004.

Mannchen, T., and Well, K.H. "Helicopter Vibration Reduction and Damping Enhancement Using Individual Blade Control." *Journal of Guidance, Control, and Dynamics*, 27:5 (September-October 2004).

McAlister, K.W. "Rotor Wake Development During the First Revolution." *Journal of the American Helicopter Society*, 49:4 (October 2004).

Rand, O.; Khromov, V.; and Peyran, R.J. "Minimum-Induced Power Loss of a Helicopter Rotor via Circulation Optimization." *Journal of Aircraft*, 41:1 (January-February 2004).

Roth, D. "Advanced Vibration Reduction by IBC Technology." Thirtieth European Rotorcraft Forum, Marseilles, France, September 2004.

Sekula, M.K., and Gandhi, F. "Helicopter Vibration and Rotor Power Reduction Through Horizontal Tail Incidence Angle Control." American Helicopter Society 60th Annual Forum, Baltimore, MD, June 2004.

Sekula, M.K.; Wilbur, M.L.; and Yeager, W.T., Jr. "Aerodynamic Design Study of an Advanced Active Twist Rotor." American Helicopter Society 4th Decennial Specialist's Conference on Aeromechanics, San Francisco, CA, January 2004.

Shen, J., and Chopra, I. "Swashplateless Helicopter Rotor With Trailing-Edge Flaps." *Journal of Aircraft*, 41:2 (March-April 2004).

Shen, J., and Chopra, I. "Aeroelastic Modeling of Trailing-Edge-Flap Helicopter Rotors Including Actuator Dynamics." *Journal of Aircraft*, 41:6 (November-December 2004).

Shinoda, P.M.; Norman, T.R.; Jacklin, S.A.; Yeo, H.; Bernhard, A.P.F.; and Haber, A. "Investigation of a Full-Scale Wide Chord Blade Rotor System in the NASA Ames 40- by 80-Foot Wind Tunnel." American Helicopter Society 4th Decennial Specialist's Conference on Aeromechanics, San Francisco, CA, January 2004.

Shinoda, P.M.; Yeo, H.; and Norman, T.R. "Rotor Performance of a UH-60 Rotor System in the NASA Ames 80- by 120-Foot Wind Tunnel." *Journal of the American Helicopter Society*, 49:4 (October 2004).

Yeo, H.; Bousman, W.G.; and Johnson, W. "Performanc Analysis of a Utility Helicopter With Standard and Advanced Rotors." *Journal of the American Helicopter Society*, 49:3 (July 2004).

Yeo, H., and Johnson, W. "Assessment of Comprehensive Analysis Calculation of Structural Loads on Rotors." American Helicopter Society 60th Annual Forum, Baltimore, MD, June 2004.

Acree, C.W., Jr. "Effects of Swept Tips on V-22 Whirl Flutter and Loads." NASA TM 2005-213458, May 2005.

Acree, C.W., Jr. "Effects of V-22 Blade Modifications on Whirl Flutter and Loads." *Journal of the American Helicopter Society*, 50:3 (July 2005).

Aoyama, T.; Yang, C.; and Saito, S. "Numerical Analysis of Active Flap for Noise Reduction Using Moving Overlapped Grid Method." American Helicopter Society 61st Annual Forum, Grapevine, TX, June 2005.

Ayadi, W., and Reber, D.Y. "Helicopter Vibration Reduction Using Digitally Redesigned H<sub>∞</sub> Controller in Observer Form." 2nd International Basic Research Conference on Rotorcraft Technology, Nanjing, China, November 2005.

Boyd, D.D., Jr.; Burley, C.L.; and Conner, D.A. "Acoustic Predictions of Manned and Unmanned Rotorcraft Using the Comprehensive Analytical Rotorcraft Model for Acoustics (CARMA) Code System." American Helicopter Society International Specialists' Meeting on Unmanned Rotorcraft, Chandler, AZ, January 2005.

Floros, M.; Shen, J.; Lee, M.K.; and Kim, J.M. "Multibody Dynamics Simulation of a Tiltrotor UAV." Eleventh ARO International Workshop on Rotorcraft Dynamics and Aeroelasticity, Boca Raton, FL, October 2005.

Harvey, D.S. "A-160 — Built to Loiter." *Defence Helicopter*, 24:5 (October/November 2005).



Johnson, W.; Yamauchi, G.K.; and Watts, M.E. "NASA Heavy Lift Rotorcraft Systems Investigation." SAE International Powered Lift Conference, Grapevine, TX, October 2005.

Johnson, W.; Yamauchi, G.K.; and Watts, M.E. "NASA Heavy Lift Rotorcraft Systems Investigation." NASA TP 2005-213467, December 2005.

Johnson, W. "Model for Vortex Ring State Influence on Rotorcraft Flight Dynamics." NASA TP 2005-213477, December 2005.

Kerho, M. "Adaptive Airfoil Dynamic Stall Control." AIAA Paper No. 2005-1365, January 2005.

Konstanzer, P. "Decentralized Vibration Control for Active Helicopter Rotor Blades." Thirty-First European Rotorcraft Forum, Florence, Italy, September 2005.

Kunz, D.L. "Comprehensive Rotorcraft Analysis: Past, Present, and Future." AIAA Paper No. 2005-2244, April 2005.

Lim, J.W., and van der Wall, B. "Investigation of the Effect of a Multiple Trailer Wake Model for Descending Flights." American Helicopter Society 61st Annual Forum, Grapevine, TX, June 2005.

Liu, L.; Friedmann, P.P.; and Patt, D. "Simultaneous Vibration and Noise Reduction in Rotorcraft — Practical Implementation Issues." AIAA Paper No. 2005-2245, April 2005.

Masaki, K.; Hattori, K.; Yoshimoto, M.; Uchiyama, N.; Nakao, M.; Saito, S.; and Kondo, N. "Wind Tunnel Test for BVI Noise and Vibration Reduction." Thirty-First European Rotorcraft Forum, Florence, Italy, September 2005.

Nitzsche, F., and Opoku, D.G. "Acoustic Validation of a New Code Using Particle Wake Aerodynamics and Geometrically-Exact Beam Structural Dynamics." *The Aeronautical Journal*, 109:1096 (June 2005).

Patt, D.; Liu, L.; and Friedmann, P.P. "Active Flaps for Noise Reduction: A Computational Study." American Helicopter Society 61st Annual Forum, Grapevine, TX, June 2005.

Patt, D.; Liu, L.; and Friedmann, P.P. "Helicopter Noise Reduction by Actively Controlled Flaps." AIAA Paper No. 2005-2904, May 2005.

Perez, G.; Brentner, K.S.; Bres, G.A.; and Jones, H.E. "A First Step Toward the Prediction of Rotorcraft Maneuver Noise." *Journal of the American Helicopter Society*, 50:3 (July 2005).

Potsdam, M. "Dynamic Rotorcraft Applications Using Overset Grids." Thirty-First European Rotorcraft Forum, Florence, Italy, September 2005.

Sekula, M.K.; Wilbur, M.L.; and Yeager, W.T., Jr. "A Parametric Study of the Structural Design for an Advanced Active Twist Rotor." American Helicopter Society 61st Annual Forum, Grapevine, TX, June 2005.

Shen, J.; Floros, M.; Lee, M.K.; and Kim, J.M. "Multibody Dynamics Simulation of a Tiltrotor UAV." 2nd International Basic Research Conference on Rotorcraft Technology, Nanjing, China, November 2005.

Wilbur, M.L., and Sekula, M.K. "The Effect of Tip Geometry on Active-Twist Rotor Response." American Helicopter Society 61st Annual Forum, Grapevine, TX, June 2005.

Yang, C.; Aoyama, T.; and Saito, S. "Numerical Analysis of BVI Noise Reduction Using Active Flap Control." Thirty-First European Rotorcraft Forum, Florence, Italy, September 2005.

Yeager, W.T., Jr., and Wilbur, M.L. "Loads and Performance Data From a Wind-Tunnel Test of Generic Model Helicopter Rotor Blades." NASA TP 2005-213937, November 2005.

Yeo, H., and Johnson, W. "Assessment of Comprehensive Analysis Calculation of Airloads on Helicopter Rotors." *Journal of Aircraft*, 42:5 (September-October 2005).

Yeo, H., and Johnson, W. "Comparison of Rotor Structural Loads Calculated Using Comprehensive Analysis." Thirty-First European Rotorcraft Forum, Florence, Italy, September 2005.

Acree, C.W., Jr., and Johnson, W. "Performance, Loads and Stability of Heavy Lift Tiltrotors." American Helicopter Society Vertical Lift Aircraft Design Conference, San Francisco, CA, January 2006.

Acree, C.W., Jr.; Martin, P.B.; and Romander, E.A. "Impact of Airfoils on Aerodynamic Optimization of Heavy Lift Rotorcraft." American Helicopter Society Vertical Lift Aircraft Design Conference, San Francisco, CA, January 2006.

Acree, C.W., Jr. "Impact of Technology on Heavy Lift Tiltrotors." American Helicopter Society 62th Annual Forum, Phoenix, AZ, May 2006.

Bailey, B.; Snowden, M.; Bartley, M.; Phelps, A.; Lee, M.K.; and Kim, J.M. "Design of an Advanced Composite Proprotor Blade for the Tilt-Rotor Smart UAV." American Helicopter Society 62th Annual Forum, Phoenix, AZ, May 2006.

Dieterich, O.; Enekl, B.; and Roth, D. "Trailing Edge Flaps for Active Rotor Control. Aeroelastic Characteristics of the ADASYS Rotor System." American Helicopter Society 62th Annual Forum, Phoenix, AZ, May 2006.

Floros, M.W.; Shen, J.; Lee, M.K.; and Hwang, S. "Loads and Stability Analysis of an Unmanned Tilt Rotor." American Helicopter Society 62th Annual Forum, Phoenix, AZ, May 2006.

Hwang, S.; Lee, M.K.; Kim, Y.; and Kim, J.M. "Proprotor Load Evaluation in Collision Avoidance Maneuver of Tilt Rotor Unmanned Aerial Vehicle." American Helicopter Society Vertical Lift Aircraft Design Conference, San Francisco, CA, January 2006.

Johnson, W.; Yamauchi, G.K.; and Watts, M.E. "Designs and Technology Requirements for Civil Heavy Lift Rotorcraft." American Helicopter Society Vertical Lift Aircraft Design Conference, San Francisco, CA, January 2006.

Jones, H.E.; Wong, O.D.; Noonan, K.W.; Reis, D.G.; and Malovrh, B.D. "Aerodynamic Characteristics of Two Rotary Wing UAV Designs." American Helicopter Society Vertical Lift Aircraft Design Conference, San Francisco, CA, January 2006.

Lim, J.W.; Nygaard, T.A.; Strawn, R.; and Potsdam, M. "BVI Airloads Prediction Using CFD/CSD Loose Coupling." American Helicopter Society Vertical Lift Aircraft Design Conference, San Francisco, CA, January 2006.

Makinen, S.M.; Hill, M.; Gandhi, F.; Long, L.N.; Vasilescu, R.; and Sankar, L.N. "A Study of the HART-I Rotor with Loose Computational Fluid/Structural Dynamic Coupling." American Helicopter Society 62th Annual Forum, Phoenix, AZ, May 2006.

Masaki, K.; Hattori, K.; Yoshimoto, M.; Uchiyama, N.; Nakao, M.; Saito, S.; and Kondo, N. "Research for BVI Noise and Vibration Reduction Using Blade Active Control." HeliJapan 2006: AHS International Meeting on Advanced Rotorcraft Technology and Life Saving Activities, Nagoya, Japan, November 2006.

Phanse, S.; Charles, B.; and Sankar, L.N. "Efficient Coupled Fluid-Structure Interaction Approach For Analysis of Rotors in Forward Flight." American Helicopter Society Vertical Lift Aircraft Design Conference, San Francisco, CA, January 2006.

Potsdam, M.; Yeo, H.; and Johnson, W. "Rotor Airloads Prediction Using Loose Aerodynamic/Structural Coupling." *Journal of Aircraft*, 43:3 (May-June 2006).

Sim, B.W., and Lim, J.W. "Blade-Vortex Interaction (BVI) Noise and Airload Prediction Using Loose Aerodynamic/Structural Coupling." American Helicopter Society 62th Annual Forum, Phoenix, AZ, May 2006.

Smith, M.J.; Potsdam, M.; Wong, T.-C.; Baeder, J.D.; and Phanse, S. "Evaluation of Computational Fluid Dynamics to Determine Two-Dimensional Airfoil Characteristics for Rotorcraft Applications." *Journal of the American Helicopter Society*, 51:1 (January 2006).

van Aken, J.M., and Sinsay, J.D. "Preliminary Sizing of 120-Passenger Advanced Civil Rotorcraft Concepts." American Helicopter Society Vertical Lift Aircraft Design Conference, San Francisco, CA, January 2006.

Visingardi, A.; Dummel, A.; Falchero, D.; Pidd, M.; Voutsinas, S.G.; and Yin, J. "Aerodynamic Interference in Full Helicopter Configurations: Validation Using the HeliNOVI Database." Thirty-Second European Rotorcraft Forum, Maastricht, The Netherlands, September 2006.

Yang, C.M.; Aoyama, T.; and Saito, S. "Numerical Analysis of Blade-Vortex Interaction Noise in Maneuvering Flight Using Moving Overlapped Grid Method." American Helicopter Society 62th Annual Forum, Phoenix, AZ, May 2006.

Yeo, H., and Johnson, W. "Aeromechanics Analysis of a Compound Helicopter." American Helicopter Society 62th Annual Forum, Phoenix, AZ, May 2006.

Yeo, H., and Johnson, W. "Optimum Design of a Compound Helicopter." HeliJapan 2006: AHS International Meeting on Advanced Rotorcraft Technology and Life Saving Activities, Nagoya, Japan, November 2006.

Aoyama, T.; Yang, C.; and Saito, S. "Numerical Analysis of Active Flap for Noise Reduction Using Moving Overlapped Grid Method." *Journal of the American Helicopter Society*, 52:3 (July 2007).

Cafarelli, I.; Hopkins, A.S.; Truong, V.K.; and Maier, T. "Aeroelastic Stability Analysis of Two Hingeless Rotors." Thirty-Third European Rotorcraft Forum, Kazan, Russia, September 2007.

Epple, A., and Ayadi, W. "Optimization Approach to Vibration Reduction in Rotorcraft Airframes Using Individual Blade Control." American Helicopter Society 63th Annual Forum, Virginia Beach, VA, May 2007.

Floros, M.W., and Johnson, W. "Stability and Control Analysis of the Slowed-Rotor Compound Helicopter Configuration." *Journal of the American Helicopter Society*, 52:3 (July 2007).

Ho, J.C.; Yeo, H.; and Ormiston, R.A. "Investigation of Rotor Blade Structural Dynamics and Modeling Based on Measured Airloads." American Helicopter Society 63th Annual Forum, Virginia Beach, VA, May 2007.

Kerho, M. "Adaptive Airfoil Dynamic Stall Control." *Journal of Aircraft*, 44:4 (July-August 2007).

Kim, K.H.; Lee, H.; Shin, S.; Kim, D.H.; and Ho, K.S. "Toward a Practical Analysis for Fluid-Structure Interactions in Helicopter Rotors." AIAA Paper No. 2007-2299, April 2007.

Kottapalli, S. "Calculation of Hub Loads at Low Airspeeds with Active Control." American Helicopter Society 63th Annual Forum, Virginia Beach, VA, May 2007.

Lim, J.W.; Nygaard, T.A.; Strawn, R.; and Potsdam, M. "Blade-Vortex Interaction Airloads Prediction Using Coupled Computational Fluid and Structural Dynamics." *Journal of the American Helicopter Society*, 52:4 (October 2007).

Lim, J.W.; McAlister, K.W.; and Johnson, W. "Hover Performance Correlation for Full-Scale and Model-Scale Coaxial Rotors." American Helicopter Society 63th Annual Forum, Virginia Beach, VA, May 2007.

Straub, F.K., and Anand, V.R. "Aeromechanics of the SMART Active Flap Rotor." American Helicopter Society 63th Annual Forum, Virginia Beach, VA, May 2007.

Yang, C.M.; Aoyama, T.; Ishii, H.; and Okuno, Y. "Analysis of Rotorcraft Aerodynamics/Acoustics During Coordinate Turns of Research Helicopter." American Helicopter Society 63th Annual Forum, Virginia Beach, VA, May 2007.

Yeo, H., and Johnson, W. "Aeromechanics Analysis of a Heavy Lift Slowed-Rotor Compound Helicopter." *Journal of Aircraft*, 44:2 (March-April 2007).

Yeo, H., and Johnson, W. "Performance and Design Investigation of Heavy Lift Tiltrotor with Aerodynamic Interference Effects." American Helicopter Society 63th Annual Forum, Virginia Beach, VA, May 2007.

Acree, C.W., Jr. "Calculation of JVX Proprotor Performance and Comparisons with Hover and High-Speed Test Data." American Helicopter Society Specialists' Conference on Aeromechanics, San Francisco, CA, January 2008.

Acree, C.W., Jr. "Modeling Requirements for Analysis and Optimization of JVX Proprotor Performance." NASA TM 2008-214581, May 2008.

Blackwell, R., and Millott, T.A. "Dynamics Design Characteristics of the Sikorsky X2 Technology Demonstrator Aircraft." American Helicopter Society 64th Annual Forum, Montreal, Canada, April 2008.

Bousman, W.G., and Norman, T. "Assessment of Predictive Capability of Aeromechanics Methods." American Helicopter Society Specialists' Conference on Aeromechanics, San Francisco, CA, January 2008.

Johnson, W. "Influence of Lift Offset on Rotorcraft Performance." American Helicopter Society Specialists' Conference on Aeromechanics, San Francisco, CA, January 2008.

Lim, J.W., and Strawn, R.C. "Computational Modeling of HART II Blade-Vortex Interaction Loading and Wake System." *Journal of Aircraft*, 45:3 (May-June 2008).

Lim, J.W. "An Assessment of Rotor Dynamics Correlation for Descending Flight Using CFD/CSD Coupled Analysis." American Helicopter Society 64th Annual Forum, Montreal, Canada, April 2008.

Martin, P.B.; Rhee, M.; Maughmer, M.D.; and Somers, D.M. "Airfoil Design and Testing for High-Lift Rotorcraft Applications." American Helicopter Society Specialists' Conference on Aeromechanics, San Francisco, CA, January 2008.

Rajmohan, N.; Sankar, L.; Bauchau, O.; Charles, B.; Makinen, S.M.; and Egolf, T.A. "Application of Hybrid Methodology to Rotors in Steady and Maneuvering Flight." American Helicopter Society 64th Annual Forum, Montreal, Canada, April 2008.

Ruzicka, G.C., and Strawn, R.C. "Computational Fluid Dynamics Analysis of a Coaxial rotor Using Overset Grids." American Helicopter Society Specialists' Conference on Aeromechanics, San Francisco, CA, January 2008.

Sim, B.W. "Suppressing In-Plane, Low Frequency Helicopter Harmonic Noise With Active Controls." American Helicopter Society Specialists' Conference on Aeromechanics, San Francisco, CA, January 2008.

Yeo, H., and Johnson, W. "Prediction of Rotor Structural Loads with Comprehensive Analysis." Journal of the American Helicopter Society, 53:2 (April 2008).

Yeo, H. "Assessment of Active Controls for Rotor Performance Enhancement." Journal of the American Helicopter Society, 53:2 (April 2008).

Yeo, H. "Investigation of Rotor Airloads and Structural Loads in Maneuvering Flight." American Helicopter Society 64th Annual Forum, Montreal, Canada, April 2008.

Yeo, H. "Assessment of Active Controls for Rotor Performance Enhancement." Journal of the American Helicopter Society, 53:2 (April 2008).

Serafini, J.; Gennaretti, M.; Masarati, P.; Quaranta, G.; and Dieterich, O. "Aeroelastic and Biodynamic Modelling for Stability Analysis of rotorcraft-Pilot Coupling Phenomena." Thirty-Fourth European Rotorcraft Forum, Liverpool, UK, September 2008.

Ho, J.C.; Yeo, H.; and Ormiston, R.A. "Investigation of Rotor Blade Structural Dynamics and Modeling Based on Measured Airloads." Journal of Aircraft, 45:5 (September-October 2008).

Biedron, R.T., and Lee-Rausch, E.M. "Rotor Airloads Prediction Using Unstructured Meshes and Loose CFD/CSD Coupling." AIAA Paper No. 2008-7341, August 2008.

Altmikus, A.; Dummel, A.; Heger, R.; and Schimke, D. "Actively Controlled Rotor: Aerodynamic and Acoustic Benefit for the Helicopter Today and Tomorrow." Thirty-Fourth European Rotorcraft Forum, Liverpool, UK, September 2008.

Acree, C.W., Jr.; Yeo, H.; and Sinsay, J.D. "Performance Optimization of the NASA Large Civil Tiltrotor." Royal Aeronautical Society International Powered Lift Conference, London, UK, July 2008.

Acree, C.W., Jr., and Johnson, W. "Aeroelastic Stability of the LCTR2 Civil Tiltrotor." American Helicopter Society Southwest Region Technical Specialists' Meeting on Next Generation Vertical Lift Technologies, Dallas, TX, October 2008.

Allan, B.G.; Jenkins, L.N.; Yao, C.-S.; Bartram, S.M.; Hallissy, J.B.; Harris, J.; Noonan, K.W.; Wong, O.D.; Jones, H.E.; Malovrh, B.D.; and Reis, D.G. "Navier-Stokes Simulation of a Heavy Lift Slowed-Rotor Compound Helicopter Configuration." American Helicopter Society 65th Annual Forum, Grapevine, TX, May 2009.

Arnold, J. "Using Multibody Dynamics for the Simulation of Flexible Rotor Blades — Getting the Mechanical Coupling Right." Thirty-Fifth European Rotorcraft Forum, Hamburg, Germany, September 2009.

Boyd, D.D., Jr. "HART-II Acoustic Predictions Using a Coupled CFD/CSD Method." American Helicopter Society 65th Annual Forum, Grapevine, TX, May 2009.

Boyd, D.D., Jr. "Initial Aerodynamic and Acoustic Study of an Active Twist Rotor Using a Loosely Coupled CFD/CSD Method." Thirty-Fifth European Rotorcraft Forum, Hamburg, Germany, September 2009.

Dietz, M., and Dieterich, O. "Towards Increased Industrial Application of Rotor Aeroelastic CFD." Thirty-Fifth European Rotorcraft Forum, Hamburg, Germany, September 2009.

Floros, M.W., and Johnson, W. "Performance Analysis of the Slowed-Rotor Compound Helicopter Configuration." *Journal of the American Helicopter Society*, 54:2 (April 2009).

JanakiRam, R.D.; Sim, B.W.; Kitaplioglu, C.; and Straub, F.K. "Blade-Vortex Interaction Noise Characteristics of a Full-Scale Active Flap Rotor." American Helicopter Society 65th Annual Forum, Grapevine, TX, May 2009.

Johnson, W. "Influence of Lift Offset on Rotorcraft Performance." NASA TP 2009-215404, November 2009.

Jung, S.N.; Park, J.-S.; You, Y.H.; Yu, Y.H.; Kim, J.W.; Park, S.H.; and Kim, D.H. "Comparison of Rotor Structural and Aerodynamic Loads Using the HART II Test Data." Thirty-Fifth European Rotorcraft Forum, Hamburg, Germany, September 2009.

Kottapalli, S., and Straub, F. "Correlation of SMART Active Flap Rotor Loads." American Helicopter Society 65th Annual Forum, Grapevine, TX, May 2009.

Lim, J.W., and Dimanlig, A.C.B. "An Investigation of the Fuselage Effect for HART II Using a CFD/CSD Coupled Analysis." Rotor Korea 2009, 2nd International Forum on Rotorcraft Multidisciplinary Technology, Seoul, Korea, October 2009.

Lim, J.W.; McAlister, K.W.; and Johnson, W. "Hover Performance Correlation for Full-Scale and Model-Scale Coaxial Rotors." *Journal of the American Helicopter Society*, 54:3 (July 2009).

Maurice, J.-B.; King, F.A.; Fichter, W.; Dieterich, O.; and Konstanzer, P. "Floquet Convergence Analysis for Periodic Active Rotor Systems Equipped with Trailing Edge Flaps." Thirty-Fifth European Rotorcraft Forum, Hamburg, Germany, September 2009.

Park, S.C.; Shin, S.; and Kim, D.-K. "Helicopter Rotor Load Prediction Using a Geometrically Exact Beam with Multi-Component Model." Rotor Korea 2009, 2nd International Forum on Rotorcraft Multidisciplinary Technology, Seoul, Korea, October 2009.

Sim, B.W.; JanakiRam, R.D.; Barbely, N.L.; and Solis, E. "Reduced In-Plane, Low Frequency Noise of an Active Flap Rotor." American Helicopter Society 65th Annual Forum, Grapevine, TX, May 2009.

Vorwald, J. "Tiltrotor Autorotation Characteristics Using Comprehensive Analysis." American Helicopter Society 65th Annual Forum, Grapevine, TX, May 2009.

Yeo, H., and Johnson, W. "Optimum Design of a Compound Helicopter." *Journal of Aircraft*, 46:4 (July-August 2009).

Yeo, H., and Johnson, W. "Performance and Design Investigation of Heavy Lift Tilt-Rotor with Aerodynamic Interference Effects." *Journal of Aircraft*, 46:4 (July-August 2009).

Acree, C.W., Jr. "Impact of Aerodynamics and Structures Technology on Heavy Lift Tiltrotors." *Journal of the American Helicopter Society*, 55:1 (January 2010).

Acree, C.W., Jr. "Integration of Rotor Aerodynamic Optimization with the Conceptual Design of a Large Civil Tiltrotor." American Helicopter Society Specialists' Conference on Aeromechanics, San Francisco, CA, January 2010.

Anusonti-Inthra, P. "Validations of Coupled CSD/CFD and Particle Vortex Transport Method for Rotorcraft Applications: Hover, Transition, and High Speed Flights." American Helicopter Society 66th Annual Forum, Phoenix, AZ, May 2010.

Arnold, J. "Using Multibody Dynamics for the Simulation of Flexible Rotor Blades — Modelling of an Innovative Blade Layout Based on Beam Approach." Thirty-Sixth European Rotorcraft Forum, Paris, France, September 2010.

Barbely, N.L.; Sim, B.W.; Kitaplioglu, C.; and Goulding, P.I. "A Study of Acoustic Reflections in Full-Scale Rotor Low Frequency Noise Measurements Acquired in Wind Tunnels." American Helicopter Society Specialists' Conference on Aeromechanics, San Francisco, CA, January 2010.

Bousman, W.G., and Norman, T. "Assessment of Predictive Capability of Aeromechanics Methods." *Journal of the American Helicopter Society*, 55:1 (January 2010).

Chang, I.-C.; Romander, E.A.; Potsdam, M.; and Yeo, H. "Air-loads Prediction of a UH-60A Rotor Inside the 40-by 80-Foot Wind Tunnel." American Helicopter Society Specialists' Conference on Aeromechanics, San Francisco, CA, January 2010.

Dieterich, O.; Konstanzer, P.; and Dietz, M. "Vibration Loads Prediction in the Age of CFD." Thirty-Sixth European Rotorcraft Forum, Paris, France, September 2010.

Dietz, M.; Maucher, C.; and Schimke, D. "Addressing Today's Aeromechanic Questions by Industrial Answers." American Helicopter Society Specialists' Conference on Aeromechanics, San Francisco, CA, January 2010.

Dietz, M.; Schimke, D.; and Embacher, M. "Advanced Industrial Application of CFD for Helicopter Development." Thirty-Sixth European Rotorcraft Forum, Paris, France, September 2010.

Fogarty, D.E.; Wilbur, M.L.; and Sekula, M.K. "A Computational Study of BVI Noise Reduction Using Active Twist Control." American Helicopter Society 66th Annual Forum, Phoenix, AZ, May 2010.

Johnson, W. "NDARC — NASA Design and Analysis of Rotorcraft. Validation and Demonstration." American Helicopter Society Specialists' Conference on Aeromechanics, San Francisco, CA, January 2010.

Jung, S.N.; Park, J.-S.; Park, S.H.; and Yu, Y.H. "Validation of HART II Structural Dynamics Predictions Based on Prescribed Airloads." American Helicopter Society Specialists' Conference on Aeromechanics, San Francisco, CA, January 2010.

Kottapalli, S. "Low-Speed and High-Speed Correlation of SMART Active Flap Rotor Loads." American Helicopter Society Specialists' Conference on Aeromechanics, San Francisco, CA, January 2010.

Lawrence, B.; Malpica, C.A.; and Theodore, C.R. "The Development of a Large Civil Tiltrotor Simulation for Hover and Low-Speed Handling Qualities Investigations." Thirty-Sixth European Rotorcraft Forum, Paris, France, September 2010.

Lee, H.-K.; Viswamurthy, S.R.; Park, S.C.; Kim, T.; Shin, S.J.; and Kim, D.-K. "Helicopter Rotor Load Prediction Using a Geometrically Exact Beam with Multicomponent Model." *Journal of Aircraft*, 47:4 (July-August 2010).

Li, P., and Chen, R. "A Mathematical Model for Helicopter Comprehensive Analysis." *Chinese Journal of Aeronautics*, 23:3 (June 2010).

Lim, J.W., and Dimanlig, A.C.B. "The Effect of Fuselage and Rotor Hub on Blade-Vortex Interaction Airloads and Rotor Wakes." Thirty-Sixth European Rotorcraft Forum, Paris, France, September 2010.

Potsdam, M.; Fulton, M.V.; and Dimanlig, A. "Multidisciplinary CFD/CSD Analysis of the SMART Active Flap Rotor." American Helicopter Society 66th Annual Forum, Phoenix, AZ, May 2010.

Rezaeian, A. "Helicopter Ground Resonance Analysis Using Multibody Dynamics." Thirty-Sixth European Rotorcraft Forum, Paris, France, September 2010.

Shen, J.; Chopra, I.; and Johnson, W. "Performance of Swashplateless Helicopter Rotor With Trailing-Edge Flaps for Primary Flight Control." *Journal of the American Helicopter Society*, 55:4 (October 2010).

Silva, C.; Yeo, H.; and Johnson, W. "Design of a Slowed-Rotor Compound Helicopter for Future Joint Service Missions." American Helicopter Society Specialists' Conference on Aeromechanics, San Francisco, CA, January 2010.

Sim, B.W.; Potsdam, M.A.; Conner, D.A.; and Watts, M.E. "Direct CFD Predictions of Low Frequency Sounds Generated by a Helicopter Main Rotor." American Helicopter Society 66th Annual Forum, Phoenix, AZ, May 2010.

Vorwald, J. "Influence of Pitch Attitude on Tiltrotor Autorotation Characteristics." American Helicopter Society Specialists' Conference on Aeromechanics, San Francisco, CA, January 2010.

Yeo, H.; Sinsay, J.D.; and Acree, C.W., Jr. "Selection of Rotor Solidity for Heavy Lift Tiltrotor Design." *Journal of the American Helicopter Society*, 55:1 (January 2010).

You, Y.H.; Kim, J.W.; Sa, J.H.; Park, J.-S.; Park, S.H.; and Jung, S.N. "Correlation of Aeroelastic Response and Structural Loads for HART II Rotor Using Loose CFD/CSD Coupling." Thirty-Sixth European Rotorcraft Forum, Paris, France, September 2010.

Yu, D.O.; Lee, H.D.; Kwon, O.J.; and Kang, H.J. "Numerical Study About Aerodynamic Interference of Rotorcraft Configurations." *HeliJapan 2010: AHS International Meeting on Advanced Rotorcraft Technology and Safety Operations*, Ohmiya, Japan, November 2010.

Ahmad, J., and Biedron, R.T. "Code-to-Code Comparison of CFD/CSD Simulation for a Helicopter Rotor in Forward Flight." AIAA Paper No. 2011-3819, June 2011.

Ahmad, J.U., and Chaderjian, N.M. "High-Order Accurate CFD/CSD Simulation of the UH-60 Rotor in Forward Flight." AIAA Paper No. 2011-3185, June 2011.



Biedron, R.T., and Lee-Rausch, E.M. "Computation of UH-60A Airloads Using CFD/CSD Coupling on Unstructured Meshes." American Helicopter Society 67th Annual Forum, Virginia Beach, VA, May 2011.

Fogarty, D.E.; Wilbur, M.L.; and Sekula, M.K. "The Effect of Non-Harmonic Active Twist Actuation on BVI Noise." American Helicopter Society 67th Annual Forum, Virginia Beach, VA, May 2011.

Grohmann, B.A.; Müller, F.; Ahci, E.; Pfaller, R.; Bauer, M.; Maucher, C.; Dieterich, O.; Storm, S.; and Jänker, P. "Design, Evaluation and Test of Active Trailing Edge." American Helicopter Society 67th Annual Forum, Virginia Beach, VA, May 2011.

Guruswamy, G.P. "CFD-Based Computations of Flexible Helicopter Blades for Stability Analysis." AIAA Paper No. 2011-1875, April 2011.

Kim, D.H., and Kim, S.-h. "Design of a Dynamically Scaled Rotor System and Verification of the Blade Properties." Thirty-Seventh European Rotorcraft Forum, Gallarate, Italy, September 2011.

Kottapalli, S. "Enhanced Correlation of SMART Active Flap Rotor Loads." AIAA Paper No. 2011-1874, April 2011.

Lim, J.W. "Improved Performance Prediction for Bo105 Model Rotor in Cruise Using Computational Fluid Dynamics." Thirty-Seventh European Rotorcraft Forum, Gallarate, Italy, September 2011.

Lim, J.W. "Improved Performance Prediction for Bo105 Model Rotor in Cruise Using Computational Fluid Dynamics." Thirty-Seventh European Rotorcraft Forum, Gallarate, Italy, September 2011.

Lim, J.W.; Wissink, A.; Jayaraman, B.; and Dimanlig, A. "Application of Adaptive Mesh Refinement Technique in Helios to Blade-Vortex Interaction Loading and Rotor Wakes." American Helicopter Society 67th Annual Forum, Virginia Beach, VA, May 2011.

Liu, Y. "Multidisciplinary Computational Rotor Noise Prediction for Helicopter Rotor in High-Speed Forward Flight." AIAA Paper No. 2011-846, January 2011.

Park, J.S.; Jung, S.N.; You, Y.H.; and Yu, Y.H. "Validation of Comprehensive Dynamics Analysis Predictions for a Rotor in Descending Flight." Aircraft Engineering and Aerospace Technology, 83:2 (2011).

Romander, E.; Norman, T.R.; and Chang, I.-C. "Correlating CFD Simulation with Wind Tunnel Test for the Full-Scale UH-60A Airloads Rotor." American Helicopter Society 67th Annual Forum, Virginia Beach, VA, May 2011.

Sa, J.H.; You, Y.H.; Park, J.-S.; Jung, S.N.; Park, S.H.; and Yu, Y.H. "Assessment of CFD/CSD Coupled Aeroelastic Analysis Solution for HART II Rotor Incorporating Fuselage Effects." American Helicopter Society 67th Annual Forum, Virginia Beach, VA, May 2011.

Sankaran, V.; Wissink, A.; Datta, A.; Sitaraman, J.; Jayaraman, B.; Potsdam, M.; Katz, A.; Kamkar, S.; Roget, B.; Mavriplis, D.; Saberi, H.; Chen, W.; Johnson, W.; and Strawn, R. "Overview of the Helios Version 2.0 Computational Platform for Rotorcraft Simulations." AIAA Paper No. 2011-1105, January 2011.

Thornburgh, R.P.; Kreshock, A.R.; and Wilbur, M.L. "Structural Optimization of Active-Twist Rotor Blades." American Helicopter Society 67th Annual Forum, Virginia Beach, VA, May 2011.

Yeo, H.; Romander, E.A.; and Norman, T.R. "Investigation of Rotor Performance and Loads of a UH-60A Individual Blade Control System." *Journal of the American Helicopter Society*, 56:4 (October 2011).

Acree, C.W., Jr., and Snyder, C.A. "Influence of Alternative Engine Concepts on LCTR2 Sizing and Mission Profile." American Helicopter Society Future Vertical Lift Aircraft Design Conference, San Francisco, CA, January 2012.

Biedron, R.T., and Lee-Rausch, E.M. "An Examination of Unsteady Airloads on a UH-60A Rotor: Computation versus Measurement." American Helicopter Society 68th Annual Forum, Fort Worth, TX, May 2012.

Chaderjian, N.M., and Ahmad, J.U. "Detached Eddy Simulation of the UH-60 Rotor Wake Using Adaptive Mesh Refinement." American Helicopter Society 68th Annual Forum, Fort Worth, TX, May 2012.

Cho, H.; Shin, S.; Lee, J.; Yee, K.; Kim, D.-K.; and Cho, I.-J. "Development of a Full Scale BO-105 Helicopter Trim Analysis." First Asian Australian Rotorcraft Forum, Busan, Korea, February 2012.

Dietz, M.; Kneisch, T.; Roth, G.; D'Alascio, A.; and Schimke, D. "EC145 T2: Comprehensive and Challenging Industrial CFD Applications." American Helicopter Society 68th Annual Forum, Fort Worth, TX, May 2012.

Floros, M.W., and Goericke, J. "Transient Analysis of Unpowered Vertical Takeoff Maneuvers." American Helicopter Society Future Vertical Lift Aircraft Design Conference, San Francisco, CA, January 2012.

Fogarty, D.E.; Wilbur, M.L.; Sekula, M.K.; and Boyd, D.D., Jr. "CFD/CSD Investigation of BVI Noise Reduction Using Harmonic Active Twist Control." Thirty-Eighth European Rotorcraft Forum, Amsterdam, The Netherlands, September 2012.

Fogarty, D.E.; Wilbur, M.L.; Sekula, M.K.; and Boyd, D.D., Jr. "Prediction of BVI Noise for an Active Twist Rotor Using a Loosely Coupled CFD/CSD Method and Comparison to Experimental Data." American Helicopter Society 68th Annual Forum, Fort Worth, TX, May 2012.

Fulton, M.V.; Gold, N.P.; Nielsen, G.E.; Mansur, M.H.; Tischler, M.B.; and Domzalski, D.B. "Development and Hover Testing of the Active Elevon Rotor." American Helicopter Society 68th Annual Forum, Fort Worth, TX, May 2012.

Johnson, W. "A History of Rotorcraft Comprehensive Analyses." NASA TP 2012-216012, April 2012.

Johnson, W.; Moodie, A.M.; and Yeo, H. "Design and Performance of Lift-Offset Rotorcraft for Short-Haul Missions." American Helicopter Society Future Vertical Lift Aircraft Design Conference, San Francisco, CA, January 2012.

Juhasz, O.; Celi, R.; Ivler, C.M.; Tischler, M.B.; and Berger, T. "Flight Dynamic Simulation Modeling of Large Flexible Tiltrotor Aircraft." American Helicopter Society 68th Annual Forum, Fort Worth, TX, May 2012.

Jung, S.N.; You, Y.H.; Kim, J.W.; Sa, J.H.; Park, J.-S.; and Park, S.H. "Correlation of Aeroelastic Response and Structural Loads for a Rotor in Descent." *Journal of Aircraft*, 49:2 (March-April 2012).

Jung, S.N.; You, Y.H.; Lau, B.H.; Johnson, W.; and Lim, J.W. "Evaluation of Rotor Structural and Aerodynamic Loads Using Measured Blade Properties." Thirty-Eighth European Rotorcraft Forum, Amsterdam, The Netherlands, September 2012.

Kottapalli, S. "Performance and Loads Correlation of a UH-60A Slowed Rotor at High Advance Ratios." American Helicopter Society Future Vertical Lift Aircraft Design Conference, San Francisco, CA, January 2012.

Maurice, J.-B.; Farolfi, R.; Saupe, F.; King, F.A.; and Fichter, W. "Robust Stability Analysis of a Linear Time-Periodic Active Helicopter Rotor." *Journal of Guidance, Control, and Dynamics*, 35:5 (September-October 2012).

Moodie, A., and Yeo, H. "Design of a Cruise-Efficient Compound Helicopter." *Journal of the American Helicopter Society*, 57:3 (July 2012).

Natarajan, B.; Eun, W.; and Shin, S. "Structured Design and Flap Actuation Mechanism Validation of an Active Trailing-Edge Flap Blade." First Asian Australian Rotorcraft Forum, Busan, Korea, February 2012.

Park, J.-S., and Jung, S.N. "Comprehensive Multibody Dynamics Analysis for Rotor Aeromechanics Predictions in Descending Flight." *The Aeronautical Journal*, 116:1177 (March 2012).

Park, J.-S.; You, Y.H.; Sa, J.H.; Park, S.H.; and Jung, S.N. "Extensive Validation of CFD/CSD Aeroelastic Simulations for a Helicopter in Descending Flight." American Helicopter Society 68th Annual Forum, Fort Worth, TX, May 2012.

Potsdam, M.; Datta, A.; and Jayaraman, B. "Computational Investigation and Fundamental Understanding of a Slowed UH-60A Rotor at High Advance Ratios." American Helicopter Society 68th Annual Forum, Fort Worth, TX, May 2012.

Russell, C., and Johnson, W. "Conceptual Design and Performance Analysis for a Large Civil Compound Helicopter." American Helicopter Society Future Vertical Lift Aircraft Design Conference, San Francisco, CA, January 2012.

Ryu, H.; Shin, S.; Lee, J.; Yee, K.; Kwak, J.S.; and Kim, D.-K. "Aerodynamics-Structural Combined Analysis for an Accurate Helicopter Forward Flight Prediction." First Asian Australian Rotorcraft Forum, Busan, Korea, February 2012.

Sekula, M.K., and Wilbur, M.L. "Analysis of a Multiflap Control System for a Swashplateless Rotor." *Journal of the American Helicopter Society*, 57:3 (July 2012).

Shao, S.; Zhu, Q.-H.; Huang, Y.-X.; Sun, W.; and Zhang, C.-L. "Investigation of Rotor Unsteady Airloads Based on Comprehensive Aeroelastic Formulation." First Asian Australian Rotorcraft Forum, Busan, Korea, February 2012.

Smith, M.J.; Lim, J.W.; van der Wall, B.G.; Baeder, J.D.; Biedron, R.T.; Boyd, D.D., Jr.; Jayaraman, B.; Jung, S.N.; and Min, B.-Y. "An Assessment of CFD/CSD Prediction State-of-the-Art Using the HART II International Workshop Data." American Helicopter Society 68th Annual Forum, Fort Worth, TX, May 2012.

Snyder, C.A., and Acree, C.W., Jr. "Preliminary Assessment of Variable Speed Power Turbine Technology on Civil Tiltrotor Size and Performance." American Helicopter Society 68th Annual Forum, Fort Worth, TX, May 2012.

van der Wall, B.G.; Lim, J.W.; Smith, M.J.; Jung, S.N.; Bailly, J.; Baeder, J.D.; and Boyd, D.D., Jr. "An Assessment of Comprehensive Code Prediction State-of-the-Art Using the HART II International Workshop Data." American Helicopter Society 68th Annual Forum, Fort Worth, TX, May 2012.

Wissink, A.; Jayaraman, B.; Datta, A.; Sitaraman, J.; Potsdam, M.; Kamkar, S.; Mavriplis, D.; Yang, Z.; Jain, R.; Lim, J.; and Strawn, R. "Capability Enhancements in Version 3 of the Helios High-Fidelity Rotorcraft Simulation Code." AIAA Paper No. 2012-0713, January 2012.

Yamauchi, G.K.; Wadcock, A.J.; Johnson, W.; and Ramasamy, M. "Wind Tunnel Measurements of Full-Scale UH-60A Rotor Tip Vortices." American Helicopter Society 68th Annual Forum, Fort Worth, TX, May 2012.

Yeo, H. "Investigation of Performance and Loads of a UH-60A Rotor at High Advance Ratios." American Helicopter Society 68th Annual Forum, Fort Worth, TX, May 2012.

Yeo, H., and Romander, E.A. "Loads Correlation of a Full-Scale UH-60A Airloads Rotor in a Wind Tunnel." American Helicopter Society 68th Annual Forum, Fort Worth, TX, May 2012.

Yun, C.Y.; Kee, Y.-J.; Kim, T.-J.; Kim, D.-K.; and Kim, S.-h. "Dynamic Characteristics Investigation of a Bearingless Main Rotor." First Asian Australian Rotorcraft Forum, Busan, Korea, February 2012.

Ahmad, J.U.; Yamauchi, G.K.; and Kao, D.L. "Comparison of Computed and Measured Vortex Evolution for a UH-60A Rotor in Forward Flight." AIAA Paper No. 2013-3160, June 2013.

Chun, T.; Ryu, H.; Seong, H.C.; Shin, S.J.; Kee, Y.; and Kim, D.-K. "Structural Analysis of a Bearingless Rotor Using an Improved Flexible Multibody Model." *Journal of Aircraft*, 50:2 (March-April 2013).

D'Alascio, A.; Kicker, K.; Kneisch, T.; Link, S.; Ries, T.; and Schimke, D. "New Role of CFD in the Helicopter Design Process — The EC145 T2 Experience." Thirty-Ninth European Rotorcraft Forum, Moscow, Russia, September 2013.

Eun, W.; Cho, H.; Ryu, H.; Shin, S.J.; and Kee, Y.-J. "Trim Analysis of a Bearingless Rotor Based on Improved Flexible Multi-body Dynamics." Second Asian/Australian Rotorcraft Forum, Tianjin, China, September 2013.

Grosveld, F.W.; Cabell, R.H.; and Boyd, D.D., Jr. "Interior Noise Predictions in the Preliminary Design of the Large Civil Tiltrotor (LCTR2)." American Helicopter Society 69th Annual Forum, Phoenix, AZ, May 2013.

Jung, S.N.; Sa, J.H.; You, Y.H.; Park, J.-S.; and Park, S.H. "Loose Fluid-Structure Coupled Approach for a Rotor in Descent Incorporating Fuselage Effects." *Journal of Aircraft*, 50:4 (July-August 2013).

Jung, S.N.; You, Y.H.; Lau, B.H.; Johnson, W.; and Lim, J.W. "Evaluation of Rotor Structural and Aerodynamic Loads Using Measured Blade Properties." *Journal of the American Helicopter Society*, 58:4 (October 2013).

Kim, T.-J.; Yun, C.Y.; Kee, Y.; Kim, S.-h.; and Jung, S.N. "Dynamic Characteristic Study of Hingeless Blade Stiffness Reinforcement for Bearingless Rotor Whirl Tower Test." Second Asian/Australian Rotorcraft Forum, Tianjin, China, September 2013.

Kutz, B.M.; Keßler, M.; and Krämer, E. "Toolchain for Free Flight Measurement and Code Validation Purposes." Thirty-Ninth European Rotorcraft Forum, Moscow, Russia, September 2013.

Massey, S.J.; Kreshock, A.R.; and Sekula, M.K. "Coupled CFD/CSD Analysis of Rotor Blade Structural Loads with Experimental Validation." AIAA Paper No. 2013-3158, June 2013.

Maurice, J.-B.; King, F.A.; and Fichter, W. "Derivation and Validation of a Helicopter Rotor Model with Trailing-Edge Flaps." *Journal of Guidance, Control, and Dynamics*, 36:5 (September-October 2013).

Maurice, J.-B.; King, F.A.; Fichter, W.; Rabourdin, A.; and Konstanzer, P.K. "Helicopter Rotor In-Plane Stability Enhancement Using Trailing-Edge Flaps." *Journal of Guidance, Control, and Dynamics*, 36:5 (September-October 2013).

Moodie, A.M., and Yeo, H. "System Performance Assessment of Active Controls for an Advanced Helicopter Concept." American Helicopter Society 69th Annual Forum, Phoenix, AZ, May 2013.

Oberinger, O., and Hajek, M. "Analysis of Complex Rotor-Airframe Coupled Instabilities by Energy Flow Considerations." American Helicopter Society 69th Annual Forum, Phoenix, AZ, May 2013.

Potsdam, M.; Yeo, H.; and Ormiston, R. "Performance and Loads Predictions of a Slowed UH-60A Rotor at High Advance Ratios." Thirty-Ninth European Rotorcraft Forum, Moscow, Russia, September 2013.

Rammer, R.; Priems, M.; and Konstanzer, P. "Modification of a Four Bladed Main Rotor — Impact on Dynamics and Vibrations." Thirty-Ninth European Rotorcraft Forum, Moscow, Russia, September 2013.

Russell, C., and Johnson, W. "Application of Climate Impact Metrics to Civil Tiltrotor Design." AIAA Paper No. 2013-1087, January 2013.

Russell, C., and Johnson, W. "Exploration of Configuration Options for a Large Civil Compound Helicopter." American Helicopter Society 69th Annual Forum, Phoenix, AZ, May 2013.

Ryu, H.; Cho, H.; Eun, W.; Shin, S.; Lee, J.; and Yee, K. "Helicopter Forward Flight Prediction using Geometrically Exact Beam Model and an Advanced Unsteady Aerodynamics." AIAA Paper No. 2013-1713, April 2013.

Smith, M.J.; Lim, J.W.; van der Wall, B.G.; Baeder, J.D.; Biedron, R.T.; Boyd, D.D., Jr.; Jayaraman, B.; Jung, S.N.; and Min, B.-Y. "The HART II International Workshop: An Assessment of the State of the Art in CFD/CSD Prediction." *CEAS Aeronautical Journal*, 4:4 (2013).

Straub, F.; JanakiRam, R.; Zientek, T.; Maciolek, R.; and Birchette, T. "Conceptual Design of an Edgewise Mission Adaptive Rotor." American Helicopter Society 69th Annual Forum, Phoenix, AZ, May 2013.

Sun, T.; Tan, J.; and Wang, H. "Investigation of Rotor Control System Loads." *Chinese Journal of Aeronautics*, 26:5 (October 2013).

van der Wall, B.G.; Lim, J.W.; Smith, M.J.; Jung, S.N.; Bailly, J.; Baeder, J.D.; and Boyd, D.D., Jr. "The HART II International Workshop: An Assessment of the State-of-the-Art in Comprehensive Code Prediction." *CEAS Aeronautical Journal*, 4:3 (September 2013).

Yeo, H. "Investigation of UH-60A Rotor Performance and Loads at High Advance Ratios." *Journal of Aircraft*, 50:2 (March-April 2013).

Yeo, H., and Romander, E.A. "Loads Correlation of a Full-Scale UH-60A Airloads Rotor in a Wind Tunnel." *Journal of the American Helicopter Society*, 58:2 (April 2013).

You, Y.H.; Sa, J.H.; Park, J.S.; Park, S.H.; and Jung, S.N. "Modern Computational Fluid Dynamics/Structural Dynamics Simulation for a Helicopter in Descent." *Journal of Aircraft*, 50:5 (September-October 2013).

Acree, C.W., Jr. "Aerodynamic Limits on Large Civil Tiltrotor Sizing and Efficiency." American Helicopter Society 5th Decennial Aeromechanics Specialists' Conference, San Francisco, CA, January 2014.

Barth, A.; Feil, R.; Konkak, K.; and Hajek, M. "Conceptual Study for an Autonomous Rotorcraft for Extreme Altitudes." Fortieth European Rotorcraft Forum, Southampton, UK, September 2014.

Biedron, R.T., and Lee-Rausch, E.M. "Blade Displacement Predictions for the Full-Scale UH-60A Airloads Rotor." American Helicopter Society 70th Annual Forum, Montreal, Canada, May 2014.

Chang, I.-C.; Norman, T.R.; and Romander, E.A. "Airloads Correlation of the UH-60A Rotor Inside the 40- by 80-Foot Wind Tunnel." International Journal of Aerospace Engineering, 2014:ID 473989 (2014).

Eun, W.; Ryu, H.; Shin, S.; Kee, Y.; and Kim, D.-K. "Aerodynamics-Structural Coupled Analysis of a Bearingless Rotor Using a Flexible Multi-Body Model." AIAA Paper No. 2014-1371, January 2014.

Fan, F.H., and Hall, S.R. "Gain-Scheduled Higher Harmonic Control for Full Flight Envelope Vibration Reduction." American Helicopter Society 70th Annual Forum, Montreal, Canada, May 2014.

Jung, S.N.; You, Y.H.; Dhadwal, M.K.; Hagerty, B.P.; Riemenschneider, J.; and Keimer, R. "Blade Property Measurement and Its Assessment on Air/Structural Loads of HART II Rotor." American Helicopter Society 70th Annual Forum, Montreal, Canada, May 2014.

Kim, D.-K., and Kim, S. "The Overview of KARI Bearingless Main Rotor Hub System." Fortieth European Rotorcraft Forum, Southampton, UK, September 2014.

Kottapalli, S., and Leyland, J. "Application of Sequential Quadratic Programming to Minimize SMART Active Flap Rotor Hub Loads." American Helicopter Society 5th Decennial Aeromechanics Specialists' Conference, San Francisco, CA, January 2014.

Lim, J.W.; Boyd, D.D., Jr.; Hoffmann, F.; van der Wall, B.G.; Kim, D.H.; Jung, S.N.; You, Y.H.; Tanabe, Y.; Bailly, J.; Lienard, C.; and Delrieux, Y. "Aeromechanical Evaluation of Smart-Twisting Active Rotor." Fortieth European Rotorcraft Forum, Southampton, UK, September 2014.

Liu, L.; Anand, V.R.; Hair, K.R.; and Straub, F.K. "Ground Resonance and Whirl Stability Analysis Using CAMRAD." American Helicopter Society 70th Annual Forum, Montreal, Canada, May 2014.

Park, J.-S. "Multibody Analyses for Performance and Aeromechanics of a Rotor in Low-Speed Flight." Aircraft Engineering and Aerospace Technology, 86:1 (2014).

Park, J.-S.; Kee, Y.; and Choi, J.-S. "Code-to-Code Comparison Study on Rotor Aeromechanics in Descending Flight." Fortieth European Rotorcraft Forum, Southampton, UK, September 2014.

Romander, E.; Meyn, L.; Norman, T.R.; Barrows, D.; and Burner, A. "Blade Motion Correlation for the Full-Scale UH-60A Airloads Rotor." American Helicopter Society 5th Decennial Aeromechanics Specialists' Conference, San Francisco, CA, January 2014.

Sekula, M.K., and Wilbur, M.L. "Optimization of an Active Twist Rotor Planform for Improved Active Response and Forward Flight Performance." American Helicopter Society 5th Decennial Aeromechanics Specialists' Conference, San Francisco, CA, January 2014.

Silbaugh, B.; Kang, H.; Floros, M.; and Singh, R. "Investigation of RCAS-CAMRAD II UH60 Structural Dynamics Model Correlation." American Helicopter Society 70th Annual Forum, Montreal, Canada, May 2014.

Sim, B.W.; JanakiRam, R.D.; and Lau, B.H. “Reduced In-Plane, Low Frequency Noise of an Active Flap Rotor.” *Journal of the American Helicopter Society*, 59:2 (April 2014).

Thornburgh, R.P.; Kreshock, A.R.; Wilbur, M.L.; Sekula, M.K.; and Shen, J. “Continuous Trailing-Edge Flaps for Primary Flight Control of a Helicopter Main Rotor.” American Helicopter Society 70th Annual Forum, Montreal, Canada, May 2014.

Yeo, H., and Johnson, W. “Investigation of Maximum Blade Loading Capability of Lift-Offset Rotors.” *Journal of the American Helicopter Society*, 59:1 (January 2014).

Ahaus, L.; Meadowcroft, T.; Sankar, L.; Makinen, S.; Tadghighi, H.; and Baeder, J. “Assessment of CFD/CSD Analytical Tools for Improved Rotor Loads.” American Helicopter Society 71st Annual Forum, Virginia Beach, VA, May 2015.

Allan, B.G.; Schaeffler, N.W.; Jenkins, L.N.; Yao, C.-S.; Wong, O.D.; and Tanner, P.E. “Active Aerodynamic Load Reduction on a Rotorcraft Fuselage with Rotor Effects — A CFD Validation Effort.” American Helicopter Society 71st Annual Forum, Virginia Beach, VA, May 2015.

Andersch, P., and Hajek, M. “Lead-Lag Dynamics of a rotor with Stick-Slip Nonlinearity.” Forty-First European Rotorcraft Forum, Munich, Germany, September 2015.

Dieterich, O.; Rabourdin, A.; Maurice, J.-B.; and Konstanzer, P. “Blue Pulse<sup>TM</sup>: Active Rotor Control by Trailing Edge Flaps at Airbus Helicopters.” Forty-First European Rotorcraft Forum, Munich, Germany, September 2015.

Jung, S.N.; You, Y.H.; Dhadwal, M.K.; Riemenschneider, J.; and Hagerty, B.P. “Study on Blade Property Measurement and Its Influence on Air/Structural Loads.” *AIAA Journal*, 53:11 (November 2015).

Kobiki, N.; Tanabe, Y.; Aoyama, T.; Kim, D.H.; Kang, H.J.; Wie, S.Y.; and Kim, S.-h. “Design, Analysis and Prototyping of Active Tab Rotor.” Forty-First European Rotorcraft Forum, Munich, Germany, September 2015.

Kowarsch, U.; Lippert, D.; Schneider, S.; Keßler, M.; and Krämer, E. “Aeroacoustic Simulation of an EC145-T2 Rotor in Descent Flight.” American Helicopter Society 71st Annual Forum, Virginia Beach, VA, May 2015.

Lim, J.; Shin, S.; Kang, Y.; and Kee, Y. “Development of Conceptual Design Framework with Rotor Structural Design Optimization for Compound Rotorcraft with a Lift Offset.” American Helicopter Society 71st Annual Forum, Virginia Beach, VA, May 2015.

Lim, J.W. “Consideration of Structural Constraints in Passive Rotor Blade Design for Improved Performance.” *The Aeronautical Journal*, 119:1222 (December 2015).

Massey, S.J.; Kreshock, A.R.; and Sekula, M.K. “Coupled CFD/CSD Analysis of an Active-Twist Rotor in a Wind Tunnel with Experimental Validation.” American Helicopter Society 71st Annual Forum, Virginia Beach, VA, May 2015.

Richter, T.; Rath, T.; Oberinger, O.; and Fichter, W. “Investigation of Whirl Flutter Stabilization Using Active Trailing Edge Flaps.” American Helicopter Society 71st Annual Forum, Virginia Beach, VA, May 2015.

Russell, C., and Basset, P.-M. “Conceptual Design of Environmentally Friendly Rotorcraft — A Comparison of NASA and ONERA Approaches.” American Helicopter Society 71st Annual Forum, Virginia Beach, VA, May 2015.

Sinsay, J.D., and Alonso, J.J. "Optimization of a Lift-Offset Compound Helicopter in a Multidisciplinary Analysis Environment." American Helicopter Society 71st Annual Forum, Virginia Beach, VA, May 2015.

Thornburgh, R.P.; Kreshock, A.R.; and Wilbur, M.L. "A Dynamic Calibration Method for Experimental and Analytical Hub Load Comparison." American Helicopter Society 71st Annual Forum, Virginia Beach, VA, May 2015.

Yeo, H., and Johnson, W. "Prediction of Maximum Lift Capability of Helicopter Rotors." *Journal of Aircraft*, 52:1 (January-February 2015).

You, Y.; Dhadwal, M.K.; and Jung, S.N. "Optimal Active Twist Input Scenario for Rotor Performance Improvement and Vibration Reduction." Forty-First European Rotorcraft Forum, Munich, Germany, September 2015.

Acree, C.W., Jr. "Assessment of JVX Proprotor Performance Data in Hover and Airplane-Mode Flight Conditions." NASA TM 2016-219070, February 2016.

Corle, E.; Schmitz, S.; Singh, R.; Kang, H.; and Floros, M. "Correlation of RCAS Load Predictions for an Active Flap Rotor." American Helicopter Society Specialists' Conference on Aeromechanics Design for Vertical Lift, San Francisco, CA, January 2016.

Dieterich, O., and Houg, W. "Ground Resonance Investigation of Slope Landing Operating Conditions." American Helicopter Society Specialists' Conference on Aeromechanics Design for Vertical Lift, San Francisco, CA, January 2016.

Feil, R.; Rauleder, J.; and Hajek, M. "Aeromechanics Analysis of a Coaxial Rotor System in Hover and High-Advance-Ratio Forward Flight." AIAA Paper No. 2016-3419, June 2016.

Feil, R.; Rauleder, J.; Hajek, M.; Cameron, C.G.; and Sirohi, J. "Computational and Experimental Aeromechanics Analysis of a Coaxial Rotor System in Hover and Forward Flight." Forty-Second European Rotorcraft Forum, Lille, France, September 2016.

Greenwood, E.; Sim, B.W.; and Boyd, D.D., Jr. "The Effects of Ambient Conditions on Helicopter Harmonic Noise Radiation: Theory and Experiment." American Helicopter Society 72nd Annual Forum, West Palm Beach, FL, May 2016.

Houg, W.; Dreher, S.; Heger, R.; Dieterich, O.; and Priems, M. "From EC145 to H145: Validation Program of Major Dynamic Changes." American Helicopter Society 72nd Annual Forum, West Palm Beach, FL, May 2016.

Johnson, W.; Elmore, J.F.; Keen, E.B.; Gallaher, A.T.; and Nunez, G.F. "Coaxial Compound Helicopter for Confined Urban Operation." American Helicopter Society Specialists' Conference on Aeromechanics Design for Vertical Lift, San Francisco, CA, January 2016.

Koning, W.J.F. "Wind Tunnel Interference Effects on Tiltrotor Testing Using Computational Fluid Dynamics." NASA CR 2016-219086, March 2016.

Kranzinger, P.P.; Keßler, M.; and Krämer, E. "Aeroacoustic Validation of the Free Wake Method FIRST on the Basis of a H145 Main Rotor in Descent Flight." Forty-Second European Rotorcraft Forum, Lille, France, September 2016.



Kowarsch, U.; Öhrle, C.; Keßler, M.; and Krämer, E. "Aeroacoustic Simulation of a Complete H145 Helicopter in Descent Flight." *Journal of the American Helicopter Society*, 61:4 (October 2016).

Kreshock, A.R.; Thornburgh, R.P.; Kang, H.; and Yeo, H. "Validation of comprehensive Modeling of the Wing and Rotor Aeroelastic Test System." *American Helicopter Society 72nd Annual Forum*, West Palm Beach, FL, May 2016.

Lim, J.; Shin, S.; and Kee, Y. "Optimization of Rotor Structural Design in Compound Rotorcraft with Lift Offset." *Journal of the American Helicopter Society*, 61:1 (January 2016).

Malpica, C.; Greenwood, E.; and Sim, B. "Parametric Investigation of the Effect of Hub Pitching Moment on Blade Vortex Interaction (BVI) Noise of an Isolated Rotor." *American Helicopter Society 72nd Annual Forum*, West Palm Beach, FL, May 2016.

Malpica, C.; Greenwood, E.; and Sim, B.W. "Helicopter Non-Unique Trim Strategies for Blade-Vortex Interaction (BVI) Noise Reduction." *American Helicopter Society Specialists' Conference on Aeromechanics Design for Vertical Lift*, San Francisco, CA, January 2016.

Narducci, R., and Tadghighi, H. "An Assessment of CREATE-AV Helios for Apache Hover and Forward Flight Simulations." *AIAA Paper No. 2016-0564*, January 2016.

Park, J.-S., and Kee, Y.J. "Rotor Aeromechanics Study Using Two Different Blade Property Data Sets." *Aircraft Engineering and Aerospace Technology*, 88:6 (2016).

Potsdam, M.; Datta, A.; and Jayaraman, B. "Computational Investigation and Fundamental Understanding of a Slowed UH-60A Rotor at High Advance Ratios." *Journal of the American Helicopter Society*, 61:2 (April 2016).

Rammer, R.; Kus, A.; Maurice, J.-B.; Dieterich, O.; and Konstanzer, P. "BLUECOPTER Demonstrator: Mastering Dynamics Challenges." *Forty-Second European Rotorcraft Forum*, Lille, France, September 2016.

Rath, T.; Richter, T.; Steinwandel, A.; and Fichter, W. "Emulation of Whirl Flutter on a Stable Helicopter Using Trailing Edge Flaps." *American Helicopter Society 72nd Annual Forum*, West Palm Beach, FL, May 2016.

Sim, J.; Kang, Y.; Eun, W.; Lim, J.; and Shin, S. "Further Parametric Study Using Rotor Structural Design Optimization Framework for Compound Rotorcraft with Lift Offset." *American Helicopter Society Specialists' Conference on Aeromechanics Design for Vertical Lift*, San Francisco, CA, January 2016.

Yeo, H., and Potsdam, M. "Rotor Structural Loads Analysis Using Coupled Computational Fluid Dynamics/Computational Structural Dynamics." *Journal of Aircraft*, 53:1 (January-February 2016).

You, Y.H., and Jung, S.N. "Optimal Active Twist Control Scenario for Performance and Vibration Perspective of a Helicopter Rotor." *American Helicopter Society Specialists' Conference on Aeromechanics Design for Vertical Lift*, San Francisco, CA, January 2016.

You, Y.H., and Jung, S.N. "Optimal Active Twist Deployment Schedule of a Rotor for Performance Improvement and Vibration Reduction." *American Helicopter Society 72nd Annual Forum*, West Palm Beach, FL, May 2016.

You, Y.; Na, D.; Jung, S.N.; Wie, S.Y.; and Kim, D.-H. "Optimum Vibration Reduction of a rotor in Descent Using Non-Uniform Active Twist Schedules." *Fifth Asian-Australian Rotorcraft Forum*, Singapore, November 2016.

Boyd, D.D., Jr.; Greenwood, E.; Watts, M.E.; and Lopes, L.V. "Examination of a Rotorcraft Noise Prediction Method and Comparison to Flight Test Data." NASA TM 2017-219370, January 2017.

Cameron, C.; Sirohi, J.; Feil, R.; and Rauleder, J. "Measurement of Transient Loads and Blade Deformation in a Coaxial Counter-Rotating Rotor." American Helicopter Society 73rd Annual Forum, Fort Worth, TX, May 2017.

Chaderjian, N.M. "Navier-Stokes Simulation of UH-60A Rotor/Wake Interaction Using Adaptive Mesh Refinement." American Helicopter Society 73rd Annual Forum, Fort Worth, TX, May 2017.

Eun, W.; Sim, J.; Lee, S.; and Shin, S. "Advancement of the SNUF Blade Design Through Flap Configuration Parametric Study and Optimization Framework." American Helicopter Society 73rd Annual Forum, Fort Worth, TX, May 2017.

Feil, R.; Rauleder, J.; and Hajek, M. "Vibratory Load Predictions of a High-Advance-Ratio Coaxial Rotor System Validated by Wind Tunnel Tests." Forty-Third European Rotorcraft Forum, Milan, Italy, September 2017.

File, C.L.; Peters, D.A.; and Patra, S. "Approximate Effect of Blade Number on the Induced Poer of Lifting Rotors at Varying Wake Skew Angles." *Journal of the American Helicopter Society*, 62:3 (July 2017).

Go, J.-I.; Kim, D.H.; Park, J.-S.; Chae, S.; and Wie, S.Y. "Performance and Loads Analyses of Compound Helicopters Using a Rigid Coaxial Rotor." Sixth Asian-Australian Rotorcraft Forum and Heli Japan 2017, Kanazawa, Japan, November 2017.

Go, J.-I.; Kim, D.H.; Park, J.-S.; Wie, S.Y.; and Chae, S. "Performance and Vibration Analyses of Lift-Offset Helicopters Using a Rigid Coaxial Rotor." Forty-Third European Rotorcraft Forum, Milan, Italy, September 2017.

Hoover, C.; Shen, J.; Kang, H.; and Kreshock, A.R. "Proprotor Loads and Whirl-Flutter Stability of a Tiltrotor Wind Tunnel Model." American Helicopter Society 73rd Annual Forum, Fort Worth, TX, May 2017.

Kim, D.-K.; Wie, S.Y.; Song, J.; Kang, H.J.; Kim, T.-J.; and Kee, Y.J. "The Overview of New Carbon Propeller Development for 32kg Gross Weight Agricultural Multicopter (Octocopter)." Forty-Third European Rotorcraft Forum, Milan, Italy, September 2017.

Kranzinger, P.P.; Keßler, M.; and Krämer, E. "Examination of the Influence of Empiric Parameters on the Aero-Acoustic Results of the Free Wake Code FIRST." Forty-Third European Rotorcraft Forum, Milan, Italy, September 2017.

Kreshock, A.R.; Thornburgh, R.P.; and Wilbur, M.L. "A Dynamic Calibration Method for Experimental and Analytical Hub Load Comparison." NASA TM 2017-219601, March 2017.

Kreshock, A.R., and Yeo, H. "Tiltrotor Whirl-Flutter Stability Predictions Using Comprehensive Analysis." AIAA Paper No. 2017-0639, January 2017.

Lim, J.W., and Sim, B.W. "Proprotor-Airframe Interactional Aerodynamics of a Tiltrotor in Airplane Mode." USARDECOM Special Report RDMR-AD-17-01, April 2017.

Malpica, C. "Parametric Investigation on the Use of Lateral and Longitudinal Rotor Trim Flapping for Tiltrotor Noise Reduction." American Helicopter Society 73rd Annual Forum, Fort Worth, TX, May 2017.

Russell, C.R., and Sekula, M.K. “Comprehensive Analysis Modeling of Small-Scale UAS Rotors.” American Helicopter Society 73rd Annual Forum, Fort Worth, TX, May 2017.

Sekula, M.K., and Wilbur, M.L. “Optimization of an Active Twist Rotor Planform for Improved Active Response and Forward Flight Performance.” *Journal of the American Helicopter Society*, 62:3 (July 2017).

Silva, C.; Sinsay, J.D.; and Johnson, W. “Design and Analysis Tools for New Rotorcraft Concepts and Emerging Markets.” Sixth Asian-Australian Rotorcraft Forum and Heli Japan 2017, Kanazawa, Japan, November 2017.

Wang, L.; Diskin, B.; Biedron, R.T.; Nielsen, E.J.; and Bauchau, O.A. “Sensitivity Analysis of Multidisciplinary Rotorcraft Solutions.” AIAA Paper No. 2017-1670, January 2017.

Xie, J.; Xie, Z.; Zhou, M.; and Qiu, J. “Multidisciplinary Aerodynamic Design of a Rotor Blade for an Optimum Rotor Speed Helicopter.” *Applied Sciences*, 7:6 (2017).

You, Y., and Jung, S.N. “Optimum Active Twist Input Scenario for Performance Improvement and Vibration Reduction of a Helicopter Rotor.” *Aerospace Science and Technology*, 63 (April 2017).

You, Y.H.; Jung, S.N.; and Kim, C.J. “Optimal Deployment Schedule of an Active Twist Rotor for Performance Enhancement and Vibration Reduction in High-Speed Flights.” *Chinese Journal of Aeronautics*, 30:4 (August 2017).

You, Y.H.; Na, D.; Jung, S.N.; Kim, K.; Park, S.H.; and Park, G.H. “Effect of Blade Deformation on Air and Structural Loads of LCH Rotor.” Sixth Asian-Australian Rotorcraft Forum and Heli Japan 2017, Kanazawa, Japan, November 2017.

Balaram, J.B.; Canham, T.; Duncan, C.; Golombek, M.; Grip, H.F.; Johnson, W.; Maki, J.; Quon, A.; Stern, R.; and Zhu, D. “Mars Helicopter Technology Demonstrator.” AIAA Paper No. 2018-0023, January 2018.

Barth, A.; Spieß, C.; Kondak, K.; and Hajek, M. “Design, Analysis and Flight Testing of a High Altitude Synchropter UAV.” American Helicopter Society 74th Annual Forum, Phoenix, AZ, May 2018.

Bowen-Davies, G., and Yeo, H. “UH-60A Rotor Performance and Loads Correlation at High Advance Ratios.” *Journal of Aircraft*, 55:1 (January-February 2018).

Feil, R.; Rinker, M.; and Hajek, M. “Comprehensive Analysis of a Coaxial Ultralight Rotorcraft and Validation with Full-Scale Flight-Test Data.” *Journal of the American Helicopter Society*, 63:4 (October 2018).

Harris, F.D. “Theory Validation — 2 Points of View.” American Helicopter Society Technical Conference on Aeromechanics Design for Transformative Vertical Flight, San Francisco, CA, January 2018.

Ho, J.C., and Yeo, H. “Rotorcraft Comprehensive Analysis Calculations of a Coaxial Rotor with Lift Offset.” American Helicopter Society 74th Annual Forum, Phoenix, AZ, May 2018.

Hoover, C.B., and Shen, J. “Parametric Study of Propeller Whirl Flutter Stability with Full-Span Model of X-57 Maxwell Aircraft.” *Journal of Aircraft*, 55:6 (November-December 2018).

Hoover, C.B.; Shen, J.; and Kreshock, A.R. “Propeller Whirl Flutter Stability and Its Influence on X-57 Aircraft Design.” *Journal of Aircraft*, 55:5 (September-October 2018).

Im, B.-U.; Lee, C.-B.; Eun, W.; and Shin, S. "System Identification of SNUF Blade Equipped with an Active Trailing-Edge Flap." Seventh Asian-Australian Rotorcraft Forum, Jeju, Korea, October 2018.

Johnson, W.; Silva, C.; and Solis, E. "Concept Vehicles for VTOL Air Taxi Operations." American Helicopter Society Technical Conference on Aeromechanics Design for Transformative Vertical Flight, San Francisco, CA, January 2018.

Koning, W.J.F.; Johnson, W.; and Allan, B.G. "Generation of Mars Helicopter Rotor Model for Comprehensive Analyses." American Helicopter Society Technical Conference on Aeromechanics Design for Transformative Vertical Flight, San Francisco, CA, January 2018.

Koning, W.J.F.; Romander, E.A.; and Johnson, W. "Low Reynolds Number Airfoil Evaluation for the Mars Helicopter Rotor." American Helicopter Society 74th Annual Forum, Phoenix, AZ, May 2018.

Kreshock, A.R.; Thornburgh, R.P.; and Yeo, H. "Comparison of Comprehensive Analyses Predicting Aeroelastic Stability of the Wing and Rotor Aeroelastic Test System." American Helicopter Society 74th Annual Forum, Phoenix, AZ, May 2018.

Krishnamurthy, S.; Rizzi, S.A.; Boyd, D.D., Jr.; and Aumann, A.R. "Auralization of Rotorcraft Periodic Flyover Noise from Design Predictions." American Helicopter Society 74th Annual Forum, Phoenix, AZ, May 2018.

Kus, A.; Schneider, S.; Hollands, M.; Rammer, R.; Dieterich, O.; and Priems, M. "GRC1: An Advanced Five-Bladed Bearingless Main Rotor Dynamics and Acoustics from Draft to Flight Test." American Helicopter Society 74th Annual Forum, Phoenix, AZ, May 2018.

Lee, J.; Kang, S.N.; Lee, S.G.; Im, D.-K.; Kang, H.J.; and Lee, D.J. "Development of Improved Rotor Blade Tip Shape Using Multidisciplinary Design Analysis and Optimization." Forty-Fourth European Rotorcraft Forum, Delft, The Netherlands, September 2018.

Lee, J.; Kang, S.N.; Lee, S.G.; Kang, H.J.; and Lee, D.J. "Design Optimization of Rotor Blade Tip Configuration for High Performance and Noise Reduction." Seventh Asian-Australian Rotorcraft Forum, Jeju, Korea, October 2018.

Meyn, L.A. "Rotorcraft Optimization Tools: Incorporating Rotorcraft Design codes into Multi-Disciplinary Design, Analysis, and Optimization." American Helicopter Society Technical Conference on Aeromechanics Design for Transformative Vertical Flight, San Francisco, CA, January 2018.

Park, J.-S.; Kim, D.-H.; Chae, S.; Lee, Y.-L.; and Go, J.-I. "Vibration Reduction Analyses Using Individual Blade Pitch Controls for Lift-Offset Rotors." Forty-Fourth European Rotorcraft Forum, Delft, The Netherlands, September 2018.

Park, J.-S.; Kim, D.-H.; Chae, S.-H.; Lee, Y.-L.; and Go, J.-I. "Hub Vibratory Loads Reductions Using Individual Blade Pitch Controls for Lift-Offset Rotors." Seventh Asian-Australian Rotorcraft Forum, Jeju, Korea, October 2018.

Rauleder, J.; van der Wall, B.G.; Abdelmoula, A.; Komp, D.; Kumar, S.; Ondra, V.; Titurus, B.; and Woods, B.K.S. "Aerodynamic Performance of Morphing Blades and Rotor Systems." American Helicopter Society 74th Annual Forum, Phoenix, AZ, May 2018.

Russell, C.R.; Theodore, C.R.; and Sekula, M.K. "Incorporating Test Data for Small UAS at the Conceptual Design Level." American Helicopter Society Technical Conference on Aeromechanics Design for Transformative Vertical Flight, San Francisco, CA, January 2018.

Schäferlein, U.; Keßler, M.; and Krämer, E. "Aeroelastic Simulation of the Tail Shake Phenomenon." *Journal of the American Helicopter Society*, 63:3 (July 2018).

Schäferlein, U.; Keßler, M.; and Krämer, E. "Aeroelastic Simulation of the Tail Shake Phenomenon." American Helicopter Society Technical Conference on Aeromechanics Design for Transformative Vertical Flight, San Francisco, CA, January 2018.

Silva, C.; Johnson, W.; Antcliff, K.R.; and Patterson, M.D. "VTOL Urban Air Mobility Concept Vehicles for Technology Development." AIAA Paper No. 2018-3847, June 2018.

Silva, C.; Johnson, W.; and Solis, E. "Multidisciplinary Conceptual Design for Reduced-Emission Rotorcraft." American Helicopter Society Technical Conference on Aeromechanics Design for Transformative Vertical Flight, San Francisco, CA, January 2018.

Sinsay, J.D. "A Heuristic for Varying Design Parametrization Applied to a Multidisciplinary Rotorcraft Problem." Doctor of Philosophy Thesis, Stanford University, 2018.

Sinsay, J.D., and Alonso, J.J. "Heuristic Discovery of Improved Rotor Designs." American Helicopter Society 74th Annual Forum, Phoenix, AZ, May 2018.

Uehara, D.; Sirohi, J.; Feil, R.; and Rauleder, J. "Measurement of Transient Blade Passage Loads of a Coaxial Counter-Rotating Rotor in Hover." Forty-Fourth European Rotorcraft Forum, Delft, The Netherlands, September 2018.

Wie, S.Y.; Chae, S.-H.; and Kim, D.-H. "Parametric Studies for Analysis of Aerodynamic and Vibration Performance of Coaxial Rotor." Seventh Asian-Australian Rotorcraft Forum, Jeju, Korea, October 2018.

Yeo, H. "Design and Aeromechanics Investigation of Compound Helicopters." Seventh Asian-Australian Rotorcraft Forum, Jeju, Korea, October 2018.

Yeo, H.; Bosworth, J.; Acree, C.W., Jr.; and Kreshock, A.R. "Comparison of CAMRAD II and RCAS Predictions of Tiltrotor Aeroelastic Stability." *Journal of the American Helicopter Society*, 63:2 (April 2018).

You, Y.; Na, D.; and Jung, S.N. "Improved Rotor Aeromechanics Predictions Using a Fluid Structure Interaction Approach." *Aerospace Science and Technology*, 73 (February 2018).

Yucekayali, A.; Ezertas, A.; and Ortakaya, Y. "Dynamic Stall Model Optimization with CFD and Assessment with Comprehensive Approach for Improved Blade Design." Forty-Fourth European Rotorcraft Forum, Delft, The Netherlands, September 2018.

Corle, E.; Floros, M.; and Schmitz, S. "Transient CFD/CSD Tiltrotor Stability Analysis." AIAA Paper No. 2019-2132, January 2019.

Dülgar, P.A.; Yücekayah, A.; Güngör, O.; and Ortakaya, Y. "Rotor Stall Onset Assessment." Eighth Asian-Australian Rotorcraft Forum, Ankara, Turkey, October 2019.

Feil, R.; Rauleder, J.; Cameron, C.G.; and Sirohi, J. “Aeromechanics Analysis of a High-Advance-Ratio Lift-Offset Coaxial Rotor System.” *Journal of Aircraft*, 56:1 (January-February 2019).

Fonte, F.; Favale, M.; Rigo, A.; and Quaranta, G. “Enhanced Gust Load Recovery for the AW609 Tiltrotor.” Forty-Fifth European Rotorcraft Forum, Warsaw, Poland, September 2019.

Hong, S.; Jung, S.; Kim, K.; Park, S.H.; Lee, D.-w.; and Lee, J. “Quasi-Static Loads Analysis of a 5-Bladed rotor in Maneuver Using CFD/CSD Coupling.” Forty-Fifth European Rotorcraft Forum, Warsaw, Poland, September 2019.

Keßler, M. “Expanding Helicopter Noise Simulation Scope, Based on High-Fidelity CFD.” American Helicopter Society 75th Annual Forum, Philadelphia, PA, May 2019.

Kim, D.-K.; Wie, S.Y.; Kang, H.J.; Kim, T.-J.; Kee, Y.J.; Lee, M.-G.; and Yun, C. “The Development of Prop-Rotor System for 52kg MTOW Quad-Tilt Prop (QTP) UAV.” Forty-Fifth European Rotorcraft Forum, Warsaw, Poland, September 2019.

Komp, D.; Kumar, S.; Abdelmoula, A.; Hajek, M.; and Rauleder, J. “Investigation of Active Rotor Design and Control for Performance Improvement.” American Helicopter Society 75th Annual Forum, Philadelphia, PA, May 2019.

Kottapalli, S., and Acree, C.W., Jr. “Correlation of Full-Scale Isolated Proprotor Performance and Loads.” American Helicopter Society 75th Annual Forum, Philadelphia, PA, May 2019.

Kottapalli, S.; Russell, C.R.; Acree, C.W., Jr.; and Norman, T.R. “Aeroelastic Stability Analysis of a Full-Scale Isolated Proprotor on the Tiltrotor Test Rig.” AIAA Paper No. 2019-2134, January 2019.

Kreshock, A.R.; Kang, H.; Yeo, H.; and Acree, C.W., Jr. “Development of a New Aeroelastic Tiltrotor Wind Tunnel Testbed.” AIAA Paper No. 2019-2133, January 2019.

Kreshock, A.R.; Thornburgh, R.P.; and Yeo, H. “Comparison of Comprehensive Analyses Predicting Whirl Flutter Stability of the Wing and Rotor Aeroelastic Test System.” *Journal of the American Helicopter Society*, 64:4 (October 2019).

Letzgus, J.; Keßler, M.; and Krämer, E. “Simulation of Dynamic Stall on an Elastic Rotor in High-Speed Turn Flight.” American Helicopter Society 75th Annual Forum, Philadelphia, PA, May 2019.

Marioni, T.D.R.; Legras, G.; Link, S.; and Embacher, M. “Phantom Blade Model — Advanced Methodology for Actuator Disk Model.” Forty-Fifth European Rotorcraft Forum, Warsaw, Poland, September 2019.

Park, J.-S.; Kim, D.-H.; Chae, S.; Lee, Y.-L.; and Kwon, Y.-M. “Vibration Reduction and Rotor Performance Analyses of Lift-Offset Rotors Using Individual Blade Pitch Controls with Multiple Harmonic Inputs.” American Helicopter Society 75th Annual Forum, Philadelphia, PA, May 2019.

Pettingill, N.A., and Zawodny, N.S. “Identification and Prediction of Broadband Noise for a Small Quadcopter.” American Helicopter Society 75th Annual Forum, Philadelphia, PA, May 2019.

Pipenberg, B.T.; Keennon, M.T.; Tyler, J.D.; Langberg, S.A.; Hibbs, B.; Balaram, J.B.; Grip, H.F.; and Pempejian, J. “Design and Fabrication of the Mars Helicopter Rotor, Airframe, and Landing Gear Systems.” AIAA Paper No. 2019-0620, January 2019.

Rinker, M.; Ries, T.; Embacher, M.; Platzer, S.; Uhl, G.; and Hajek, M. "Simulation of Rotor-Emppennage Interactional Aerodynamics in Comparison to Experimental Data." American Helicopter Society 75th Annual Forum, Philadelphia, PA, May 2019.

Uehara, D.; Sirohi, J.; Feil, R.; and Rauleder, J. "Blade Passage Loads and Deformation of a Coaxial Rotor System in Hover." *Journal of Aircraft*, 56:6 (November-December 2019).

Ventura Diaz, P.; Johnson, W.; Ahmad, J.; and Yoon, S. "Computational Study of the Side-by-Side Urban Air Taxi Concept." American Helicopter Society 75th Annual Forum, Philadelphia, PA, May 2019.

Yeo, H. "Design and Aeromechanics Investigation of Compound Helicopters." *Aerospace Science and Technology*, 88 (May 2019).

Yeo, H., and Kreshock, A.R. "Whirl Flutter Investigation of Hingeless Proprotors." American Helicopter Society 75th Annual Forum, Philadelphia, PA, May 2019.

Johnson, W. "A Quiet Helicopter for Air Taxi Operations." Vertical Flight Society Aeromechanics for Advanced Vertical Flight Technical Meeting, San Jose, CA, January 2020.

Kottapalli, S. "Loads Correlation of a Full-Scale Proprotor on the Tiltrotor Test Rig." Vertical Flight Society Aeromechanics for Advanced Vertical Flight Technical Meeting, San Jose, CA, January 2020.

Lee, Y.-L.; Kim, D.-H.; Park, J.-S.; and Hong, S.-B. "Vibration Reduction Simulations for Rotor and Airframe of a Lift-Offset Compound Helicopter Using Two Active Vibration Control Techniques." Vertical Flight Society Aeromechanics for Advanced Vertical Flight Technical Meeting, San Jose, CA, January 2020.

Ventura Diaz, P., and Yoon, S. "Computational Study of NASA's Quadrotor Urban Air Taxi Concept." AIAA Paper No. 2020-0302, January 2020.

Yang, H.; Alotaibi, J.; and Morales, R. "Advanced On-Blade Control for Vibration Reduction of the EC-145 Rotor: Robust Principal Components vs  $H_\infty$ ." AIAA Paper No. 2020-0945, January 2020.

## **PUBLICATIONS REGARDING CAMRAD/JA**

Johnson, W. "CAMRAD/JA, A Comprehensive Analytical Model of Rotorcraft Aerodynamics and Dynamics, Johnson Aeronautics Version." Johnson Aeronautics, 1988.

Johnson, W. "Airloads and Wake Models for a Comprehensive Helicopter Analysis." AGARD-R-781, April 1990; NASA CR 177551, April 1990; Vertica, Volume 14, Number 3, 1990.

Johnson, W. "Wake Model for Helicopter Rotors in High Speed Flight." NASA CR 177507, November 1988.

Bousman, W.G.; Young, C.; Gilbert, N.; Toulmay, F.; Johnson, W.; and Riley, M.J. "Correlation of Puma Airloads — Lifting-Line and Wake Calculation." Fifteenth European Rotorcraft Forum, Amsterdam, The Netherlands, September 1989.

Dadone, L.; Caradonna, F.; Ramachandran, K.; Silva, M.; and Poling, D. "The Prediction of Loads on the Boeing Helicopters Model 360 Rotor." American Helicopter Society 45th Annual Forum, Boston, MA, May 1989.

Elliott, A.S., and McConville, J.B. "Application of a General-Purpose Mechanical Systems Analysis Code to Rotorcraft Dynamics Problems." American Helicopter Society National Specialists' Meeting on Rotorcraft Dynamics, Arlington, TX, November 1989.

Johnson, W. "Calculation of Blade-Vortex Interaction Airloads on Helicopter Rotors." Journal of Aircraft, 26:5 (May 1989).

Johnson, W. "Tilt Rotor Research Investigations and Methodology Development (1989)." Boeing Vertol Report D210-12668-3, December 1989.

Strawn, R.C.; Desopper, A.; Miller, J.; and Jones, A. "Correlation of Puma Airloads — Evaluation of CFD Prediction Methods." Fifteenth European Rotorcraft Forum, Amsterdam, The Netherlands, September 1989.

Tadghighi, H. "An Analytical Model for Prediction of Main Rotor/Tail Rotor Interaction Noise." AIAA Paper No. 89-1130, April 1989.

Hassan, A.A. "Finite-Difference Solutions of Three-Dimensional Rotor Blade-Vortex Interactions." Developments in Theoretical and Applied Mechanics, 15 (March 1990).

Johnson, W. "Calculation of Airloads on a Helicopter Rotor Blade with a Swept Tip." NASA CR 177536, July 1990.

Johnson, W. "Airloads, Wakes, and Aeroelasticity." NASA CR 177551, April 1990.

Johnson, W. "Rotor Wake and Aerodynamic Model Influence on Calculated Helicopter Performance." NASA CR 177555, July 1990.



Johnson, W. "Airloads and Wake Models for a Comprehensive Helicopter Analysis." *Vertica*, 14:3 (1990).

Kunz, D.L. "Development of a CAMRAD Model for the HARP Rotor." McDonnell Douglas Helicopter Company, FTTN 90-007, March 1990.

Martin, R.M.; Marcolini, M.A.; Spletstoesser, W.R.; and Schultz, K.J. "Wake Geometry Effects on Rotor Blade-Vortex Interaction Noise Directivity." NASA TP 3015, November 1990.

Sambell, K.W.; JanakiRam, D.S.; and Silverthorn, L.J. "Trail Rotor V/STOL Aircraft, Features and Applications." American Helicopter Society 46th Annual Forum, Washington, D.C., May 1990.

Straub, F.K., and Merkle, D.J. "MDHC Technical Assessment of Advanced Rotor and Control Concepts." American Helicopter Society Vertical Lift Aircraft Design Conference, San Francisco, CA, January 1990.

Total, J.J., and Madden, J.F., III. "Rotor and Control System Loads Analysis of the XV-15 With the Advanced Technology Blades." American Helicopter Society Specialists' Meeting: Innovations in Rotorcraft Test Technologies for the 90's, Scottsdale, AZ, October 1990.

Yen, J.G.; Yuce, M.; Chao, C.-F.; and Schillings, J. "Validation of Rotor Vibratory Airloads and Application to Helicopter Response." *Journal of the American Helicopter Society*, 35:4 (October 1990).

Burley, C.L.; Jones, H.E.; Marcolini, M.A.; and Spletstoesser, W.R. "Directivity and Prediction of Low Frequency Rotor Noise." AIAA Paper No. 91-0592, January 1991.

Charles, B.D.; Tadghighi, H.; and Hassan, A.A. "Effects of a Trailing Edge Flap on the Aerodynamics and Acoustics of Rotor Blade-Vortex Interactions." American Helicopter Society International Technical Specialists Meeting, Rotorcraft Aeroacoustics and Rotor Fluid Dynamics, Philadelphia, PA, October 1991.

Felker, F.F. "Results from a Test of a 2/3-Scale V-22 Rotor and Wing in the 40- by 80-Foot Wind Tunnel." American Helicopter Society 47th Annual Forum, Phoenix, AZ, May 1991.

Flemming, R.J.; Bond, T.H.; and Britton, R.K. "Results of a Sub-Scale Model Rotor Icing Test." AIAA Paper No. 91-0660, January 1991.

Hassan, A.A., and Charles, B.D. "Simulation of Realistic Rotor Blade-Vortex Interactions Using A Finite-Difference Technique." *Journal of the American Helicopter Society*, 36:3 (July 1991).

Heffernan, R.M.; Precetti, D.; and Johnson, W. "Analysis and Correlation of SA349/2 Helicopter Vibration." AIAA Paper No. 91-1222, April 1991.

Heffernan, R.; Precetti, D.; and Johnson, W. "Vibration Analysis of the SA349/2 Helicopter." NASA TM 102794, January 1991.

Hernandez, F., and Johnson, W. "Correlation of Airloads on a Two-Bladed Helicopter Rotor." American Helicopter Society and Royal Aeronautical Society International Technical Specialists Meeting: Rotorcraft Acoustics and Rotor Fluid Dynamics, Valley Forge, PA, October 1991.

Peterson, R.L., and Johnson, W. "Aeroelastic Loads and Stability Investigation of a Full-Scale Hingeless Rotor." NASA TM 103867, July 1991.

Shanley, J.P. "Validation of UH-60A CAMRAD/JA Input Model." Sikorsky Aircraft SER 701716, November 1991.

Straub, F.K.; Callahan, C.B.; and Culp, J.D. "Rotor Design Optimization Using a Multidisciplinary Approach." AIAA Paper No. 91-0477, January 1991.

Strawn, R.C., and Bridgeman, J.O. "An Improved Three-Dimensional Aerodynamics Model for Helicopter Airloads Prediction." AIAA Paper No. 91-0767, January 1991.

van Aken, J.M. "Alleviation of Whirl-Flutter on Tilt-Rotor Aircraft Using Active Controls." American Helicopter Society 47th Annual Forum, Phoenix, AZ, May 1991.

Young, C.; Bousman, W.G.; Maier, T.H.; Toulmay, F.; and Gilbert, N. "Lifting Line Predictions for a Swept Tip Rotor Blade." American Helicopter Society 47th Annual Forum, Phoenix, AZ, May 1991.

Bousman, W.G., and Maier, T.H. "An Investigation of Helicopter Rotor Blade Flap Vibratory Loads." American Helicopter Society 48th Annual Forum, Washington, D.C., June 1992.

Chattopadhyay, A., and Narayan, J.R. "Optimum Design of High Speed Prop-Rotors Using a Multidisciplinary Approach." American Helicopter Society 48th Annual Forum, Washington, D.C., June 1992.

Crouse, G.L., Jr. "An Analytical Study of Unsteady Rotor/Fuselage Interaction in Hover and Forward Flight." Doctor of Philosophy Thesis, University of Maryland, 1992.

Hassan, A.A.; Charles, B.D.; Tadghighi, H.; and Sankar, L.N. "Blade-Mounted Trailing Edge Flap Control for BVI Noise Reduction." NASA CR 4426, February 1992.

Kottapalli, S. "Blade Root Torsional Dampers to Reduce Hub Loads." AIAA Paper No. 92-2449, April 1992.

Kottapalli, S., and Leyland, J.A. "Analysis of Open Loop Higher Harmonic Control at High Airspeeds on a Modern Four-Bladed Articulated Rotor." AIAA Paper No. 92-2450, April 1992.

Kottapalli, S., and Meza, V. "Analytical Aeroelastic Stability Considerations and Conversion Loads for an XV-15 Tilt-Rotor in a Wind Tunnel Simulation." AIAA Paper No. 92-2258, April 1992.

Kunz, D.L. "On the Effect of Pitch/Mast-Bending Coupling on Whirl-Mode Stability." American Helicopter Society 48th Annual Forum, Washington, D.C., June 1992.

LaMarsh, W.J., II; Walsh, J.L.; and Rogers, J.L. "Aerodynamic Performance Optimization of a Rotor Blade Using a Neural Network as the Analysis." AIAA Paper No. 92-4837, September 1992.

Leclercq, F. "Rotor Wake Induced Flow Field. Development of a Program for Induced Velocity Visualization Using the CAMRAD/JA Wake Model in Low Speed Forward Flight and the Graphics Software PLOT3D." NASA Ames Research Center, October 1992.

Maier, T.H., and Bousman, W.G. "An Examination of the Aerodynamic Moment on Rotor Blade Tips Using Flight Test Data and Analysis." Eighteenth European Rotorcraft Forum, Avignon, France, September 1992.

Marcolini, M.A.; Martin, R.M.; Lorber, P.F.; and Egolf, T.A. "Prediction of BVI Noise Patterns and Correlation with Wake Interaction Locations." American Helicopter Society 48th Annual Forum, Washington, D.C., June 1992.

Tadghighi, H.; Hassan, A.A.; and Charles, B. "Prediction of Blade-Vortex Interaction Noise Using Airloads Generated by a Finite-Difference Technique." *Journal of the American Helicopter Society*, 37:4 (October 1992).

Yen, J.G., and Yuce, M. "Correlation of Pitch-Link Loads in Deep Stall on Bearingless Rotors." *Journal of the American Helicopter Society*, 37:4 (October 1992).

Acree, C.W., Jr. "An Improved CAMRAD Model for Aeroelastic Stability Analysis of the XV-15 With Advanced Technology Blades." NASA TM 4448, March 1993.

Callahan, C.B., and Straub, F.K. "Design Optimization of Rotor Blades for Improved Performance and Vibration." *Journal of the American Helicopter Society*, 38:4 (October 1993).

Chattopadhyay, A.; McCarthy, T.R.; and Madden, J.F., III. "Optimum Design of High Speed Prop Rotors Including the Coupling of Performance, Aeroelastic Stability and Structures." American Helicopter Society 49th Annual Forum, St. Louis, MO, May 1993.

Chattopadhyay, A.; McCarthy, T.R.; and Madden, J.F., III. "Structural Optimization of High Speed Prop Rotors Including Aeroelastic Stability Constraints." *Mathematical and Computer Modeling*, 18:3/4 (August 1993).

Felker, F.F. "Accuracy of Tilt Rotor Hover Performance Predictions." NASA TM 104023, June 1993.

Gallman, J.M.; Tung, C.; Yu, Y.H.; and Low, S.L. "Prediction of Blade-Vortex Interaction Noise With Applications to Higher Harmonic Control." AIAA Paper No. 93-4331, October 1993.

He, C.J. "A Parametric Study of Harmonic Hub Loads." NASA CR 4558, November 1993.

Kottapalli, S. "Sources of Helicopter Rotor Hub Inplane Shears." AIAA Paper No. 93-1358, April 1993.

Lau, B.H.; Louie, A.W.; Sotiriou, C.P.; and Griffiths, N. "Correlation of the Lynx-XZ170 Flight -Test Results Up To and Beyond the Stall Boundary." American Helicopter Society 49th Annual Forum, St. Louis, MO, May 1993.

McCarthy, T.R., and Chattopadhyay, A. "Design of High Speed Proprotors Using Multiobjective Optimization Techniques." AIAA Paper No. 93-1032, February 1993.

Moore, M.J.; Yablonski, M.J.; Mathew, B.; and Liu, J. "High Speed Tiltrotors: Dynamics Methodology." American Helicopter Society 49th Annual Forum, St. Louis, MO, May 1993.

Pritchard, J.I.; Adelman, H.M.; Walsh, J.L.; and Wilbur, M.L. "Optimizing Tuning Masses for Helicopter Rotor Blade Vibration Reduction and Comparison with Test Data." *Journal of Aircraft*, 30:6 (November-December 1993).

Ramachandran, K.; Steinhoff, J.S.; and Yonghu, W. "Free-Wake Computation of Helicopter Rotor Flowfield for General Flight Regimes." ARO Report 25623.4-EG-S, March 1993.

Ramachandran, K.; Schleichriem, S.; Caradonna, F.X.; and Steinhoff, J. "The Application of Vorticity Embedding to the Computation of Advancing Rotor Flows." American Helicopter Society 49th Annual Forum, St. Louis, MO, May 1993.

Ramachandran, K.; Schleichriem, S.; Caradonna, F.X.; and Steinhoff, J.S. "Free-Wake Computation of Helicopter Rotor Flowfield in Forward Flight." AIAA Paper No. 93-3079, July 1993.

Rutherford, J.W.; O'Rourke, M.J.; Lovenguth, M.A.; and Mitchell, C.A. "Conceptual Assessment of Two High-Speed Rotorcraft." *Journal of Aircraft*, 50:2 (March-April 1993).

Shinoda, P.M., and Johnson, W. "Performance Results from a Test of an S-76 Rotor in the NASA Ames 80- by 120-Foot Wind Tunnel." AIAA Paper No. 93-3414, August 1993.

Straub, F.K., and Robinson, L.H. "Dynamics of a rotor With Nonharmonic Control." American Helicopter Society 49th Annual Forum, St. Louis, MO, May 1993.

Swanson, A.A. "Application of the Shadowgraph Flow Visualization Technique to a Full-Scale Helicopter Rotor in Hover and Forward Flight." AIAA Paper No. 93-3411, August 1993.

Tai, T.C., and Vorwald, J. "Simulation of V-22 Rotorcraft Hover Flowfield." AIAA Paper No. 93-4878, December 1993.

Walsh, J.L.; LaMarsh, W.J., II; and Adelman, H.M. "Fully Integrated Aerodynamic/Dynamic Optimization of Helicopter Rotor Blades." *Mathematical and Computer Modeling*, 18:3/4 (August 1993).

Wasikowski, M.E.; Heiges, M.W.; and Bright, J. "Coupled Rotor Fuselage Loads Analysis — A Comparative Evaluation and Correlation." Nineteenth European Rotorcraft Forum, Cernobbio, Italy, September 1993.

Yu, Y.H.; Tung, C.; Gallman, J.; Schultz, K.-J.; van der Wall, B.; Spiegel, P.; and Michea, B. "Aerodynamics and Acoustics of Rotor Blade-Vortex Interaction." *Journal of Aircraft*, 32:5 (September-October 1995).

Beaumier, P.; Prieur, J.; Rahier, G.; Spiegel, P.; Demargne, A.; Tung, C.; Gallman, J.M.; Yu, Y.H.; Kube, R.; van der Wall, B.G.; Schultz, K.J.; Spletstoesser, W.R.; Brooks, T.F.; Burley, C.L.; and Boyd, D.D., Jr. "Effect of Higher Harmonic Control on Helicopter Rotor Blade-Vortex Interaction Noise: Prediction and Initial Validation." AGARD CP 552, October 1994.

Chattopadhyay, A.; McCarthy, T.R.; and Madden, J.F., III. "An Optimization Procedure for the Design of Prop-Rotors in High Speed Cruise Including the Coupling of Performance, Aeroelastic Stability, and Structures." *Mathematical and Computer Modeling*, 19:3/4 (February 1994).

Dadone, L.; Liu, J.; Wilkerson, J.; and Acree, C.W. "Proprotor Design Issues for High Speed Tiltrotors." American Helicopter Society 50th Annual Forum, Washington, D.C., May 1994.

Dawson, S. "Design of an Active Flap Model Rotor: A Multidisciplinary Approach." American Helicopter Society Aeromechanics Specialists Conference, San Francisco, CA, January 1994.

Dawson, S., and Straub, F. "Design, Validation, and Test of a Model Rotor with Tip Mounted Active Flaps." American Helicopter Society 50th Annual Forum, Washington, D.C., May 1994.

Felker, F.F., and McKillip, R.M., Jr. "Comparisons of Predicted and Measured Rotor Performance in Vertical Climb and Descent." American Helicopter Society 50th Annual Forum, Washington, D.C., May 1994.

Haas, D.J., and Imber, R. "Identification of Helicopter Component Loads Using Multiple Regression." *Journal of Aircraft*, 31:4 (July-August 1994).

He, C.J. "A Parametric Study of Harmonic Rotor Hub Loads." American Helicopter Society Aeromechanics Specialists Conference, San Francisco, CA, January 1994.

Niesl, G.; Swanson, S.M.; Jacklin, S.A.; Blaas, A.; and Kube, R. "Effect of Individual Blade Control on Noise Radiation." AGARD CP 552, October 1994.

Peterson, R.L.; Maier, T.; Langer, H.-J.; and Tranapp, N. "Correlation of Wind Tunnel and Flight Test Results of a Full-Scale Hingeless Rotor." American Helicopter Society Aeromechanics Specialists Conference, San Francisco, CA, January 1994.

Richter, P., and Schreiber, T. "Theoretical Investigations and Windtunnel Tests with HHC-IBC." Twentieth European Rotorcraft Forum, Amsterdam, Netherlands, October 1994.

Straub, F.K., and Charles, B.D. "A New Approach to Active Control." American Helicopter Society Aeromechanics Specialists Conference, San Francisco, CA, January 1994.

Walsh, J.L.; Young, K.C.; Pritchard, J.I.; Adelman, H.M.; and Mantay, W. "Multilevel Decomposition Approach to Integrated Aerodynamic/Dynamic/Structural Optimization of Helicopter Rotor Blades." American Helicopter Society Aeromechanics Specialists Conference, San Francisco, CA, January 1994.

Charles, B.D.; JanakiRam, R.D.; Hassan, A.A.; and Quackenbush, T.R. "As Assessment of Current Methodology for Predicting Tiltrotor Blade-Vortex Interaction Aerodynamics." American Helicopter Society 51st Annual Forum, Ft. Worth, TX, May 1995.

Chattopadhyay, A., and McCarthy, T.R. "An Integrated Optimum Design Approach for High Speed Prop Rotors." NASA CR 199389, August 1995.

Dawson, S.; Hassan, A.; Straub, F.; and Tadghighi, H. "Blade-Mounted Flap Control for BVI Noise Reduction Proof-of-Concept Test." NASA CR 195078, July 1995.

Gallman, J.M.; Tung, C.; and Low, S.L. "The Effects of Vortex Modeling on Blade-vortex Interaction Noise Prediction." AIAA Paper No. 95-0832, January 1995.

Ghee, T.A., and Elliott, J.W. "The Wake of a Small-Scale Rotor in Forward Flight Using Flow Visualization." *Journal of the American Helicopter Society*, 40:3 (July 1995).

Gorton, S.A.; Poling, D.R.; and Dadone, L. "Laser Velocimetry and Blade Pressure Measurements of a Blade-Vortex Interaction." *Journal of the American Helicopter Society*, 40:2 (April 1995).

Heiges, M.W. "Reconfigurable Controls for Rotorcraft — A Feasibility Study." *Journal of the American Helicopter Society*, 42:3 (July 1997).

Henderson, J.L.; Walsh, J.L.; and Young, K.C. "Application of Response Surface Techniques to Helicopter Rotor Blade Optimization Procedures." NASA TM 111274, November 1995.

Lim, J.W. "Analytical Investigation of UH-60A Flight Blade Airloads and Loads Data." American Helicopter Society 51st Annual Forum, Ft. Worth, TX, May 1995.

Lim, J.W., and Anastassiades, T. "Correlation of 2GCHAS Analysis with Experimental Data." *Journal of the American Helicopter Society*, 40:4 (October 1995).

Maier, T.H.; Sharpe, D.L.; and Lim, J.W. "Fundamental Investigation of Hingeless Rotor Aeroelastic Stability, Test Data and Correlation." American Helicopter Society 51st Annual Forum, Ft. Worth, TX, May 1995.

Ramachandran, K., and Caradonna, F.X. "The Use of CFD for the Free-Wake Computation of Flows over General Multi-Blade Rotors." American Helicopter Society 2nd International Aeromechanics Specialists' Conference, Bridgeport, CT, October 1995.

Rocchetto, A., and Poloni, C. "A Hybrid Numerical Optimization Technique Based on Genetic and Feasible Direction Algorithms for Multipoint Helicopter Rotor Blade Design." Twenty-First European Rotorcraft Forum, Saint Petersburg, Russia, September 1995.

Straub, F.K. "Active Flap Control for Vibration Reduction and Performance Improvement." American Helicopter Society 51st Annual Forum, Ft. Worth, TX, May 1995.

Tung, C.; Gallman, J.M.; Kube, R.; Wagner, W.; van der Wall, B.; Brooks, T.F.; Burley, C.L.; Boyd, D.D., Jr.; Rahier, G.; and Beaumier, P. "Prediction and Measurement of Blade-Vortex Interaction Loading." NASA TM 110824, June 1995.

Walsh, J.L., and Young, K.C. "Automatic Differentiation Evaluated as a Tool for Rotorcraft Design and Optimization." American Helicopter Society National Technical Specialists' Meeting on Rotorcraft Structures, Williamsburg, VA, October 1995.

Walsh, J.L.; Young, K.C.; Pritchard, J.I.; Adelman, H.M.; and Mantay, W.R. "Integrated Aerodynamic/Dynamic/Structural Optimization of Helicopter Rotor Blades Using Multilevel Decomposition." NASA TP 3465, January 1995.

Bousman, W.G.; Young, C.; Toulmay, F.; Gilbert, N.E.; Strawn, R.C.; Miller, J.V.; Maier, T.H.; Costes, M.; and Beaumier, P. "A Comparison of Lifting-Line and CFD Methods with Flight Test Data from a Research Puma Helicopter." NASA TM 110421, October 1996.

Charles, B.; Tadghighi, H.; and Hassan, A.A. "Higher Harmonic Actuation of Trailing-Edge Flaps for Rotor BVI Noise Control." American Helicopter Society 52nd Annual Forum, Washington, D.C., June 1996.

Ghee, T.A.; Berry, J.D.; Zori, L.A.J.; and Elliott, J.W. "Wake Geometry Measurements and Analytical Calculations on a Small-Scale Rotor Model." NASA TP 3584, August 1996.

Hassan, A.A.; Charles, B.D.; Tadghighi, H.; and Burley, C. "A Consistent Approach for Modeling the Aerodynamics of Self-Generated Rotor Blade-Vortex Interactions." Journal of the American Helicopter Society, 41:2 (April 1996).

Higman, J.P.; Liu, S.; and Schrage, D.P. "Inflow and Load Identification of a Coupled Flap-Lag-Torsion Rotor Blade." Twenty-Second European Rotorcraft Forum, Brighton, UK, September 1996.

McCarthy, T.R., and Chattopadhyay, A. "A Coupled Rotor/Wing Optimization Procedure for High Speed Tilt-Rotor Aircraft." Journal of the American Helicopter Society, 41:4 (October 1996).

Straub, F.K., and Hassan, A.A. "Aeromechanic Considerations in the Design of a Rotor With Smart Material Actuated Trailing Edge Flaps." American Helicopter Society 52nd Annual Forum, Washington, D.C., June 1996.

Straub, F.K., and Merkley, D.J. "Design of a Servo-Flap Rotor for Reduced Control Loads." Smart Materials and Structures, 5:1 (February 1996).

Strehlow, H.; Teves, D.; and Polz, G. "Applied Helicopter Aeroelastics — Modelling and Testing." Twenty-Second European Rotorcraft Forum, Brighton, UK, September 1996.

Tadghighi, H., and Charles, B.D. "Tiltrotor Noise Prediction." NASA CDCR-10001, January 1996.

Tang, D.M., and Dowell, E.H. "Damping Prediction for Hingeless Rotor Aeroelastic Stability with Experimental Correlation." *Journal of Aircraft*, 33:6 (November-December 1996).

Yu, Y.H. "Miss Distance for Rotor Blade-Vortex Interaction Noise Reduction." AIAA Paper No. 96-1738, May 1996.

Yu, Y.H.; Tung, C.; and Low, S. "Blade Aeroelastic Effect on Rotor Blade-Vortex Interaction (BVI) Noise." American Helicopter Society 52nd Annual Forum, Washington, D.C., June 1996.

Bangalore, A.; Moulton, M.A.; and Caradonna, F.X. "The Development of an Overset/Hybrid Method For Rotorcraft Applications." American Helicopter Society 53rd Annual Forum, Virginia Beach, VA, May 1997.

Beaumier, P.; Jobard, N.; Costes, M.; Tung, C.; Low, S.; and Dadone, L. "Evaluation of Airload Prediction Methodologies Using BH-360 Test Data." American Helicopter Society 53rd Annual Forum, Virginia Beach, VA, May 1997.

Hassan, A.A., and Charles, B.D. "Airfoil Design for Helicopter Rotor Blades — A Three-Dimensional Approach." *Journal of Aircraft*, 34:2 (March-April 1997).

Hassan, A.A.; Straub, F.K.; and Charles, B.D. "Effects of Surface Blowing/Suction on the Aerodynamics of Helicopter Rotor Blade-Vortex Interactions (BVI) — A Numerical Simulation." *Journal of the American Helicopter Society*, 42:2 (April 1997).

Lim, J.W., and Tung, C. "2GCHAS Prediction of HART Blade-Vortex Interaction Loading." American Helicopter Society Technical Specialists' Meeting for Rotorcraft Acoustics and Aerodynamics, Williamsburg, VA, October 1997.

Milgram, J.H. "A Comprehensive Aeroelastic Analysis of Helicopter Main Rotors with Trailing Edge Flaps for Vibration Reduction." Doctor of Philosophy Thesis, University of Maryland, 1997.

Straub, F.K., and Merkley, D.J. "Design of a Smart Material Actuator for Rotor Control." *Smart Materials and Structures*, 6:3 (June 1997).

de Terlizzi, M., and Friedmann, P.P. "Aeroelastic Response of Swept Tip Rotors Including the Effects of BVI." American Helicopter Society 54th Annual Forum, Washington, D.C., May 1998.

Hansford, R.E., and Vorwald, J. "Dynamics Workshop On Rotor Vibratory Loads Prediction." *Journal of the American Helicopter Society*, 43:1 (January 1998).

Milgram, J.; Chopra, I.; and Straub, F. "Rotors With Trailing Edge Flaps: Analysis and Comparison With Experimental Data." *Journal of the American Helicopter Society*, 43:4 (October 1998).

Morbitzer, D.; Arnold, U.T.P.; and Muller, M. "Vibration and Noise Reduction Through Individual Blade Control. Experimental and Theoretical Results." Twenty-Fourth European Rotorcraft Forum, Marseilles, France, September 1998.

Shimizu, T. "Helicopter Noise Reduction Research — Accomplishments at Fuji Heavy Industries." HeliJapan 1998: AHS International Meeting on Rotorcraft Technology and Disaster Relief, Gifu, Japan, April 1998.

Tung, C.; Kube, R.; Brooks, T.F.; and Rahier, G. "Prediction and Measurement of Blade-Vortex Interaction." *Journal of Aircraft*, 35:2 (March-April 1998).

Bousman, W.G. "Putting the Aero Back Into Aeroelasticity." Eighth Annual ARO Workshop on Aeroelasticity of Rotorcraft Systems, University Park, PA, October 1999.

Cribbs, R.C., and Friedmann, P.P. "Vibration Suppression in Helicopters Using the ACSR Approach With Improved Aerodynamic Modeling." AIAA Paper No. 99-1218, April 1999.

Cribbs, R., and Friedmann, P.P. "Vibration Suppression in Helicopters with the ACSR Approach Using an Improved Control Algorithm." Twenty-Fifth European Rotorcraft Forum, Rome, Italy, September 1999.

de Terlizzi, M., and Friedmann, P.P. "Active Control of BVI Induced Vibrations Using a Refined Aerodynamic Model and Experimental Correlation." American Helicopter Society 55th Annual Forum, Montreal, Canada, May 1999.

de Terlizzi, M., and Friedmann, P.P. "BVI Alleviation Using Active Control." AIAA Paper No. 99-1220, April 1999.

de Terlizzi, M., and Friedmann, P.P. "Active Control of Vibrations Due to BVI and Experimental Correlation." Twenty-Fifth European Rotorcraft Forum, Rome, Italy, September 1999.

Glinka, A.T., IV. "The Flip-Tip Rotor Blade: A Novel Method for Reducing Helicopter Rotor Noise." Arizona State University, July 1999.

Kampa, K.; Enenkl, B.; Polz, G.; and Roth, G. "Aeromechanic Aspects in the Design of the EC135." *Journal of the American Helicopter Society*, 44:2 (April 1999).

Kunze, O.; Arnold, U.T.P.; and Waaske, S. "Development and Design of an Individual Blade control System for the Sikorsky CH-53G Helicopter." American Helicopter Society 55th Annual Forum, Montreal, Canada, May 1999.

Petot, D.; Arnaud, G.; Harrison, R.; Stevens, J.; Teves, D.; van der Wall, B.G.; Young, C.; and Szechenyi, E. "Stall Effects and Blade Torsion — An Evaluation of Predictive Tools." *Journal of the American Helicopter Society*, 44:4 (October 1999).

Tadghighi, H.; Rajagopalan, R.G.; and Burley, C.L. "Simulation of Tiltrotor Fountain Flow Effects Using a Finite Volume Technique — An Aero-Acoustic Study." *Journal of the American Helicopter Society*, 44:2 (April 1999).

Tarzanin, F.; Young, D.K.; and Panda, B. "Advanced Aeroelastic Optimization Applied to an Improved Performance, Low Vibration Rotor." American Helicopter Society 55th Annual Forum, Montreal, Canada, May 1999.

Cribbs, R., and Friedmann, P.P. "Vibration Reduction in Rotorcraft Using an Enhanced ACSR Model." AIAA Paper No. 2000-1687, April 2000.

Cribbs, R.C.; Friedmann, P.P.; and Chiu, T. "Coupled Helicopter Rotor/Flexible Fuselage Aeroelastic Model for Control of Structural Response." *AIAA Journal*, 38:10 (October 2000).



Cribbs, R., and Friedmann, P.P. "Actuator Saturation in Actively Controlled Trailing Edge Flaps." Twenty-Sixth European Rotorcraft Forum, The Hague, Netherlands, September 2000.

McAlister, K.W.; Tung, C.; Sharpe, D.L.; Huang, S.; and Hendley, E.M. "Preliminary Study of a Model Rotor in Descent." NASA TM 2000-208785, November 2000.

Miller, J.V.; Pidd, M.; Pagano, A.; Haverdings, H.; Bernardini, G.; di Francescantonio, P.; Pisoni, A.; and Gracey, M.W. "ROSAA: The European Solution to Connect Aeroelasticity, Aerodynamics and Acoustics Codes in a Unique User-Friendly Rotorcraft Simulation System." Twenty-Sixth European Rotorcraft Forum, The Hague, Netherlands, September 2000.

Pagano, A.; Hounjet, M.; Miller, J.; Gracey, M.; and Pisoni, A. "ROSAA: A European Simulation System for the Multidisciplinary Numerical Prediction of Rotor Phenomena." European Congress on Computational Methods in Applied Sciences and Engineering, Barcelona, Spain, September 2000.

Pagano, A.; Leoncini, P.; and Pisoni, A. "System and Software Engineering Methodologies Applied to a Rotorcraft Simulation System." American Helicopter Society Aeromechanics Specialists' Meeting, Atlanta, GA, November 2000.

Straub, F.K.; Kennedy, D.K.; Domzalski, D.B.; Hassan, A.A.; Ngo, H.; Anand, V.; and Birchette, T. "Smart Material Actuated Rotor Technology — SMART." AIAA Paper No. 2000-1715, April 2000.

Friedmann, P.P.; de Terlizzi, M.; and Myrtle, T.F. "New Developments in Vibration Reduction with Actively Controlled Trailing Edge Flaps." *Mathematical and Computer Modeling*, 33:10-11 (May-June 2001).

Nannoni, F.; Giancamilli, G.; and Cicale, M. "ERICA: The European Advanced Tiltrotor." Twenty-Seventh European Rotorcraft Forum, Moscow, Russia, September 2001.

Straub, F.K., and Charles, B.D. "Aeroelastic Analysis of Rotors With Trailing Edge Flaps Using Comprehensive Codes." *Journal of the American Helicopter Society*, 46:3 (July 2001).

Masarati, P.; Mantegazza, P.; Abdel-Nour, P.; Monteggia, C.; and Reval, R. "Helicopter Control System Synthesis by Multibody Multidisciplinary Analysis." Twenty-Eighth European Rotorcraft Forum, Bristol, United Kingdom, September 2002.

Ponza, R., and Pisoni, A. "Helicopter Noise Footprints Prediction Environment." Twenty-Eighth European Rotorcraft Forum, Bristol, United Kingdom, September 2002.

JanakiRam, R.; Smith, R.; Charles, B.; and Hassan, A. "Aerodynamic Design of a New Affordable Main Rotor for the Apache Helicopter." American Helicopter Society 59th Annual Forum, Phoenix, AZ, May 2003.

Ponza, R. "Helicopter Acoustic Characterization by Simulation: Comparison with Flight Test Results and Predicted Impact of New Design Solutions." American Helicopter Society 59th Annual Forum, Phoenix, AZ, May 2003.

Liu, L.; Patt, D.; and Friedmann, P.P. "Active Vibration and Noise Reduction in Rotorcraft Using an Aeroelastic Simulation." American Helicopter Society 4th Decennial Specialist's Conference on Aeromechanics, San Francisco, CA, January 2004.

Liu, L.; Patt, D.; and Friedmann, P.P. "Simultaneous Vibration and Noise Reduction in Rotorcraft Using Aeroelastic Simulation." American Helicopter Society 60th Annual Forum, Baltimore, MD, June 2004.

Patt, D.; Liu, L.; and Friedmann, P.P. "Achieving Simultaneous Reduction of Rotorcraft Vibration and Noise Using Simulation." Thirtieth European Rotorcraft Forum, Marseilles, France, September 2004.

Patt, D.; Liu, L.; and Friedmann, P.P. "Rotorcraft Vibration Reduction and Noise Prediction Using a Unified Aeroelastic Response Simulation." Journal of the American Helicopter Society, 50:1 (January 2005).

Straub, F.K., and Kennedy, D.K. "Design, Development, Fabrication and Testing of an Active Flap Rotor System." American Helicopter Society 61st Annual Forum, Grapevine, TX, June 2005.

Patt, D.; Liu, L.; and Friedmann, P.P. "Simultaneous Vibration and Noise Reduction in Rotorcraft Using Aeroelastic Simulation." Journal of the American Helicopter Society, 51:2 (April 2006).

Glaz, B.; Friedmann, P.P.; and Liu, L. "Vibration Reduction and Performance Enhancement of Helicopter Rotors Using an Active/Passive Approach." AIAA Paper No. 2008-2178, April 2008.

Glaz, B.; Friedmann, P.P.; Liu, L.; Kumar, D.; and Cesnik, C.E.S. "The AVINOR Aeroelastic Simulation Code and its Application to Reduced Vibration Composite Rotor Blade Design." AIAA Paper No. 2009-2601, May 2009.

Choi, J.-Y.; Summers, M.; and Corrigan, J.J. "Validation of CHARM Wake Methodology for Computation of Loads and Vibration." American Helicopter Society 65th Annual Forum, Grapevine, TX, May 2009.

Masarati, P.; Muscarello, V.; and Quaranta, G. "Linearized Aeroservoelastic Analysis of Rotary-Wing Aircraft." Thirty-Sixth European Rotorcraft Forum, Paris, France, September 2010.

Masarati, P.; Muscarello, V.; Quaranta, G.; Locatelli, A.; Mangone, D.; Riviello, L.; and Viganò, L. "An Integrated Environment for Helicopter Aeroservoelastic Analysis: The Ground Resonance Case." Thirty-Seventh European Rotorcraft Forum, Gallarate, Italy, September 2011.

Massaro, A.; D'Andrea, A.; and Benini, E. "Multiobjective-Multipoint Rotor Blade Optimization in Forward Flight Conditions Using Surrogate-Assisted Memetic Algorithm." Thirty-Seventh European Rotorcraft Forum, Gallarate, Italy, September 2011.

Melone, S., and D'Andrea, A. "Helicopter Main Rotor-Tail Rotor Interactional Aerodynamics and Related Effects on the On-Ground Noise Footprint." Thirty-Seventh European Rotorcraft Forum, Gallarate, Italy, September 2011.

Cruz, L.; Massaro, A.; Melone, S.; and D'Andrea, A. "Rotorcraft Multi-Objective Trajectory Optimization for Low Noise Landing Procedures." Thirty-Eighth European Rotorcraft Forum, Amsterdam, The Netherlands, September 2012.

Johnson, W. "A History of Rotorcraft Comprehensive Analyses." NASA TP 2012-216012, April 2012.

Massaro, A., and D'Andrea, A. "Multi-Point Aerodynamic Optimization by Means of Memetic Algorithm for Design of Advanced Tiltrotor Blades." Thirty-Ninth European Rotorcraft Forum, Moscow, Russia, September 2013.

Tamer, A.; Muscarello, V.; Masarati, P.; Quaranta, G.; and Yaman, Y. "Helicopter Vibratory Loads and Vibrations Reduction Using Higher-Harmonic Control." Thirty-Ninth European Rotorcraft Forum, Moscow, Russia, September 2013.

Goulos, I., and Pachidis, V. "Real-Time Simulation of Rotor Blade Aeroelasticity for the Multidisciplinary Design of Rotorcraft." ASME Turbo Expo 2014: Turbine Technical Conference and Exposition, Düsseldorf, Germany, June 2014.

Goulos, I.; Pachidis, V.; and Pilidis, P. "Helicopter Rotor Blade Flexibility Simulation for Aeroelasticity and Flight Dynamics Applications." *Journal of the American Helicopter Society*, 59:4 (October 2014).

Jones, M.; Bernascone, A.; Masarati, P.; Quaranta, G.; and Rezgui, D. "Ongoing Developments in the Use of Continuation-Bifurcation Methodology at AgustaWestland." Fortieth European Rotorcraft Forum, Southampton, UK, September 2014.

Goulos, I.; Pachidis, V.; and Pilidis, P. "Flexible Rotor Blade Dynamics for Helicopter Aeromechanics Including Comparisons with Experimental Data." *The Aeronautical Journal*, 119:1213 (March 2015).

Muscarello, V., and Quaranta, G. "Simulation of Tiltrotor Maneuvers Using Linear Parameter Varying Models." Forty-Third European Rotorcraft Forum, Milan, Italy, September 2017.

Ragazzi, A.; Mengotti, R.B.; Sabato, P.; Afruni, G.; and Hyder, C. "AW169 Loss of Tail Rotor Effectiveness Simulation." Forty-Third European Rotorcraft Forum, Milan, Italy, September 2017.

Righetti, A.; Muscarello, V.; and Quaranta, G. "Linear Parameter Varying Models for the Optimization of Tiltrotor Conversion Maneuver." American Helicopter Society 73rd Annual Forum, Fort Worth, TX, May 2017.

Tamer, A.; Muscarello, V.; Masarati, P.; and Quaranta, G. "A Virtual Environment for Rotorcraft Vibration Analysis." Forty-Third European Rotorcraft Forum, Milan, Italy, September 2017.

Colombo, F.; Muscarello, V.; Quaranta, G.; and Masarati, P. "A Comprehensive Aeroservoelastic Approach to Detect and Prevent Rotorcraft-Pilot Coupling Phenomena in Tiltrotors." American Helicopter Society 74th Annual Forum, Phoenix, AZ, May 2018.

Muscarello, V., and Quaranta, G. "Wing-Pilot Vertical Bounce in Tiltrotors." *Journal of Guidance, Control, and Dynamics*, 41:8 (August 2018).

Tamer, A.; Muscarello, V.; Masarati, P.; and Quaranta, G. "Vibration Rating of Medical Helicopters." American Helicopter Society 74th Annual Forum, Phoenix, AZ, May 2018.

Muscarello, V.; Colombo, F.; Quaranta, G.; and Masarati, P. "Aeroelastic Rotorcraft-Pilot Couplings in Tiltrotor Aircraft." *Journal of Guidance, Control, and Dynamics*, 42:3 (March 2019).

Muscarello, V., and Quaranta, G. "Optimization of Tiltrotor Blade Twist to Increase Whirl-Flutter Stability." AIAA Paper No. 2019-1366, January 2019.

## **PUBLICATIONS REGARDING CAMRAD**

Johnson, W. "A Comprehensive Analytical Model of Rotorcraft Aerodynamics and Dynamics." NASA TM 81182, TM 81183, TM 81184, June 1980.

Johnson, W. "Development of a Comprehensive Analysis for Rotorcraft." Vertica, Volume 5, Number 2 (Part I) and Number 3 (Part II), 1981.

Johnson, W. "Assessment of Aerodynamic Models in a Comprehensive Analysis for Rotorcraft." NASA TM 86835, October 1985; Computers and Mathematics with Applications, Volume 12A, Number 1, 1986.

Johnson, W. "Comparison of Calculated and Measured Model Rotor Loading and Wake Geometry." NASA TM 81189, April 1980.

Johnson, W. "Comparison of Calculated and Measured Helicopter Rotor Lateral Flapping Angles." NASA TM 81213, July 1980.

Johnson, W. "Comparison of Calculated and Measured Blade Loads on a Full-Scale Tilting Proprotor in an Wind Tunnel." NASA TM 81228, September 1980.

Johnson, W. "Comparison of Calculated and Measured Helicopter Rotor Lateral Flapping Angles." Journal of the American Helicopter Society, 20:2 (April 1981).

Johnson, W. "The Influence of Unsteady Aerodynamics on Hingeless Rotor Ground Resonance." NASA TM 81302, July 1981.

Johnson, W. "Development of a Comprehensive Analysis for Rotorcraft. Part I — Rotor Model and Wake Analysis." Vertica, 5:2 (1981).

Johnson, W. "Development of a Comprehensive Analysis for Rotorcraft. Part II — Aircraft Model, Solution Procedure, and Applications." Vertica, 5:3 (1981).

Johnson, W. "Influence of Unsteady Aerodynamics on Hingeless Rotor Ground Resonance." Journal of Aircraft, 19:8 (August 1982).

Bousman, W.G. "A Comparison of Theory and Experiment for Coupled Rotor-Body Stability of a Hingeless Rotor Model in Hover." NASA CP 10007, June 1983.

Pleasants, W.A., III. "A Rotor Technology Assessment of the Advancing Blade Concept." NASA TM 84298, January 1983.

Sharpe, D.L. "A Comparison of Theory and Experiment for Aeroelastic Stability of a Hingeless Rotor Model in Hover." NASA CP 10007, June 1983.

Stephens, W.B. "A Comparison of the Various Helicopter Mathematical Models Used in the Methodology Assessment." NASA CP 10007, June 1983.

Yeager, W.T., Jr.; Hamouda, M.-N.H.; and Mantay, W.R. "Aeromechanical Stability of a Hingeless Rotor in Hover and Forward Flight: Analysis and Wind Tunnel Test." NASA TM 85683, August 1983.

Johnson, W. "An Assessment of the Capability to Calculate Tilting Prop-Rotor Aircraft Performance, Loads, and Stability." NASA TP 2291, March 1984.

Johnson, W., and Yamauchi, G.K. "Applications of an Analysis of Axisymmetric Body Effects on Rotor Performance and Loads." Tenth European Rotorcraft Forum, The Hague, The Netherlands, August 1984.

Kidd, D.L.; Popelka, D.A.; Parham, T.C., Jr.; Schillings, J.; and Sheffler, M.W. "Final Test Report; First and Second Wind tunnel Tests of the JVX .2 Scale Semi Span Aeroelastic Model." Bell-Boeing Report No. 901-983-013, November 1984.

Peterson, R.L.; Warmbrodt, W.; and Hoover, J. "Aeromechanical Stability of a Full-Scale Hingeless Rotor in Hover." American Helicopter Society 40th Annual Forum, Arlington, VA, May 1984.

Rogers, J.P.; Shinn, R.A.; and Smith, R.L. "Advanced Technology Impact on LHX Helicopter Preliminary Design." American Helicopter Society 40th Annual Forum, Arlington, VA, May 1984.

Tung, C., and Chang, I.C. "Rotor Transonic Computation With Wake Effect." 4th International Conference on Applied Numerical Modelling, Tainan, Taiwan, December 1984.

Yamauchi, G.K., and Johnson, W. "Analysis of Axisymmetric Body Effects on Rotor Aerodynamics Using Modified Slender Body Theory." AIAA Paper No. 84-2204, August 1984.

Yamauchi, G., and Johnson, W. "Development and Application of an Analysis of Axisymmetric Body Effects on Helicopter Rotor Aerodynamics Using Modified Slender Body Theory." NASA TM 85934, July 1984.

Caradonna, F.X., and Tung, C. "Finite-Difference Computations of Rotor Loads." American Helicopter Society International Conference on Rotorcraft Basic Research, Research Triangle Park, NC, February 1985.

Chang, I.-C., and Tung, C. "Numerical Solution of the Full-Potential Equation for Rotors and Oblique Wings Using a New Wake Model." AIAA Paper No. 85-0268, January 1985.

Sankar, L.N., and Prichard, D.S. "Solution of Transonic Flow Past Rotor Blades Using the Conservative Full Potential Equation." AIAA Paper No. 85-5012, October 1985.

Callahan, C.B., and Bassett, D.E. "Application of a Comprehensive Analytical Model of Rotorcraft Aerodynamics and Dynamics to the MDHC AH-64 Helicopter." MDHC Report 86-253, 86-277, October 1986.

Caradonna, F.X., and Tung, C. "A Review of Current Finite Difference Rotor Flow Methods." American Helicopter Society 42nd Annual Forum, Washington D.C., June 1986.

Chou, S.-T., and George, A.R. "Progress in Tail Rotor Noise Analysis." American Helicopter Society 42nd Annual Forum, Washington D.C., June 1986.

Chou, S.-T., and George, A.R. "Helicopter Tail Rotor Noise." AIAA Paper No. 96-1900, July 1986.

George, A.R., and Chou, S.-T. "Helicopter Tail Rotor Noise Analysis." NASA CR 176829, January 1986.

Gilbert, N.E. "Helicopter Analysis Computer Codes Surveyed During Visits to Establishments in the U.S., U.K., and Netherlands in 1984." ARL AERO TM-375, April 1986.

Johnson, W. "Assessment of Aerodynamic and Dynamic Models in a Comprehensive Analysis for Rotorcraft." Computers and Mathematics with Applications, 12A:1 (1986).

Peterson, R.L., and Warmbrodt, W. "Hover Performance and Dynamics of a Full-Scale Hingeless Rotor." Journal of the American Helicopter Society, 31:3 (July 1986).

Sankar, L.N., and Tung, C. "Euler Calculations for Rotor Configurations in Unsteady Forward Flight." American Helicopter Society 42nd Annual Forum, Washington D.C., June 1986.

Shanley, J.P. "Application of the Comprehensive Analytical Model of Rotorcraft Aerodynamics and Dynamics to the UH-60A Aircraft." Sikorsky Aircraft, SER 72126, February 1986.

Strawn, R.C., and Tung, C. "The Prediction of Transonic Loading on Advancing Helicopter Rotors." AGARD CP 412, April 1986.

Tung, C.; Caradonna, F.X.; and Johnson, W. "The Prediction of Transonic Flows on an Advancing Rotor." Journal of the American Helicopter Society, 31:3 (July 1986).

Acree, C.W., Jr., and Tischler, M.B. "Using Frequency-Domain Methods to Identify XV-15 Aeroelastic Modes." NASA TM 100033, November 1987.

Bousman, W.G., and Mantay, W.R. "A Review of Research in Rotor Loads." NASA CP 2495, March 1987.

Callahan, C., and Bassett, D. "Application of a Comprehensive Analytical Model of Rotorcraft Aerodynamics and Dynamics (CAMRAD) to the McDonnell Douglas AH-64A Helicopter." American Helicopter Society 43rd Annual Forum, St. Louis, MO, May 1987.

Felker, F.F.; Lau, B.H.; McLaughlin, S.; and Johnson, W. "Nonlinear Behavior of an Elastomeric Lag Damper Undergoing Dual-Frequency Motion and its Effect on Rotor Dynamics." Journal of the American Helicopter Society, 32:4 (October 1987).

Gaubert, M., and Yamauchi, G.K. "Prediction of SA 349/2 GV Blade Loads in High Speed Flight Using Several Rotor Analyses." American Helicopter Society 43rd Annual Forum, St. Louis, MO, May 1987.

Harris, F.D. "Rotary Wing Aerodynamics — Historical Perspective and Important Issues." American Helicopter Society National Specialists' Meeting on Aerodynamics and Aeroacoustics, Arlington, TX, February 1987.

JanakiRam, D.S., and Tadghighi, H. "Rotor Noise Prediction and Validation." American Helicopter Society 43rd Annual Forum, St. Louis, MO, May 1987.

Johnson, W. "Tilt Rotor Research Investigations and Methodology Development (1987)." Boeing Vertol Report D210-12668-1, November 1987.

Johnson, W. "Tilt Rotor Research Investigations and Methodology Development." Boeing Vertol Report D210-12631-1, January 1987.

Johnson, W.; Lau, B.H.; and Bowles, J.V. "Calculated Performance, Stability, and Maneuverability of High Speed Tilting Proprotor Aircraft." *Vertica*, 11:1/2 (1987).

Popelka, D.; Sheffler, M.; and Bilger, J. "Correlation of Test and Analysis for the 1/5-Scale V-22 Aeroelastic Model." *Journal of the American Helicopter Society*, 32:2 (April 1987).

Reddy, K.R., and Gilbert, N.E. "Comparison with Flight Data of Hover Performance Using Various Rotor Wake Models." Thirteenth European Rotorcraft Forum, Arles, France, September 1987.

Stephens, W.B., and Austin, E.E. "Comprehensive Rotorcraft Analysis Methods." NASA CP 2495, March 1987.

Strawn, R.C., and Tung, C. "Prediction of Unsteady Transonic Rotor Loads With a Full-Potential Rotor Code." American Helicopter Society 43rd Annual Forum, St. Louis, MO, May 1987.

Yamauchi, G.K.; Heffernan, R.M.; and Gaubert, M. "Correlation of SA349/2 Helicopter Flight Test Data with a Comprehensive Rotorcraft Model." NASA TM 88351, February 1987.

Yeager, W.T., Jr.; Hamouda, M.-N.H.; and Mantay, W.R. "An Experimental Investigation of the Aeromechanical Stability of a Hingeless Rotor in Hover and Forward Flight." NASA TM 89107, June 1987.

Callahan, C.B., and Bassett, D.E. "Application of a Comprehensive Analytical Model of Rotorcraft Aerodynamics and Dynamics (CAMRAD) to the McDonnell Douglas AH-64A Helicopter." NASA CR 177455, November 1988.

Charles, B.D., and Hassan, A.A. "A Correlation Study of Rotor Inflow in Forward Flight." American Helicopter Society 44th Annual Forum, Washington, D.C., June 1988.

Chattopadhyay, A., and Walsh, J.L. "Structural Optimization of Rotor Blades with Integrated Dynamics and Aerodynamics." NASA CP 3031, September 1988.

Chattopadhyay, A., and Walsh, J.L. "Minimum Weight Design of Rectangular and Tapered Helicopter Rotor Blades with Frequency Constraints." 2nd International Conference on Rotorcraft Basic Research, College Park, MD, February 1988.

Corrigan, J.J.; Schillings, J.J.; Yin, S.K.; and Hsieh, P.Y. "Developments in Dynamics Methodology at Bell Helicopter Textron." American Helicopter Society 44th Annual Forum, Washington, D.C., June 1988.

Heffernan, R.M. "Effect of Helicopter Blade Dynamics on Blade Aerodynamic and Structural Loads." *Journal of the American Helicopter Society*, 33:3 (July 1988).

Hoad, D.R.; Althoff, S.L.; and Elliott, J.W. "Rotor Inflow Variability with Advance Ratio." American Helicopter Society 44th Annual Forum, Washington, D.C., June 1988.

JanakiRam, R.D.; Hassan, A.A.; and Agarwal, R.K. "Rotorcraft Computational Fluid Dynamics — Recent Developments at McDonnell Douglas." Fourteenth European Rotorcraft Forum, Milan, Italy, September 1988.

Murthy, V.R. "Comprehensive Analysis of Helicopters with Bearingless Rotors." NASA CR 182537, March 1988.

Nixon, M.W. "Improvements to Tilt Rotor Performance Through Passive Blade Twist Control." NASA TM 100583, April 1988.

Prichard, D.S., and Sankar, L.N. "Improvements to Transonic Flowfield Calculations." American Helicopter Society 44th Annual Forum, Washington, D.C., June 1988.

Tadghighi, H. "An Analytical Model for Prediction of MR/TR Interaction Noise." American Helicopter Society 44th Annual Forum, Washington, D.C., June 1988.

Yamauchi, G.K.; Heffernan, R.M.; and Gaubert, M. "Correlation of SA349/2 Helicopter Flight Test Data with a Comprehensive Rotorcraft Model." *Journal of the American Helicopter Society*, 33:2 (April 1988).

Acree, C.W., Jr., and Tischler, M.B. "Identification of XV-15 Aeroelastic Modes Using Frequency-Domain Methods." *Vertica*, 13:1 (1989).

Acree, C.W., Jr., and Tischler, M.B. "Identification of XV-15 Aeroelastic Modes Using Frequency Sweeps." *Journal of Aircraft*, 26:7 (July 1989).

Chattopadhyay, A., and Walsh, J.L. "Minimum Weight Design of Helicopter Rotor Blades with Frequency Constraints." *Journal of the American Helicopter Society*, 34:4 (October 1989).

George, A.R., and Chou, S.-T. "Helicopter Tail Rotor Blade-Vortex Interaction Noise." NASA CR 183178, 1989.

Johnson, W. "Tilt Rotor Research Investigations and Methodology Development (1988)." Boeing Vertol Report D210-12668-2, January 1989.

Kufeld, R.M., and Nguyen, D. "Full-Scale UH-60A Rotor Blade Nonrotating Modal Analysis Shake Test." NASA TM 101005, November 1989.

Maier, T.H. "An Examination of Helicopter Rotor Load Calculations." American Helicopter Society National Specialists' Meeting on Rotorcraft Dynamics, Arlington, TX, November 1989.

Nguyen, K.Q. "Higher Harmonic Control Analysis for Vibration Reduction of Helicopter Rotor Systems." Doctor of Philosophy Thesis, University of Maryland, 1989.

Quackenbush, T.R.; Bliss, D.B.; Wachspress, D.A.; and McKillip, R.M., Jr. "Free Wake Analysis of Rotor Configurations for Reduced Vibratory Airloads." American Helicopter Society National Specialists' Meeting on Rotorcraft Dynamics, Arlington, TX, November 1989.

Toffoletto, R.; Gilbert, N.E.; Hill, S.; and Reddy, K.R. "Incorporation of Vortex Line and Vortex Ring Hover Wake Models into a Comprehensive Rotorcraft Analysis Code." ARL Flight Mechanics TM 408, January 1989.

Torok, M.S., and Chopra, I. "A Coupled Rotor Aeroelastic Analysis Utilizing Non-Linear Aerodynamics and Refined Wake Modelling." *Vertica*, 13:2 (1989).

Torok, M.S. "Rotor Loads and Stability Analysis Using Non-Linear Unsteady Aerodynamics." Doctor of Philosophy Thesis, University of Maryland, 1989.

Wolkovitch, J.; Wainfan, B.; Ben-Harush, Y.; and Johnson, W. "Application of the Joined Wing to Tiltrotor Aircraft." NASA CR 177543, November 1989.



Agarwal, R.K., and Deese, J.E. "Euler/Navier-Stokes Calculations of the Flowfield of a Helicopter Rotor in Hover and Forward Flight." In *Applied Computational Aerodynamics*, Henne, P.A. (Editor). Washington, D.C.: American Institute of Aeronautics and Astronautics, 1990.

Chattopadhyay, A., and Chiu, Y.D. "An Enhanced Integrated Aerodynamic Load/Dynamic Approach to Optimum Rotor Blade Design." American Helicopter Society 46th Annual Forum, Washington, D.C., May 1990.

Chattopadhyay, A., and Jones, H. "Performance of an Optimized Rotor Blade at Off-Design Flight Conditions." American Helicopter Society Vertical Lift Aircraft Design Conference, San Francisco, CA, January 1990.

Chattopadhyay, A., and Walsh, J.L. "Minimum Weight Design of Rotorcraft Blades with Multiple Frequency and Stress Constraints." *AIAA Journal*, 28:3 (March 1990).

Hassan, A.A.; Tung, C.; and Sankar, L.N. "An Assessment of Full Potential and Euler Solutions for Self-Generated Rotor Blade-Vortex Interactions." American Helicopter Society 46th Annual Forum, Washington, D.C., May 1990.

Hassan, A.A.; Tung, C.; and Sankar, L.N. "Euler Solutions for Self-Generated Rotor Blade-Vortex Interactions." AIAA Paper No. 90-1588, June 1990.

Heffernan, R.M.; Yamauchi, G.K.; Gaubert, M.; and Johnson, W. "Hub Loads Analysis of the SA349/2 Helicopter." *Journal of the American Helicopter Society*, 35:1 (January 1990).

Hoad, D.R. "Rotor Induced-Inflow-Ratio Measurements and CAMRAD Calculations." NASA TP 2946, January 1990.

Kim, K.-C. "Dynamic Analysis of Advanced Tip Rotors Including Three Dimensional Aerodynamics." Doctor of Philosophy Thesis, University of Maryland, 1990.

Mantay, W.R., and Adelman, H.M. "Status of Integrated Multidisciplinary Rotorcraft Optimization Research at the Langley Research Center." American Helicopter Society 46th Annual Forum, Washington, D.C., May 1990.

Nguyen, K., and Chopra, I. "Application of Higher Harmonic Control to Rotors Operating at High Speed and Thrust." *Journal of the American Helicopter Society*, 35:3 (July 1990).

Singleton, J.D.; Yeager, W.T., Jr.; and Wilbur, M.L. "Performance Data From a Wind-Tunnel Test of Two Main-Rotor Blade Designs for a Utility-Class Helicopter." NASA TM 4183, June 1990.

Chattopadhyay, A.; Walsh, J.L.; and Riley, M.F. "Integrated Aerodynamic Load/Dynamic Optimization of Helicopter Rotor Blades." *Journal of Aircraft*, 28:1 (January 1991).

Kim, K.-C., and Chopra, I. "Effects of Three-Dimensional Aerodynamics on Blade Response and Loads." *AIAA Journal*, 29:7 (July 1991).

Kim, K.-C.; Desopper, A.; and Chopra, I. "Blade Response Calculations Using Three-Dimensional Aerodynamic Modeling." *Journal of the American Helicopter Society*, 36:1 (January 1991).

Pagnano, G.; Nannoni, F.; Simoni, M.; and Langer, H.-J. "Correlation of Flight, Tunnel, and Prediction Methods. Data on a Helicopter Main Rotor." Seventeenth European Rotorcraft Forum, Berlin, Germany, September 1991.

Torok, M.S., and Chopra, I. "Rotor Loads Prediction Utilizing a Coupled Aeroelastic Analysis With Refined Aerodynamic Modeling." *Journal of the American Helicopter Society*, 36:1 (January 1991).

Torok, M.S., and Chopra, I. "Hingeless Rotor Aeroelastic Stability Analysis With Refined Aerodynamic Modeling." *Journal of the American Helicopter Society*, 36:4 (October 1991).

Walsh, J.L. "Performance Optimization of Helicopter Rotor Blades." NASA TM 104054, April 1991.

Wilbur, M.L. "Experimental Investigation of Helicopter Vibration Reduction Using Rotor Blade Aeroelastic Tailoring." American Helicopter Society 47th Annual Forum, Phoenix, AZ, May 1991.

Chattopadhyay, A., and Jones, H. "Dynamics of an Optimized Rotor Blade at Off-Design Flight Conditions." *Journal of Aircraft*, 29:2 (March-April 1992).

Kim, K.-C., and Chopra, I. "Aeroelastic Analysis of Swept, Anhedral, and Tapered Tip Rotor Blades." *Journal of the American Helicopter Society*, 37:1 (January 1992).

McCarthy, T.R., and Chattopadhyay, A. "Multidisciplinary Optimization of Helicopter rotor Blades Including Design Variable Sensitivity." AIAA Paper No. 92-4783, September 1992.

Nguyen, K., and Chopra, I. "Effects of Higher Harmonic Control on Rotor Performance and Control Loads." *Journal of Aircraft*, 29:3 (May-June 1992).

Settle, T.B., and Kidd, D.L. "Evolution and Test History of the V-22 0.2-Scale Aeroelastic Model." *Journal of the American Helicopter Society*, 37:1 (January 1992).

Acree, C.W., Jr., and Tischler, M.B. "Determining XV-15 Aeroelastic Modes from Flight Data with Frequency-Domain Methods." NASA TP 3330, May 1993.

Chattopadhyay, A., and McCarthy, T.R. "A Multidisciplinary Optimization Approach for Vibration Reduction in Helicopter Rotor Blades." *Computers and Mathematics with Applications*, 25:2 (1993).

Jambunathan, V., and Murthy, V.R. "Comprehensive Analysis of Bearingless Rotors: Model Development and Experimental Correlation of Modes, Response, Trim and Stability." AIAA Paper No. 93-0624, January 1993.

Sarathy, S., and Murthy, V.R. "Parallel Rotorcraft Flight Simulation." AIAA Paper No. 93-0623, January 1993.

Brooks, T.F.; Booth, E.R., Jr.; Boyd, D.D., Jr.; Splettstoesser, W.R.; Schultz, K.-J.; Kube, R.; Niesl, G.; and Streby, O. "Analysis of a Higher Harmonic Control Test to Reduce Blade Vortex Interaction Noise." *Journal of Aircraft*, 31:6 (November-December 1994).

Burley, C.L., and Tadghighi, H. "Importance of High Accuracy Blade Motion and Airloads Prediction for Acoustic Analysis." American Helicopter Society 50th Annual Forum, Washington, D.C., May 1994.

Nguyen, K.; Lauzon, D.; and Anand, V. "Computation of Loads on the McDonnell Douglas Advanced Bearingless Rotor." American Helicopter Society 50th Annual Forum, Washington, D.C., May 1994.

Nguyen, K.Q. "Higher Harmonic Control Analysis for Vibration Reduction of Helicopter Rotor Systems." NASA TM 103855, October 1994.

Prichard, D.S.; Boyd, D.D.; and Burley, C.L. "NASA/Langley's CFD-Based BVI Rotor Noise Prediction System: (ROTORNET/BVI). An Introduction and Users' Guide." NASA TM 109147, November 1994.

Torok, M.S., and Berezin, C.R. "Aerodynamic and Wake Methodology Evaluation Using Model UH-60A Experimental Data." *Journal of the American Helicopter Society*, 39:2 (April 1994).

Chattopadhyay, A.; McCarthy, T.R.; and Pagaldipti, N. "Multilevel Decomposition Procedure for Efficient Design Optimization of Helicopter Rotor Blades." *AIAA Journal*, 33:2 (February 1995).

McCarthy, T.R.; Chattopadhyay, A.; and Zhang, S. "A Coupled Rotor/Wing Optimization Procedure for High Speed Tilt-Rotor Aircraft." American Helicopter Society 51st Annual Forum, Ft. Worth, TX, May 1995.

Prichard, D.S.; Burley, C.L.; and Boyd, D.D., Jr. "Computational Techniques for Improved Blade Vortex Interaction Modeling." American Helicopter Society 51st Annual Forum, Ft. Worth, TX, May 1995.

Rutledge, C.K.; Mueller, A.W.; and Wilson, M.R. "A Study of the Variability Difference Between Model Scale Wind Tunnel and Full Scale Flight Test Airloads Data." American Helicopter Society Vertical Lift Aircraft Design Conference, San Francisco, CA, January 1995.

Berezin, C. "Determination of Tilt-Rotor Free-Flight Trim State Using Isolated Rotor Wind Tunnel Test Data." NASA CDCR-10010, October 1996.

Brooks, T.F.; Boyd, D.D., Jr.; Burley, C.L.; and Jolly, J.R., Jr. "Aeroacoustic Codes for Rotor Harmonic and BVI Noise — CAMRAD.Mod1/HIRES." AIAA Paper No. 96-1735, May 1996.

Ganguli, R.; Chopra, I.; and Haas, D.J. "Formulation of a Helicopter Rotor System Damage Detection Methodology." *Journal of the American Helicopter Society*, 41:4 (October 1996).

Berezin, C., and Visintainer, J.A. "Aerodynamic and Acoustic Predictions for the XV-15 Tilt-Rotor Aircraft Using TRAC." NASA CDCR-10014, August 1997.

Boyd, D.D., Jr.; Brooks, T.F.; Burley, C.L.; and Jolly, J.R., Jr. "Aeroacoustic Codes for Rotor Harmonic and BVI Noise — CAMRAD.Mod1/HIRES: Methodology and Users' Manual." NASA TM 1998-207640, March 1998.

Tadghighi, H. "An Aero/Acoustic Optimization Model — A Multiobjective, Multilevel Decomposition Based Optimization Technique." American Helicopter Society 54th Annual Forum, Washington, D.C., May 1998.

Burley, C.L.; Brooks, T.F.; Charles, B.D.; and McCluer, M. "Tiltrotor Aeroacoustic Code (TRAC) Prediction Assessment and Initial Comparisons with TRAM Test Data." Twenty-Fifth European Rotorcraft Forum, Rome, Italy, September 1999.

Charles, B.D., and Hassan, A.A. "Airframe Interference Effects On Rotorcraft BVI." American Helicopter Society 55th Annual Forum, Montreal, Canada, May 1999.

Glegg, S.A.L.; Devenport, W.J.; Wittmer, K.S.; and Pope, D.S. "Broadband Helicopter Noise Generated by Blade Wake Interactions." *Journal of the American Helicopter Society*, 44:4 (October 1999).

Lyle, K.H.; Burley, C.L.; and Prichard, D.S. "A Comparison of Measured and Predicted XV-15 Tiltrotor Surface Acoustic Pressures." *Journal of the American Helicopter Society*, 44:4 (October 1999).

Rahnke, C. "XV-15 Aerodynamic Model and Blade Tip Acoustic Study." Bell Helicopter Report 699-099-507, August 1999.

Brooks, T.F.; Boyd, D.D., Jr.; Burley, C.L.; and Jolly, J.R., Jr. "Aeroacoustic Codes for Rotor Harmonic and BVI Noise — CAMRAD.Mod1/HIRES." Journal of the American Helicopter Society, 45:2 (April 2000).

Burley, C.L.; Brooks, T.F.; Marcolini, M.A.; Brand, A.G.; and Conner, D.A. "Tiltrotor Aeroacoustic code (TRAC) Predictions and Comparison with Measurements." Journal of the American Helicopter Society, 45:2 (April 2000).

Murty, H., and Berezin, C.R. "Rotorcraft Noise Abatement Flight Path Modeling." NASA CR 2000-209353, February 2000.

Prichard, D.S. "Initial Tiltrotor Aeroacoustic code (TRAC) Predictions for the XV-15 Flight Vehicle and Comparison with Flight Measurements." American Helicopter Society 56th Annual Forum, Virginia Beach, VA, May 2000.

Brooks, T.F., and Burley, C.L. "Rotor Broadband Noise Prediction with Comparison to Model Data." AIAA Paper No. 2001-2210, May 2001.

Hennes, C.C., and Brentner, K.S. "The Effect of Blade Deformation on Rotorcraft Acoustics." Journal of the American Helicopter Society, 53:4 (October 2008).

April 1995: Original List.

May 1995: Added citations received from MDHC at May 1995 CAMRAD Users Group Meeting.

August 1995: Added JAHS citations.

September 1999: Added AHS Forum, ERF, HeliJapan98, JAHS citations

April 2001: Added AHS Forum, ERF, JAHS citations

January 2002: Added AHS Forum, ERF, JAHS citations

June 2002: Added AHS Forum citations

November 2002: Added ERF, HeliJapan 2002 citations

July 2003: Added AHS Forum, JAHS citations

September 2003: Added ERF citations

January 2004: Added AHS SF04 citations

June 2004: Added AHS Forum citations

April 2005: Added JAHS citations

---

December 2006: Revised from EndNote Bibliography  
CAMRAD/JA includes wake model in other codes  
CAMRAD includes CAMRAD.Mod1

July 2008: Revised from EndNote Bibliography; only CAMRADII additions

November 2009: Revised from EndNote Bibliography

October 2012: Revised from EndNote Bibliography; changed font

January 2017: Revised from EndNote Bibliography