5. Vibration Testing and Structural Damage Identification of Wind Turbine Blades

Mentor: Gyuhae Park <gpark@lanl.gov> and Kevin Farinholt <Farinholt@lanl.gov> Timothy Marinone

Timothy Marinone- Tim is a recent graduate of the University of Massachusetts Lowell (UML) with a BS in Mechanical Engineering. He was a member of ASME, Tau Beta Pi, Pi Tau Sigma, Omicron Delta Kappa, Student Government and Christian Student Fellowship. He also received the Dean's Medal for highest GPA in mechanical engineering. He will be returning to UML in the fall to pursue a Masters Degree in Structural Dynamics while working in the Structural Dynamics and Acoustics Laboratory (SDASL) under Dr. Peter Avitabile in the area of non-linear dynamics. He spent the past two summers working for General Electric Aviation, involving Six Sigma and Lean Manufacturing analysis, as well as assembly of the First Engine to Test for the Honda HF-120 engine. In his



spare time, he enjoys playing bass guitar and banjo, reading and hiking.



Krystal Deines

Krystal Deines graduated from New Mexico State University with a B.S. in Mechanical Engineering in May 2009. She is now working on her M.S. in Aerospace Engineering at NMSU and will graduate in May 2011. Her research project is related to Structural Health Monitoring. Krystal is an active member in Pi Tau Sigma, Tau Beta Pi, and is an ambassador for the College of Engineering. Last summer Krystal worked for Mechtronic Solutions, Inc. in Albuquerque, NM. She also worked at General Motors in Detroit, MI the two summers before that. In her spare time, Krystal enjoys spending time with friends and family, two-stepping, working with her dad on the ranch, volleyball, basketball, snowboarding, and anything that keeps her outdoors for extended periods of time.

Ryan Schultz

Ryan graduated from Michigan Tech in 2008 with a B.S. in Mechanical Engineering. Prior to attending the DSS, he worked as a design engineer at Weir Minerals North America, a slurry pump and minerals processing equipment manufacturer in Madison, WI. At Weir, he worked in a variety of areas including pump testing, design, manufacturing support and design team supervision. As an undergrad, he was involved in a several campus activities such as playing on the club lacrosse team, being a member of the Sigma Phi Epsilon fraternity and working in the Microfluidics and Interfacial Transport research group where he worked on fluidic oscillators and their manufacture using soft lithography. Ryan will be working toward



his Masters in Mechanical Engineering starting in the fall of 2010 at Purdue University where he will focus on vibrations and acoustics. In his free time, he enjoys playing and watching a variety of sports, as well as many outdoor activities.