Department of Civil & Environmental Engineering Northeastern University

CIVE 7400 Graduate Seminar Series

Huffing and Puffing and Blowing It Down: Can We Mitigate Damage to Houses in Severe Storms?

Dr. Gregory A. Kopp Professor of Civil and Environmental Engineering Director, Alan G. Davenport Boundary Layer Wind Tunnel Laboratory University of Western Ontario, London (Ontario) Canada



Tuesday, January 18 1:45 pm to 2:45 pm 335 Shillman Hall, Northeastern University

<u>ABSTRACT:</u> Severe storms are causing increasing losses around the world each year. Much of the damage is to houses; and this has been happening for so long that we have even mythologized this fact in popular children's stories such as the 'Three Little Pigs'. The talk will focus on how wind storms damage houses and current research efforts to mitigate it. In particular, wind tunnel tests of houses, combined with full-scale testing allow for us to find optimal, cost effective solutions. Such research has been increasing in recent years and many of these new results will be discussed.

More information may be found at: <u>http://www.eng.uwo.ca/irlbh/</u>, or http://www.youtube.com/watch?v=RPK6ZS8UwPY

BIOGRAPHY: Dr. Gregory Kopp has almost 20 years experience in the field of aerodynamics, particularly in wind tunnel testing of bluff-bodies such as bridges and low-rise buildings. Dr. Kopp was recently appointed as Director at the AGD Boundary Layer Wind Tunnel Laboratory. He has recently been involved in the wind tunnel testing of the Tsing Lung Bridge, Hong Kong and Bronx-Whitestone Bridge, New York, as well as David L. Lawrence Convention Center, Pittsburgh, the NIST Aerodynamic Database and various other projects. He has led the AGD Laboratory's development of full-scale panel testing using novel Pressure Loading Actuators which can replicate full-scale pressure time histories for extreme wind speeds. He has written more than 40 papers on various aspects of bluff-body aerodynamics and wind loads on low buildings

(Reception will follow)

For questions or additional information, please contact Luca Caracoglia, <u>lucac@coe.neu.edu</u>, 617-373-5186