



TEXAS TECH UNIVERSITY

Wind Science and Engineering Research Center

The McDonald-Mehta Lecture Series presents:

“Wind vs. Wave Damage to Buildings”

By Mr. Timothy P. Marshall, P.E.

Meteorologist and Engineer for Haag Engineering, TTU Alumni 1983



Wednesday, February 17, 2010, from 3:30 p.m. – 4:30 p.m.

(Reception following the seminar)

Electrical Engineering Building Room 217

Abstract:

As soon as a hurricane has dissipated, another storm begins to brew about whether the damage to buildings was caused by wind, rising water, or both. This controversy arises due to various insurance coverages. Typically, private insurance companies pay for wind damage, whereas government insurance pays for water damage. Thus, there are times when engineers are called upon to help delineate building damages. Mr. Marshall's lecture will present examples of wind and water damages to buildings affected by Hurricanes Ivan, Katrina, and Ike. He also will provide a methodology to perform building damage assessments. A few recent legal cases also will be discussed.

Background:

Tim Marshall is a meteorologist and civil engineer who makes his living surveying and assessing damage in the wake of tornadoes, hurricanes, floods, and hailstorms. He was born and raised in the Chicago, IL area and became interested in tornadoes when his hometown was struck by an F-4 tornado on April 21, 1967. Mr. Marshall earned a B.S degree from Northern Illinois University majoring in meteorology, an M.S. degree in Atmospheric Science from Texas Tech University, and an M.S. degree in Civil Engineering also from Texas Tech. He began chasing storms in 1978 and has witnessed over 200 tornadoes and 18 hurricanes to date. In 1983, Mr. Marshall went to work for Haag Engineering Company, based in Dallas, and has surveyed more than 100 natural disasters during the past 27 years. In 2008, he rode out Hurricane Ike on Galveston Island and conducted aerial and ground surveys after the event. Last year, Mr. Marshall was selected to be the navigator on board the lead Probe vehicle in VORTEX 2 where he deployed instrumented pods in front of tornadoes. He is a member of the American Society of Civil Engineering, American Meteorological Society, and National Weather Association. He currently serves on the Severe Local Storms and Enhanced Fujita scale committees and is a consultant to the National Hurricane Center regarding updating the Saffir-Simpson scale. Mr. Marshall has written numerous publications on storms and storm damage and has appeared on dozens of radio and television programs including The Oprah Winfrey show.