

Memorial Tribute for Arn Womble

COVID 19 took a toll on one of our beloved wind engineers. Dr. Arn Womble succumbed to the virus on October 2, 2021, after a brief battle. It is a momentous loss to the wind engineering community to lose a prominent and upcoming individual in his prime of life. Currently, Dr. Womble was Lead Research Engineer at the Insurance Institute for Business & Home Safety (IBHS) in Richburg, SC. He was Chair of the Remote Sensing Subcommittee of the ASCE Tornado Wind Speed Estimation Standards Committee.

Dr. Womble grew up in Lubbock, Texas, where his father owned a construction business, and gave him his first experiences with building construction. He attended Texas Tech University getting his B. S. degree in civil engineering. While he was at Texas Tech as an undergraduate student, he was a student assistant in the Wind Science and Engineering Research Center. He voluntarily joined teams going out on the field for damage investigations after several storms including Hurricane Andrew in 1992. He worked as structural engineer with WPM & Associates in Dallas for a couple of years after his graduation. The experience of seeing damage in the field had him hooked in wind engineering. From Dallas he went to Fort Collins, Colorado and worked in the wind-engineering firm of Cermak, Peterka and Peterson, Inc. While working at CPP he pursued his masters' degree specializing in wind tunnel testing. His thesis involved wind tunnel testing of the building model of the Texas Tech low-rise experimental building, known as WERFL. That testing was part of the Cooperative Research Program between CSU and TTU funded by NSF.

His nervous energy led him to establish his own consulting firm WindForce Associates, Inc. in Lubbock and Amarillo offering services specializing in wind induced damage and as an expert witness. The professional background of forensic evaluation of wind induced damage and wind tunnel testing guided him to pursue a doctoral degree in Wind Science and Engineering at Texas Tech. His experiences had convinced him that real problems in the field are multidisciplinary. He was among the first group of students receiving an NSF fellowship in the Integrated Graduate Education and Research Training (IGERT) program. His doctoral thesis was the pioneering work of assessing wind induced damage using satellite imagery. He correlated the roof damage in Hurricane Charley using satellite images, aerial images, and ground truth images. This field has continued to expand based on the pioneering work done by him.

Following his Ph. D. degree in Wind Science and Engineering, he taught the course in wind engineering at Texas Tech and courses in mathematics and engineering at South Plains College. When the opportunity arose, he became a tenure-track faculty member at West Texas A&M University in Canyon, Texas. In the new College of Engineering at West Texas A&M he established the Natural Hazards Engineering Research Laboratory. He also acquired a prestigious CAREER Grant from NSF on the subject of Remote Sensing for Understanding of Tornado Actions and Broadened STEM Education in Rural Areas. During the four years he was at West Texas A&M, he was a participant in several research projects funded by NSF and other

agencies. His research culminated in more than 100 papers and presentations with a large range of collaborators.

What was unique about Dr. Womble was his pursuit of wind engineering, not just in research, but in teaching as well as professional service. He taught at Kingdom Preparatory Academy Christian School, South Plains College, Texas Tech University and West Texas A&M University.

His service to the profession started early. He was a Student Board Member on the Wind Engineering Research Council (predecessor of AAWE) in 1990 <https://aawe.org/wp-content/uploads/2016/05/The-Wind-Engineer-May-91.pdf> . Since then, during his entire career he has provided professional services by organizing panels at the National Tornado Summits, THWART Conferences, and reviewing papers for journals such as JWEIA, Journal of Performance of Constructed Facilities, Wind and Structures, Frontiers in the Built Environment, and others. He also volunteered his time to be on several review panels for NSF. He had numerous collaborations throughout his career, and used his resources and expertise to foster research, but also professional growth for the next generation of wind engineers as students and early-career faculty. He was willing to devote his time to advance the wind-engineering field, specifically mitigation of wind hazard impacts on constructed facilities, to improve the lives of people.

Dr. Womble received several honors and awards, in addition to the NSF prestigious CAREER grant and NSF IGERT fellowship; he was recognized twice as Outstanding Faculty at the West Texas A&M University. He was elected to Chi Epsilon civil engineering honor society and Tau Beta Pi engineering honor society.

His wife Patty, children Abigail, Kevin, and Rachel and extended family can take solace in knowing that he was well liked and admired by the professional community and has left a legacy of substantial contribution to the field of wind engineering.

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