REAL-WORLD METEOROLOGY

A series of profiles celebrating a half-century of Certified Consulting Meteorologists



Who: Bruce A. Egan

What: Air pollution meteorologist/

environmental scientist

When: CCM since 1979

Where: Egan Environmental Inc., Beverly,

Massachusetts



Why: Recognized the professional growth benefit value of accreditation and camaraderie with others working in the field of air pollution meteorology.

How: After Bruce had worked for several years for Environmental Research and Technology, a growing environmental services company, he realized that broader contacts and recognition in the meteorological community would be helpful to his career. Upon the recommendation of a CCM colleague, he sought CCM certification.

In His Own Words: "My undergraduate and early graduate school training was in the field of mechanical engineering specializing in fluid mechanics, thermodynamics, and aerodynamics. My first job was to design new experimental equipment at Harvard University's instructional laboratories in thermodynamics and fluid mechanics. My interest in meteorological flows came later—driven first by my recreational devotion to sailing and then by my employment with the National Committee for Fluid Dynamics Films [NCFMF], an MIT spin-off that was producing university-level educational movies with National Science Foundation funding. One of my assignments at the NCFMF was to find historic footage of atmospheric temperature inversions relating to air pollution episodes for movies titled *Turbulence* and *Stratified Flows*. This experience triggered an interest to better understand air pollution meteorology, a desire that ultimately inspired me to seek a doctorate at the Harvard School of Public Health's environmental health sciences program. My thesis advisor (former AMS President James R. Mahoney) encouraged me to cross-register at MIT for formal meteorological coursework. Upon graduating and publishing my thesis on numerical modeling of urban air pollution transport in issues of the *Journal of Applied Meteorology*, I joined Environmental Research and Technology, a consulting company that Mahoney had recently cofounded. I found myself deeply immersed in a career of air quality model development and applications.

"I then became very active in the AMS by writing a position paper on dispersion in complex terrain, and by becoming a member of the AMS Committee on Meteorological Aspects of Air Pollution. This led to a number of subsequent associations with EPA, industry, other consultants, and model development and consulting opportunities for regulatory driven air pollution projects. Although my mainstream work is in air pollution meteorology, my background in thermodynamics drew me to work on models for accidental releases of hazardous chemicals and litigation relating to real-world accidents, and more recently to issues of greenhouse gas legislation. Having formed Egan Environmental, Inc., II years ago, I now work mostly for law firms involved in litigation, other consulting companies, or university or government groups requiring specialty services on multidisciplinary projects relating to air quality applications and modeling guidance. Recently, I have also been consulting on the engineering and meteorological aspects of renewable-energy resource projects.

"Becoming a CCM was a critical step in my career that resulted in expanded opportunities for professional advancement. It is an obvious step for those trained in meteorology or atmospheric sciences after a few years of experience. I also recommend it to others who find themselves as serious practitioners in meteorologically related work even though their initial academic focus may have been in other fields. I have had the honor of serving on the review committees of several other CCMs and am very pleased to observe how well their careers are advancing and their contributions to the environmental field."

For more information on the Certified Consulting Meteorologist (CCM) Program, please visit the AMS Web site at www.ametsoc.org/amscert/index.html.