

## REAL-WORLD METEOROLOGY

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



**Who:** Robert J. "Bob" Paine

**What:** Air pollution meteorologist

**When:** CCM since 1983

**Where:** AECOM Corporation, Westford, Massachusetts

**Why:** To enhance standing for testimony in public and adjudicatory hearings

**How:** Bob Paine became a CCM after several years of environmental consulting work with ERT (later to become ENSR, then AECOM). He has been involved in numerous projects involving predictions of future air quality as a result of proposed emission sources. From the time he became a CCM, Paine has been involved in collaborations between AMS and the U.S. Environmental Protection Agency (EPA) to improve

the state of the art of air dispersion models. One notable project in this regard that Paine participated in led to the development of an advanced dispersion model, AERMOD, which was officially adopted by the EPA in 2005. Paine is a past chair of the AMS Committee on Meteorological Aspects of Air Pollution as well as the Air & Waste Management Association (A&WMA)'s Meteorology Committee, which has held numerous joint conferences with AMS.

**In His Own Words:** "I attended numerous joint AMS/A&WMA conferences that were held during AMS Annual Meetings after I became a CCM. My participation in these meetings helped me to become acquainted with other CCMs and practitioners in the air dispersion modeling field. Ultimately, we joined forces with EPA scientists to improve the state of the art of dispersion modeling, building on previous developments in this field. The result was the AMS/EPA Regulatory Model, which incorporates scientific advances in dispersion modeling over the past 30 years and which is being used throughout the United States and around the world.

"In the past several years, we in the dispersion modeling community have worked more closely with NOAA scientists to incorporate advances in meteorological data collection and data initialization into products that can be used in air quality modeling. I promoted the use of the products such as the Rapid Update Cycle to provide superior dispersion modeling results for a North Dakota application. In a 2003 public hearing on that effort, I was pleased to be joined by supporting testimony from other CCMs, including AMS Past President Walt Lyons. This testimony helped to win acceptance by regulators of these advanced meteorological products for air dispersion modeling. I look forward during the rest of my career to working with the EPA and other CCMs to continue to promote further progress in the use of advanced meteorological data for air quality modeling assessments."

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

