

REAL-WORLD METEOROLOGY

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



Who: John F. Henz

What: Consulting hydrometeorologist

When: CCM since 1980

Where: Denver, Colorado

How: John Henz became a CCM based

on sound advice from Loren Crow, one of the deans of the CCM program, as John was preparing to leave the U.S. Air Force after four years of active duty. John received his undergraduate degree in meteorology from the University of Wisconsin and served the four years in the Air Weather Service in Colorado, Texas, and Georgia. As he was transitioning from military life, a career in Denver television

broadcasting was offered to him. He asked Crow for advice, who suggested he go to Colorado State University (CSU), get his masters in atmospheric science, and after five years or so of experience then apply for a CCM. John followed Crow's advice to the letter, and he has been in private meteorology for almost four decades. During that time he started Geophysical R&D Corp (a.k.a. GRD Weather Center); Henz, Kelly and Associates; and Henz Meteorological Services (HMS Weather), three very successful private meteorological businesses. HMS was purchased by HDR Engineering, Inc., in 2000 and John became a senior project manager and atmospheric science practice leader for HDR, where he served 10 years. In late 2010, John joined Dewberry & Davis in their Denver office as a senior meteorologist and technical leader.

John's interest in hydrometeorology was spurred by early research work at CSU on severe storms, including the Rapid City flash flood in 1972. While doing GRD radio work in 1976 with Vince Scheetz (also a CCM), they recognized similar weather patterns to the Rapid City flood developing along the Colorado foothills. Their early radio weathercasts of flash flood potential 36 hours before and during the event earned them a Special Award from AMS, "for the use of radio and meteorological knowledge in support of public safety during the Big Thompson Flash Flood of 31 July and 1 August 1976."

Over the next three decades, John labored on several hydrometeorological endeavors. He has developed flash flood prediction programs in Colorado and Arizona that have served their flood-control districts for more than two decades. He has developed flood-response plans in Colorado, Arizona, California, Texas, North Carolina, and Virginia. In 1993, John developed a GIS-based hail-damage/radar reflectivity algorithm called HailTrak that supported most of the major insurance companies for 10 years. He developed a convective quantitative precipitation forecast tool based on depth of warm layer and updraft speeds. Recently, at HDR, he codeveloped with Robert Rahrs and Bill Badini the



Extreme Precipitation Analysis Tool (EPAT) that is used as a standard of practice in Colorado for determining Probable Maximum Precipitation (PMP) for dam design.

While John specializes in hydrometeorology, his interests in solving meteorological prediction problems have led to other interesting projects. In 1974 and 1975, he did research on terrestrial dust storms as part of a project for the Jet Propulsion Laboratory that was used in part by the Mars *Viking* lander team. In 1981, he was cochief meteorologist for the successful coast-to-coast balloon flight of *Super Chicken* across America and the successful trans-Pacific flight of Ben Abruzzo's *Double Eagle V* balloon. He served as a special consultant to the inspector generals of the Departments of Commerce and Transportation on evaluations of the NWS's flash-flood warning program and the selection of the WSR-88D for a national radar network.

In His Own Words: “Ever since I was a young child I was fascinated by the weather and its impact on people’s activities. While attending meteorology classes at Wisconsin we were taught to ‘sift and winnow’ the weather observations and theory for the best answers science could provide. Knowledge was constantly evolving then, as it is today. While in the air force, pilot weather briefings demanded you do your best all the time. The more experience you had, the better you became. Finally, my CSU colleagues helped me over time to fine tune the character needed to be successful. Knowledge, experience, and character are the three hallmarks of being a CCM. They embody the characteristics of someone committed to excellence in the field of meteorology.

“As the outgoing chair of the CCM Board, I had the great honor of learning almost daily about the contributions being made by CCMs in business, academics, government service, and the private sector in the past year. If you look through the organization of the AMS, many federal labs, university faculties, and Fortune 500 companies, you will find CCMs in positions of importance. CCMs are also small-business owners, and directly represent the profession in the business community while applying cutting-edge science and technology in solving client’s weather-related problems. Unfortunately, however, fewer CCMs are practicing now than our profession needs. We need you.

“The CCM program endeavors to continue and expand the recognition of CCMs by setting a high standard of excellence and commitment to professionalism. In this era of pseudoprofessionalism marked by the easy access of Internet ‘knowledge,’ it seems that everyone is now a ‘meteorologist.’ CCMs are committed to the application of the scientific method in solving problems while using a balance between academic training and experience. The CCM program provides a basis on which a client seeking assistance on problems of a meteorological nature may be confident of mature, competent, and ethical professional counsel by a CCM. Simply put, you can trust a CCM, and that CCM can be you.”

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