Allan H. Murphy 1931-1997

"Forecasts possess no intrinsic value. They acquire value through their ability to influence the decisions made by users of the forecasts."

This quote from Weather and Forecasting (Wea. Forecasting, 8, 286) in an article by Allan Murphy contains the essence of his work. He devoted his professional life to verification and evaluation of weather forecasts, probability weather forecasting, and decision theory. He was tireless in his desire to expand the use of probability forecasts in actual practice. The way one colleague has stated his recollection of Allan was that he found problems in meteorology that no one else in the community tried to look at, problems that were relevant and important to weather services in the broadest sense of the word "services."

Allan Hunt Murphy died at his home in Corvallis, Oregon, on 5 August 1997. Murph, as he was known to his friends, was born in Cambridge, Massachusetts, the first of three sons of Ethan Allen Murphy and Mina Dorothea Hunt. Murphy's father played an important role in the early days of meteorology at the Massachusetts Institute of Technology (MIT), so it was only natural that young Murphy earned his B.S. in meteorology in 1954 at MIT. In 1960 he was awarded an M.S. in meteorology and in 1963 an M.S. in statistics, both from the University of Michigan. That same university granted him a Ph.D. in atmospheric and oceanic science in 1974.

Murphy spent most of his professional career at the University of Michigan, Travelers Research Center, the National center for Atmospheric Research (NCAR), and Oregon State University. In 1993 he retired from Oregon State University as a professor of atmospheric sciences and became principal of his com-



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pany, Prediction and Evaluation Systems.

There were several characteristics that made Murph highly respected in his work. He kept himself abreast of current literature in a wide range of relevant fields. He was an outstanding collaborator. His publications are particularly notable for the number of joint author-

ships. That his name is listed first in so many of them attests to the fact that, more often than not, he contributed the salient ideas and motivation.

He loved to travel and as a result, he visited many countries and worked closely with many scientists, not only in their weather services, but at universities and research institutes. This collaboration with others in mutually extending the knowledge of his field may be unparalleled in its extent in modern day meteorology. His list of coauthors is an enumeration of those who have contributed so much to the fields in which he was interested. His travels took him to Austria, the USSR, India, the United Kingdom, the Netherlands, Sweden, the People's Republic of China (PRC), Finland, Kenya, and Germany. Even as the end was nearing, he still was planning to travel to visit his youngest son in a Peruvian rain forest.

With his broad interests, he touched the lives of many. One of his colleagues and friends tells the story of Murphy meeting with farmers and road maintenance and construction people in Sweden. Even though Murph could not speak Swedish and the farmers had little education in English, they were able to carry on a discussion using all available means on the subject of forecasting probabilities. His enthusiasm for his work was contagious and was easily passed on to associates. It was a combined challenge of fun and hard work to be with him. After his death, one of his former students from the PRC wrote that he could not believe that Professor Murphy had left them, since there were so many things to be done in China that needed his guidance, advice, and help.

A second characteristic was his tireless, systematic, and intensive work in arranging conferences, symposia, and workshops. He began this work early in his career when he was the vice chair for the First National Conference on Statistical Meteorology held by the AMS in Hartford, Connecticut, in 1968. Murphy con-

tinued as the chair, organizer, or committee member for meetings around the world with the American Association for the Advancement of Science, AMS, American Statistical Association, International Institute for Applied Systems Analysis, International Institute of Forecasters, National Academy of Science/ National Research Council, NCAR, National Oceanic and Atmospheric Administration, Operations Research Society of America, Swedish Hydrometeorological Institute, The Institute of Mathematical Statistics, and World Meteorological Organization, Even in his last weeks, he was preparing to take part in the program committee work for the 14th Conference on Probability and Statistics in Atmospheric Sciences to be held at the AMS Annual Meeting in Phoenix, Arizona, in January 1998.

Subject areas to which Murphy contributed include atmospheric sciences and humankind's needs; dissemination, user requirements, and economic values of very short range weather forecasts; economic and social value of weather and climate information; economic benefits of meteorological and hydrological services; energy and climate; evaluation of space weather forecasts; human interactions with the atmosphere; humans and machines in weather forecasting systems; operations research and management science in atmospheric sciences; probabilistic and statistical methods in weather forecasting; probability and statistics in atmospheric sciences; statistical climatology; statistics and policy issues in measuring environmental contamination; value of forecasts; weather and climate modification, impacts on world food problems; weather forecasting and analysis; weather forecasting and weather forecasters; and the history of probabilistic weather predictions.

Another characteristic was that of being a prolific, meticulous, and clear writer. He coauthored three books and published over 150 papers. Individuals who have files of his work probably would admit that they are among the thickest in their filing cabinets. He served as the editor and associate editor of the Journal of Forecasting of the International Institute of Forecasters. He was a member of the editorial board of Acta Psychologica, an associate editor of Meteorological Applications of the Royal Meteorological Society, and an associate editor for Weather and Forecasting of the AMS. As a result of his thoughtful and careful analyses of papers submitted for publication in Weather and Forecasting, the AMS gave Murphy an Editor's Award in 1997, which was presented at the 77th Annual Meeting in Long Beach, California.

He cherished that award since it was recognition from his peers to his exacting standards for publication of research results.

He was a Certified Consulting Meteorologist and a Fellow of the AMS. In 1980 Murphy was the winner of the AMS Award for Outstanding Contribution to the Advance of Applied Meteorology. The citation reads, "for his innovative experimental and practical studies related to probability forecasting and for significant contributions to the theory and practice of forecast evaluation."

Allan is survived by his wife of 37 years, Shelly (Mokriski) of Corvallis; three sons, Kenneth of Miami, Florida, Christopher of Boise, Idaho, and Peter of Durham, North Carolina; a daughter, Andrea Chaney of Dallas, Texas; two brothers, Dana of El Centro, California, and Stephen of North Andover, Massachusetts.

Allan Murphy worked in an extremely narrow, but very important and highly interdisciplinary sector of meteorology. We certainly will miss his dry humor,

his friendly smile, and his intolerance for anything that was not perfect or nearly so, but he has left us a legacy upon which we can build, so the heart of our science—forecasting—can be used in better and more useful ways. He would like that.

The family has established a memorial scholarship (see page 2964–2965 for further details) named after Allan and his father Ethan. It will support an undergraduate student with a superior academic record, who, through curricular or extracurricular activities, has evidenced an interest in weather forecasting or in the value and utilization of forecasts. The Ethan and Allan Murphy Memorial Scholarship will be augmented by contributions from interested individuals. The scholarship, to be endowed, will be awarded annually in the amount of \$2000. Contributions to the Ethan and Allan Murphy Memorial Scholarship Fund may be sent to Barry Mohan, AMS, 45 Beacon St., Boston, MA 02108-3963.—Eugene W. Bierly and Edward S. Epstein.