Helmut E. Landsberg

1906–1985

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Submitted by the NAE Home Secretary

Helmut E. Landsberg, perhaps the most renowned climatologist of the twentieth century, died on December 6, 1985, in Geneva, Switzerland, while attending, as a delegate, the ninth session of the World Meteorological Organization (WMO) Commission for Climatology. He was at that time a professor emeritus of meteorology at the University of Maryland, College Park.

It normally takes many individuals working jointly to make significant scientific disciplinary advances. Of those contributors, some develop special interests and pursue and expand those specialties for following generations to continue. Some administer scientific programs and activities. Some educate the next generation of scientists. Some move public opinion to attract resources and fresh manpower to their discipline. Some integrate current and past ideas to open avenues for new concepts and studies. Occasionally an individual may span several of these activities in a career. Only exceptionally rarely does one individual make significant contributions to all these activities in one lifetime. Helmut E. Landsberg was one of these rare people. Landsberg advanced our knowledge of climatology through his own research, that of his students, and that of his many coworkers. He was in the forefront of teaching at universities, guiding international organizations, and directing national agencies. He developed regional and national applied climatological networks. He integrated atmospheric science into human affairs.
through political input and public documents. He stimulated professional organizations to interact and clarify scientific thought, and he interwove government, university, and private practitioners into a creative medium for scientific progress.

Landsberg was born in Frankfurt am Main, Germany, on February 9, 1906. He spent his student years from 1925 to 1930 at the University of Frankfurt, taking a basic curriculum of physics, mathematics, and geophysics. He took courses in meteorology at the Geophysics Institute and completed his thesis dissertation in seismology in 1930. At this juncture Landsberg realized his intense interest in the atmosphere, and more from an observational viewpoint; he was fond of saying that meteorology was an observational science. He first took on a project to set up a climatological network in a local wine-producing district. He then turned to practical forecasting by joining the Taunus Observatory where he stayed, ultimately becoming its chief, until 1934. The observatory provided extensive experience and broadened Landsberg's perspective. Indeed, it was at Taunus that his love for libraries blossomed. Because the observatory was more often than not surrounded by fog, Landsberg used the time to devour all the meteorological literature he could find.

Landsberg was recruited to teach geophysics at Penn State in 1934. As the first meteorologist at that institution, he set up an observatory with the help of some students and began a teaching program that evolved into the present meteorology department. In 1941 he joined the faculty at the University of Chicago, where he developed a field course for cadets who were in attendance during that period.

Shortly before the end of the Second World War, Landsberg shifted gears, moved out of academia and into the world of science administration in the federal government. He first was a consultant to the U.S. Air Force and then became executive director of the Commission on Geophysics and Geography of the Research and Development Board, a position he held from 1948 to 1951. From 1951 to 1954 he was director of the Geophysics Directorate of the Air Force Cambridge Research Center. There he had occasion not only to develop in-house research with young protégés but also to fund high-quality university
research. He then returned to Washington to direct the Office of Climatology of the United States Weather Bureau (USWB), at which position he remained until reorganization of the Weather Bureau into the Environmental Science Services Administration (ESSA) in 1965. At that time he became head of the Environmental Data Services of ESSA.

In 1967 Landsberg returned to the academic world where he would spend the rest of his life. He joined the University of Maryland as a research professor and concurrently held several administrative posts. He was acting director of the Institute for Fluid Dynamics and Applied Mathematics and subsequently became director of the meteorology program that evolved from that Institute. In 1976 he retired from the university and began his final career as a professor emeritus with no loss of intensity. Without administrative responsibilities, he devoted more time to students, to traveling, and to producing creative-research results at a rate that would put most scientists in their prime to shame.

Landsberg offered his abilities liberally and enthusiastically to any and all who requested them, as noted by his outside commitments. He was elected to membership in the National Academy of Engineering in 1966, and was an honorary life member of the New York Academy of Sciences. He was a fellow of the Royal Meteorological Society, the American Academy of Arts and Sciences, the American Association for the Advancement of Science, the American Geophysical Union (AGU), the Meteoritical Society, the American Meteorological Society (AMS), and the Washington Academy of Sciences. In addition, he was a member of the German Meteorological Society, the American Institute for Medical Climatology, the International Society of Biometeorology, the Mount Washington Observatory, the Sneckenberg Society of Natural History, the Society of Sigma Xi, the Society of Sigma Pi Sigma, the Society of Sigma Gamma Epsilon, and he was an honorary member of Phi Beta Kappa.

He served as president of the WMO Commission for Special Applications of Meteorology and Climatology from 1969 to 1978; he was a member of a WMO Advisory Working Group from 1978 to 1981; and he was a member of its Commission for
Climatology from 1981 until his death. He served the National Academy of Engineering as a member of its Awards Committee in 1974 and 1975. At the National Research Council (NRC) he served on the Geophysics Research Board as chairman of the Geophysical Predictions Panel in 1977 and 1978 and as a member of its Panel on Energy and Climate from 1975 to 1978. For the NRC Division of Physical Sciences he was a member of its Climatic Impact Committee from 1972 to 1975. He served the government as a member of the National Advisory Committee on Oceans and Atmospheres from 1975 to 1977. He served the universities as trustee to University Corporation for Atmospheric Research (UCAR) from 1968 to 1972 and assisted the private sector as a certified consulting meteorologist of the AMS. He served the AMS as councillor from 1952 to 1960, as vice-president in 1963–1964, and as chairman of the Awards Committee in 1974–1975. In support of the American Association for the Advancement of Science he was vice-president of Section E in 1972. The AGU will remember Landsberg particularly well. He served as vice-president, Section on Meteorology (1953–1956), as president of that section (1956–1959), as vice-president of the Union (1966–1968), and finally as its president (1968–1970).

Landsberg loved books and often browsed in out-of-the-way bookshops, thereby acquiring a unique and unequalled collection of rare historical books on meteorology, which he subsequently donated with great generosity to libraries. He was an associate editor of the Journal of Meteorology (1950–1961), the editor of Advances in Geophysics (1952–1977), the editor-in-chief of the World Survey of Climatology (1964–1985), and the chairman of the Publications Committee of the International Society of Biometeorology (1960–1985).

For his extensive professional contributions, he was rewarded by numerous acknowledgments. He received the Exceptional Meritorious Service Award from the Department of Commerce in 1960. The AMS bestowed on Landsberg their Award for Outstanding Achievement in Bioclimatology in 1964, the Charles Franklin Brooks Award for Outstanding Services to the Society in 1972, and the Cleveland Abbe Award for Distinguished Service to Atmospheric Sciences by an Individual in 1983. The
Duetsche Meteorologische Gesellschaft E.V., the German Meteorological Society, awarded him the Alfred Wegener-Medaille in 1980. He was the recipient of the William Bowie Medal in 1978 from the AGU. In 1979 he received the International Meteorological Organization Prize from the WMO. The W. F. Peterson Foundation Gold Medal was awarded to him in 1983, and in 1985 he was honored with the Solco W. Tromp Memorial Award by the Enviroscience Foundation. Ultimately he was bestowed the National Medal of Science by President Reagan in 1985.

Landsberg's scientific productivity was astounding and his breadth of interest and involvement remarkable. He left us with almost four hundred written published documents, including several books, and his written contributions to collective documents from his many committee assignments would substantially augment that total. His research explorations command numerous topics, including seismology, geography, geology, climatology, weather forecasting, bioclimatology, urban climate, climate history, and climate services among many others. Yet, given the enormity of his formal output, to most of his colleagues and acquaintances Landsberg is remembered best as a man whose door and mind were always open to discussion and the exchange of ideas, and who was overwhelmingly supportive and encouraging. He had the perception and serenity that unfailingly led to meaningful solutions for the most complex of problems.