OBITUARY

Einar A. Tandberg-Hanssen

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Einar Andreas Tandberg-Hanssen 1921–2011 (Photograph: J.W. Gary)

Dr. Einar Andreas Tandberg-Hanssen, a longtime member of the Editorial Board of *Solar Physics*, died on 22 July 2011 in Huntsville, AL, USA, due to complications from ALS (Amyotrophic lateral sclerosis, often referred to as Lou Gehrig's disease). He was an internationally known member of the solar physics community, with over a hundred published scientific papers and several books, including *Solar Activity* (1967), *Solar Prominences* (1974), *The Physics of Solar Flares* (1988) and *The Nature of Solar Prominences* (1995).

Einar was born on 6 August 1921, in Bergen, Norway. He grew up in Langesund and Skien, where he took the qualifying exams at Skien High School in 1941. After the war he studied natural sciences at the University of Oslo (UiO) and received his undergraduate degree in astronomy in 1950. In June 1951, he married nurse Erna Rønning.

He worked as a research assistant in the Institute of Theoretical Astrophysics at the University of Oslo for three intervals in the 1950s, interspersed by fellowships at the Institut d'Astrophysique in Paris, California Institute of Technology in Pasadena, CA, the High Al-

titude Observatory in Boulder, CO and the Cavendish Laboratory in the UK (on invitation from the British radio astronomer Sir Martin Ryle). He earned a doctorate in astrophysics at the University in Oslo in 1960 with a dissertation titled "An Investigation of the Temperature Conditions in Prominences with a Special Study of the Excitation of Helium."

From 1959 to 1961, Tandberg-Hanssen was a professor at the University in Oslo. He then traveled back to the High Altitude Observatory in Boulder, Colorado, where he was employed until 1974. He was subsequently employed at the Space Science Laboratory at NASA's Marshall Space Flight Center (MSFC) in Huntsville, Alabama. There, he was a Senior Research Scientist and later Deputy Director of the Laboratory. He served as Lab Director from 1987 until his retirement from NASA in 1993. He promptly took a part-time post within the Center for Space Plasma and Aeronomic Research at The University of Alabama in Huntsville, where he worked until his death.

During his tenure at NASA, he, along with Dr. Mona Hagyard and Dr. S.T. Wu, built up a substantial, internationally based group of solar physicists at MSFC and UA Huntsville. He was a lead investigator on two instruments onboard NASA spacecraft: the S-056 *X-Ray Event Analyzer* on the *Skylab/Apollo Telescope Mount* (which provided pioneering, high-temporal-cadence temperature and density information on solar X-ray-emitting regions) and the *Ultraviolet Spectrometer and Polarimeter* on the *Solar Maximum Mission* (which carried out sweeping new studies of EUV emission from solar active regions and flares). Dr. Tandberg-Hanssen's books on various aspects of solar activity, viz. *Solar Activity* (Blaisdell, 1967), *Solar Prominences* (Reidel, 1974), *The Physics of Solar Flares* (with A.G. Emslie) (Cambridge, 1988), and *The Nature of Solar Prominences* (Reidel, 1995), have become international standard works within the discipline of solar physics.

In 1982, Dr. Tandberg-Hanssen was elected to membership in the Norwegian Academy of Science and Letters. From 1979 to 1982 and from 1982 to 1985, respectively, he served as vice-president and president of Commission 10 of the International Astronomical Union (IAU). He served as president of the Federation of Astronomical and Geophysical Data Analysis Services from 1990 to 1994. He has also received the NASA Exceptional Service Medal.

Dr. Tandberg-Hanssen's *Solar Physics* Memoir paper, entitled *Solar Prominences* – *An Intriguing Phenomenon*, was recently published (http://www.springerlink.com/content/1166j74k577kv332/). The article starts with an autobiographical account, where the author relates how his various study-trips abroad gradually led him to the study of solar physics in general, and prominences particularly.

Einar's residence as a research fellow at the Institut d'Astrophysique in Paris in the 1950s laid the foundation for a lifelong interest in France and French culture. His great interest in and knowledge of French mediaeval churches, as well as the Norwegian stave churches, is reflected in two books, *Letters to My Daughters* (Ivy House Pub. Group, 2004), and *The Joy of Travel: More Letters to My Daughters* (Pentland Press, 2007), which serve as a review, tourist guide, and history book, shaped in the form of letters home to his two daughters from the locations of his many travels in Norway and France.

Einar was a true gentleman and a true scholar. As demonstrated by his papers, his books, and his dealings with others, he was always seeking not only to expand his own knowledge and understanding, but also to find new ways of communicating his remarkable insight to others. He is survived by his daughters, Else and Karin, and their families.

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