Neil Mather Brice

February 27, 1934 — January 31, 1974

Cornell suffered a tragic loss when Neil Mather Brice was killed in a plane crash in Pago Pago, Samoa, on January 31, 1974, at the age of 39. Brice was a professor of electrical engineering, and at the time of his death he was returning from Australia, where he had been on sabbatic leave at the University of Sydney. During the leave he had traveled and lectured in England, India, Japan, Hong Kong, and New Zealand, and he was on his way to Hawaii and back to the United States when the crash occurred.

He received his B.Sc. and M.Sc. degrees from Queensland University in his native Australia, and the Ph.D. from Stanford University in 1965. He then taught at Carleton University in Ottawa, Canada, for two years before coming to Cornell. During 1970-71 he served as a program director for solar-terrestrial research for the National Science Foundation. He was recently elected a fellow of the Institute of Electrical and Electronics Engineers and was awarded an honorary D.Sc. degree by Queensland University. His early research involved participation in both Australian and Stanford University expeditions to Antarctica, and there is now a mountain named Mt. Brice in Antarctica. He was a member of the American Geophysical Union, the International Scientific Radio Union, and the American Association for the Advancement of Science, and was on numerous advisory panels.

Professor Brice was an energetic and prolific scientist with an impressive record of publications. In his extensive work on various magnetospheric topics he demonstrated a keen ability to sort through a variety of data, recognize what was important, and construct a unifying model of the various phenomena and their interrelationships. He did fundamental work on whistler propagation, the physics of whistler emission, and electron precipitation from the magnetosphere. He was a major contributor to the early work leading to the recognition of the importance of the magnetospheric substorm, and he continued to contribute in many of the important areas of magnetospheric and ionospheric research. He was one of the first to recognize the importance of Jupiter's magnetosphere, and many of his ideas concerning Jupiter have been borne out by recent spacecraft measurements; in particular, the suggestion put forward by Brice and one of his former students that there may be "doughnuts" of gas associated with the large satellites of the major planets was apparently verified just a few days before his death.

Neil Brice was more than a talented scientist. His energy and enthusiasm affected all aspects of his life. He always had a dozen projects under way and was bursting to tell everyone he met about them. One minute he would be describing a new idea about the magnetosphere or some data from Arecibo, and the next he would be talking...
about the barn he was building for his antique buggy collection or some new wrinkle in the income tax laws he had
discovered. In whatever he did, whether it was teaching his children “Strine,” the dialect of Australia, jousting in
academic politics, or trying to unravel a scientific puzzle, Neil put his considerable energy and talents to good use.

He is survived by his wife, Marilyn, and their three children, Henry, Amy, and Betsy. Neil’s imagination and
enthusiasm will be sorely missed by those who knew him well. His view of life is perhaps captured by an Oscar
Wilde quotation on a poster taped to his office door: ‘Consistency is the last refuge of the unimaginative.” He
needed days with more than twenty-four hours and lived his short life to the full.

Gordon Cummings, Martin Harwit, Donald Farley