

R. William Shaw

July 7, 1904 — March 14, 1995

Professor Emeritus of Astronomy, R. William Shaw, who had been confined to his residence on Halycon Hill in Forest Home due to a long siege of arthritis and declining health, died following a short hospitalization on March 14, 1995, at the age of 90.

Born July 7, 1904, he was raised on a farm near Meadville, Pennsylvania. Primary schooling took place in a one-room school near the farm; high school was in town necessitating a long walk and trolley ride. Farm chores demanded his time outside school hours, so he was trained early in discipline and hard work. He graduated from Allegheny College in 1926 and went to Purdue for graduate study, earning a Master's degree in 1929. He came to Cornell and earned his Ph.D. degree under Professor R.C. Gibbs in 1934. He became thereafter an Instructor in the Physics Department, teaching spectroscopy in the Advanced Laboratory course. One of his students in 1934 was Charlotte Throop, granddaughter of the Department's venerable one-time head, Edward L. Nichols. A year or so later, Shaw and Miss Throop were married. He was appointed an Assistant Professor of Astronomy in 1939, serving with Professor Samuel L. Boothroyd who earlier had been named by the School of Civil Engineering to head an Astronomy Department in the Arts College at Cornell. Boothroyd's forte was on positional or practical astronomy. Shaw served to bring some physical astronomy to the small Department. At Boothroyd's retirement in 1942, Shaw was named Director of the Fuertes Observatory and Chairman of the Astronomy Department.

Astronomy remained a small Department with Shaw as its Chairman until expansion was undertaken during the late 1950s. The Department played an important role in navigational instruction during World War II. Following the war, augmented with an added Assistant Professor and Instructor, the Department was quartered in a barracks type structure behind Rockefeller Hall until construction of Clark Hall necessitated its removal. Inspection of the laboratory manual he wrote shows a broad diversity of subject matter and a nice approach to some fairly sophisticated techniques. His interest in all aspects of the subject never lapsed; he subscribed to the astronomy magazine, *Sky and Telescope*, until his last year, holding a complete sequence of issues beginning with Vol. 1, No. 1, 1941. He retired and became Professor Emeritus in 1971.

Shaw's main interest was in teaching, and his laboratory manual reflects this. For many years, under the auspices of the National Science Foundation, he ran one of the first summer institutes in graduate studies for earth science teachers.

In the early thirties, Shaw and Boothroyd mounted an observational expedition to San Francisco Peaks near Flagstaff in Arizona to test the relative efficacy of aluminum coating for telescope mirrors compared to the conventional silver coating. The process of coating glass with aluminum had been worked on in the Physics Department. Shaw was essentially the chief scientist, while Boothroyd handled the logistics, and two or three graduate students served as “sherpas.” The expedition was a distinct success; for stellar spectra into the ultraviolet, aluminum turned out to be quite superior to silver and remains the coating of preference today even for the largest reflectors.

Also in the thirties, Shaw conceived the idea of building a 24-inch telescope to be used in Arizona for obtaining stellar spectra. A glass disc was obtained, ground, polished, and tested here in Ithaca. The War intervened and the project was put on hold. The telescope never did make it to Arizona; a mounting was built by the local BOCES and the assembly was installed where it now resides in the Hartung-Boothroyd Observatory on Mt. Pleasant. It is used in advanced laboratory courses in Astronomy.

Shaw was a very private person. He was committed to his teaching and it was done well, eliciting much praise from students. He was devoted to home and family, which included three sons, all of whom graduated from Cornell. His last years were rather lonely, his wife having died a few years earlier.

He is survived by a sister near Philadelphia; sons, Robert (Ph.D.) of Potomac, Maryland, Montgomery (Ph.D.) of Mansfield, Connecticut, and James (M.D.) of Hummelstown, Pennsylvania; as well as five grandchildren.

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