

JOHN J. RUIZ, 1894-1978
ASTRONOMER, CRAFTSMAN, AND FRIEND

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John Ruiz was one of the first amateur astronomers to mix photoelectric cells, vacuum tubes, and telescopes electronically. In the December, 1951, issue of Sky & Telescope, he reported on his observations of variable stars with his 8-inch reflecting telescope and a photoelectric photometer which he had built himself. John was not only an assiduous observer, but he was also an excellent craftsman with a remarkable ability to thread his way through the complexities of electronic design. In addition, he had the capability of inspiring newcomers to astronomy to "go out and do likewise."

Perhaps John is best known for his work on producing and contributing material for the A.A.V.S.O. Photoelectric Photometry Handbook. The first edition came out in 1956 along with the formation of the Photoelectric Photometry Committee in which John carried the major load. He supplied much of the letterpress and all of the constructional and electrical circuit drawings. John took great pride in his Handbook, and in his role in establishing the Photoelectric Photometry Section of the A.A.V.S.O. From the time of the appearance of the Handbook he acted as a consultant to those amateurs desiring to embark on this method of observing variable stars.

John was born on the island of Cuba in the year 1894 and came to the United States as a young electrical engineer. He rarely talked about his early years in Cuba but he did receive a good basic education which was of great value to him later in life. He became a member of the A.A.V.S.O. in November, 1947. John soon became well known, not only to amateur star gazers but in professional astronomical circles as well. He was selected by Albert Ingalls, Editor of the Amateur Scientist Department of the Scientific American, to contribute material for an article in that magazine for February, 1954, on observing variable stars with a photoelectric photometer. John made many trips to Pueblo, Mexico, where a friend had a 12-inch reflector with photoelectric photometry equipment, mostly of John's design. There he took part in several international variable star observing programs.

At the 1959 Spring Meeting of the A.A.V.S.O. John presented a paper describing his observations on U Herculis, Sigma Aquilae, DD Lacertae, and V380 Cygni. This was a hilarious dissertation illustrated with slides drawn by John in cartoon form, and made his reputation as a humorist as well as an astronomer. During this period he published several papers on U Herculis and DD Lacertae in the Publications of the Astronomical Society of the Pacific, and he traveled extensively in the United States and Europe, attending numerous national and international astronomical meetings to promote the use of the photoelectric photometer. In 1962 he retired from electrical engineering and moved to Erie, Pennsylvania, where a sister and a niece lived. He built a new observatory with a 12.5-inch Cassegrainian reflector and, of course, the latest in photoelectric equipment.

From 1962 on, for just over a decade, John was plagued by nerve-racking problems in trying to get his two other sisters and a niece out of Cuba. He finally succeeded after several visits to Mexico, Portugal, Spain, and Venezuela, together with innumerable conferences

with various government officials of these countries. After months of frustrating efforts they were permitted to leave, but sadly enough, only after the Cuban Revolutionary Government had seized all of the Ruiz assets and property.

John and his sister, Consuelo, then moved to Sunrise Village, a suburb of Fort Lauderdale, Florida, but he never got around to setting up another observatory. Instead, he donated his 12.5-inch reflector and all his photoelectric photometry equipment to Broward Community College in Sunrise, Florida, not far from where he lived.

John died in August, 1978, at his home in Sunrise, Florida. John will always be remembered as a humble but warm human being, with an independent, inquiring personality, spiced with gentle humor. We shall all miss him but always think of him as we flip the switch on the D.C. amplifier and make the first observation of the evening.

LETTER TO THE EDITOR

To the Editor:

Three Stars with Flashy Futures

I am writing to alert AAVSOers to the importance of observing 3 cataclysmic variables of exceptional interest.

(1) 010359 HT Cas: This star erupts from magnitude 17 to ~12 with an unknown period (probably between 25 to 400 days). The star shows deep eclipses (1 to 2.5 magnitudes) which recur at the orbital period of $1^{\text{h}}47^{\text{m}}$. When the star is in eruption, these eclipses may be easily seen in small telescopes, but you must observe very frequently (~30 seconds) since they only last about 10 minutes. Careful observations and timing of HT Cas eclipses will enable the luminosity of the system to be mapped, and will address the most fundamental questions about dwarf novae. Equally importantly, the eruption period needs to be ascertained by diligent monitoring. (Warning: the eruptions last only 1 to 3 days).

The elements for the mid-eclipse are: J.D. minimum (heliocentric) = 2,443,727.937 + 0.07364722E.

(2) 170225 V2051 Oph: This star is very similar to HT Cas, but is not known to be a dwarf nova. Normally m_v is 15.8, but the system would be of comparable importance to HT Cas if it would ever erupt (and for the same reason; it's an eclipsing binary with $P = 1^{\text{h}}30^{\text{m}}$).

(3) 203501 AE Aqr: This star has fallen out of popularity with visual observers, but the recent discovery of strictly periodic 33 second oscillations in its light (with an amplitude of less than 1%) has produced a new wave of interest. The nature of its eruptive activity is still unknown, and it is not likely that professional astronomers will ever find it out. It will require intense visual coverage, preferably with good time resolution since there are flares lasting only ~5-15 minutes. The system generally varies between visual magnitude 12.5 and about 11. The photographic range is much higher (13 to about 10.5), suggesting the possibility of studying the variations through consecutive short-exposure photographs.

If anyone out there would like to help out on these projects, their valuable contributions would be much appreciated.

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