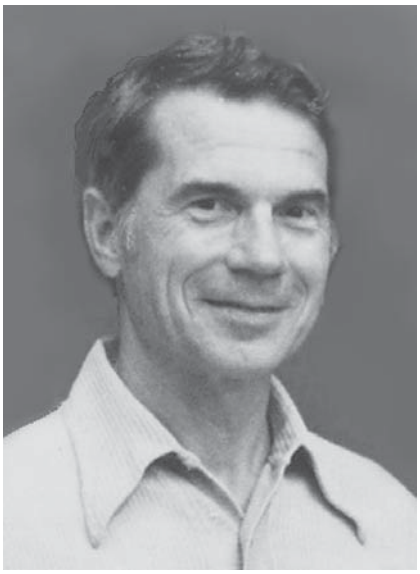
Obituary

Elmer J. Reese (1919–2010)

Elmer J. Reese, who died on 2010 October 15, was one of the most accomplished Jupiter observers of all time, both as an amateur and later as a professional. He was born on 1919 May 24 in Uniontown, Pennsylvania, where he went to high school and worked in his family's grocery store. He became interested in astronomy and built his own 6-inch (15cm) reflector of superb optical quality. Before World War II, he was already an active observer corresponding routinely with other amateurs.

From 1942 to early 1946 he served with US Army Ordnance and was stationed at the Aberdeen Proving Grounds for more than two years. As he wrote: 'I was very fortunate during the war being in an army ordnance battalion which saw most of the world but no combat. From January to June, 1945, we were stationed at Toddington, England [near Cheltenham]. Many pleasant memories of England linger with me [including] VE night in Worcester.' During the last few months of the war he served in New Guinea and the Philippines.

On returning to civilian life, he went back to Uniontown, Pennsylvania and rapidly became well known as a first-rate amateur observer. In 1948 he was elected to membership in the BAA and was also one of the charter members of the Association of Lunar and Planetary Observers (ALPO) in the USA. He became the first ALPO Jupiter Recorder in 1949 and prepared most of their reports during the following years. He remained a major source of Jupiter observations for both associations until 1963, and also provided observations of Saturn.



Elmer Reese in the mid-1980s.

His contributions to the BAA Jupiter Section (as well as to the ALPO) extended from 1946 to 1963, including notable series of drawings, strip-sketches, transit timings, and systematic colour and intensity estimates. Indeed in many of these years his were among the most important contributions, especially just after the war when the planet was southerly and the BAA had few such productive members. Thus he produced a detailed record of the South Tropical Streak of 1946–'47, and even saw evidence of the internal circulation of the Great Red Spot in 1949. Remarkably, he made all his observations with his 6-inch reflector, but nevertheless he was known for the accuracy of his drawings and his transit timings. As Walter Haas wrote in 1947, 'Reese can do everything with a telescope but make it sing.'

He also published valuable papers analysing Jupiter's major features over many years. These included documentation of the early history of the great South Temperate white ovals as they developed during the early 1940s. He also investigated whether the great outbreaks that trigger SEB Revivals came from permanent subsurface sources, and in 1972 he proposed a fixed period which successfully matched most of the subsequent outbreaks.

In 1963, Reese was induced to join the planetary research group at New Mexico State University (NMSU) led by Clyde Tombaugh and Bradford Smith. Up to that time, there had been almost no professional monitoring of Jupiter, but Reese and his colleagues regularly took photographs with a 61cm reflector in one of the few systematic professional surveys of the planet. From 1963 until he retired in 1977, Reese published reports on the features and motions of Jupiter's atmosphere, now based on measurements of large-scale photographs. His important papers in the professional journal *Icarus* included not only regular reports, but also the first proof of the internal circulation of the Great Red Spot, the rediscovery of the superfast North Temperate jet stream (both with Dr Bradford Smith), and the history of a pair of exceptionally great and long-lived plumes in the equatorial region (with Dr Reta Beebe). His work provided a basis for early planning of the *Voyager* observational sequences. He also published photographic work on Saturn and Venus, confirming the 4-day retrograde rotation of Venus' upper atmosphere.

At NMSU, not only did Reese share his long-term knowledge of Jupiter's changing cloud deck, he also worked successfully with young researchers, teaching them to respect careful analysis and encouraging them to apply new approaches to the work. Even though he had no professional degree, he played an integral role in the planetary research at NMSU and in establishing a historical basis for understanding jovian climatology.

He only married late in life. After retiring, Reese and his wife, Margaret, resided in Longview, Texas. There, Reese continued to observe with a small telescope and to follow planetary exploration for many years. Despite his personal modesty, his observational and analytical skills had earned him the lasting respect of both the amateur and professional astronomical communities.

John H. Rogers & Reta F. Beebe

Dr John Rogers is BAA Jupiter Section Director. Professor Reta Beebe is at New Mexico State University, and is Program Scientist of the NASA Planetary Data System.