



Obituary

Michael J. Hendrie (1931–2018)

With the death of Michael Hendrie at the age of 87, the Association has lost one of the great classical astrophotographers, as well as a distinguished past Director of the Comet Section.

Michael James Hendrie was born on 1931 February 14, and was educated at Cranbrook School. He did not enjoy boarding, but received a sound education. He recalled being a fast runner in those days, and it was certainly a good way of getting into town in the limited leisure time available! There were workshops, too. Michael and co-author JV (who met in 1957) both held the view that despite having experienced in early childhood the ravages of World War II, the immediate post-war period, with its relatively dark skies, helped stimulate their interest in astronomy. Michael exposed his first astronomical photograph in 1950, aged 19, and his first comet photograph was of P/Schaumasse in 1952 taken from the parental home in Westcliff-on-Sea.

Michael joined the BAA in 1951. His first appearance in print, appropriately enough, was in the report of a meeting talk he gave when showing photos of Comet Honda 1955g. The following year, using predictions by M. P. Candy and Dr J. G. Porter published in the BAA *Handbook*, Michael was able to make an independent photographic recovery of periodic Comet Crommelin (designated 1956g; period 28 years) on the same night that it was photographed by L. Pajdušáková in Czechoslovakia.



Figure 2. Comet Burnham 1959k on 1960 April 27, 02:58 UT: a 30-minute exposure with Waterfield's 153mm f/4.5 Cooke triplet, taken at Ascot by Michael Hendrie & Harold Ridley. The tail was described as being more than 10° long on the original plate.



Figure 1. Michael Hendrie with his 254mm folded photographic reflector, used for his work on comet P/Halley.

Michael's statistical analysis of comet discoveries formed an important early contribution to the literature (*Journal*, 72, 384–396 (1962)). Michael wrote or introduced a series of articles entitled 'For the Beginner', and in the mid-sixties acted as Assistant Editor of the *Journal*. Working in London, Michael would find it convenient to serve on the Council, also. For many years he used a 5-inch (125mm) refractor from the BAA Instrument Collection for his guiding telescope. This had once been used by the solar observer F. J. Sellers, and Michael recalled collecting it from an attic in Muswell Hill. To this equatorial he attached a large comet camera. Later he made a wide-field 10-inch (254mm) folded reflector for photographing P/Halley (Figure 1).

Despite his daily commuting to London, Michael collaborated frequently with veteran comet photographers Harold Ridley and Reggie Waterfield. At one time he was making frequent trips to Waterfield's home near Ascot, and later to Woolston in Somerset, making exposures together with Waterfield or Ridley. A particularly fine photo of the spring onion-like Comet Burnham 1959k is reproduced here (Figure 2). Of course, photographic work in those days was with film or glass plate emulsions. Images of fainter comets would sometimes require exposures of well over an hour. Effective guiding on the comet would necessitate the observer having to periodically offset from a guide star, requiring great patience and skill in the use of an eyepiece micrometer. JV carried out similar observations at Brentwood, and Michael used to remark that they were both blighted by the same addiction!

Michael moved to Wormingford, Essex in the late 1950s, where he constructed a wooden run-off roof observatory. A further move was made to West Bergholt, a leafy suburb northwest of Colchester, in 1972. Here he built another good-

sized run-off roof observatory, clad with PVC panels, on heathland overlooking playing fields (and described years later in the *Journal*, 104, 300–303 (1994)). RM first met Michael here in 1979. The astronomer's familiar enemies of street lighting, buildings and trees would only slowly encroach upon this promising site.

JV had met Michael through their mutual interest in comets, when the former constructed an observatory at Brentwood to house his telescope and a pair of Aldis cameras on loan from the BAA. In those days neither Brentwood nor Colchester had yet expanded into the light-scattering conurbations they are today. Michael later commented (not infrequently) that exposures on the night sky of more than 15 minutes would be streaked with items put into Earth orbit. He also expressed despondency over the ever-increasing expansion in aviation, resulting in contrails and navigation lights littering the skies. 'We had the best of it in our youth', he would say, and he was right.

In 1977 upon the retirement of Stan Millbourn, Michael became Director of the Comet Section. In conjunction with Charles Morris he made significant progress with magnitude analyses of the late 1940s and 1950s comets. Current Section reports appeared on Comet Kohler 1977 and Comet P/Halley. Michael fully involved the Section with the International Halley Watch project. (The first recovery images of Halley from the UK were taken by members of our Comet Section).

Michael readily accepted the suggestion that the Association should publish a special *Memoir* dealing with the Halley results, as had also been done for the 1910 apparition, and rapidly put the work in hand in collaboration with other

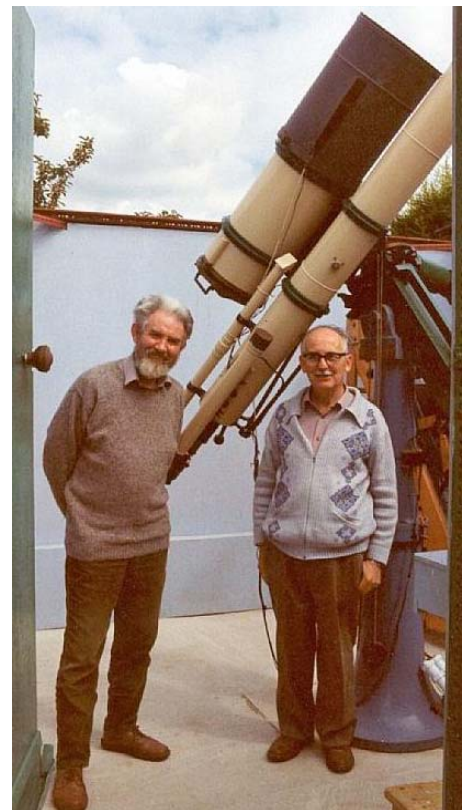


Figure 3. Michael Hendrie (right) together with John Vetterlein (left) and the 6-inch Cooke refractor at Michael's home in Colchester, 1993 August. (Photo by Pat Hendrie.)



Figure 4. Comet C/1995 O1 (Hale-Bopp) on 1997 April 4.864: a 20-minute exposure with the Cooke triplet on a 102×127mm Kodak IIa-O blue-sensitive plate, taken at Colchester by M. J. Hendrie.

members of the Section. The resulting *Memoir* is an impressive analysis of the Section's work. Michael gave many talks to local astronomical societies about P/Halley, feeling that it was his duty to publicise the work of the Association. He was meticulous in his dedication to his role, and was later awarded the Goodacre Medal in 1990 for all his work for the BAA. Another form of recognition came when minor planet 4506 (formerly 1990 FJ, discovered by Brian Manning from Stakenbridge) was renamed (4506) Hendrie by the IAU in his honour.

When Michael retired from the Directorship in 1987 there were still a considerable number of post-War bright comets whose observations had not yet been analysed. Michael set to work upon Comet Arend-Roland 1957, Mrkos 1957, Bennett 1969, Kohoutek 1973 and Kobayashi-Berger-Milon 1975, producing a number of important papers for the *Journal*. Jonathan Shanklin has informed us that in addition to numerous photos and positional measurements, Michael made 229 visual comet observations up to 2007.

When Reggie Waterfield died in 1986, Michael inherited his 6-inch (152mm) Cooke refractor, shown at its Colchester home in Figure 3. In 1997 he took what were probably his finest photographs with the 153mm f/4.5 Cooke triplet lens mounted upon this rock-steady instrument, of the magnificent Comet Hale-Bopp (Figure 4). RM was lucky to have been able to assist with one of these, and recalls how well organised Michael always was, despite the tricky operation in the dark of the telescope and camera controls.

Michael was one of the few amateurs to measure his comet plates for position, and his mechanical skills enabled him to construct a superb plate-measuring machine and a blink microscope. It would be fair to say that he was a perfectionist both as an observer and as a technician. He kept a fully equipped workshop with a lathe in his shed. Later of course, plates gave way to film, and film to electronic detectors. Michael wrote up his lifetime's work with his most familiar medium in his final paper (*Journal*, 122,

97–104 (2012)), entitled appropriately enough 'Farewell to film: Imaging comets and the Sun the old way'. Sadly it was also to prove his astronomical farewell.

In retirement Michael was a keen solar photographer, and regularly obtained high resolution results in hydrogen alpha using a Daystar filter: some examples featured in that final paper, and some examples here serve as a further testament to his skill (Figure 5). He did like a good observational challenge, and finding bright stars in broad daylight was just one of them. Setting circles and a sidereal clock would be the tools: no 'Go-to' devices for Michael! But in the 2012 paper he wrote: 'Had I been younger I would have embraced the new methods and equipment now available but contrary to what one might expect, free time seems to get less with advancing years and everything takes one longer.'

Outside the BAA, Michael was the astronomy correspondent for *The Times* for some 20 years from the mid-1980s, and his monthly column was always keenly awaited. Each year he edited *The Times* Night Sky monthly star map booklet, but in 1999 he went one step further than his predecessors to pen a 128-page book called *The Times Night Sky Companion*, which was warmly received and to which both of these friends were pleased to contribute.

The BAA was not the only scientific organisation that Michael followed. He was a long-time member of the British Interplanetary Society, and was elected a Fellow of the RAS in 1957. Michael, Harold Ridley and JV each acted as RAS Honorary Auditors for two years at the start of the 1960s. Comments about the threadbare stair carpet led to its replacement, and they were thanked by the Astronomer Royal (who no longer feared tripping up). For some years in Colchester, Michael ran an Adult Education course in Astronomy, and he would always be willing to give talks to or to host the nearby

Scout group. During his commuting days he also worked with JV for London University's Extramural Department.

Professionally, Michael's career was with British Petroleum in London. For this work he was involved in aspects of the design of oil platforms and refineries, and primarily in economic forecasting. At BP he met Patricia Sartain, who worked in the Shipping office and later became his wife. They were married for 45 years. By his early sixties Michael suffered from a heart condition, but bravely underwent a bypass operation in 1996, the successful result of which gave him a new lease of life. Both the writers tried to keep in touch with him after we moved away from Essex: JV last visited in 1993 (Figure 3), after which he moved to Orkney to take up auroral work, but spoke to Michael every fortnight on the telephone, while RM visited West Bergholt whenever he could, most recently in 2016.

Michael will be remembered as a skilful astronomer who was widely read and always happy to receive visitors. He was a friendly but quietly spoken man, always very modest about his achievements, even when demonstrating some extraordinary new piece of equipment fresh from his workshop. Conversations would be wide-ranging, and the Hendries were excellent and generous hosts. Michael was keenly interested in steam railways (another interest which all of us shared!) and all things mechanical, as well as polar exploration. His shelves and coffee table were always full of such books being keenly devoured.

In the last few years Michael suffered from a variety of health problems, but only in his mid-eighties did he have to completely abandon his observational work. He passed away after a heart attack on 2018 February 25. Michael's older brother, John, died some years ago. His younger brother Gerald, formerly Professor of Music at the Open University, lives in Southern France.

Michael is survived by his widow Pat, to whom we extend our deepest sympathy. Our acute sense of loss will be widely shared by the astronomical community.

Richard McKim & John Vetterlein

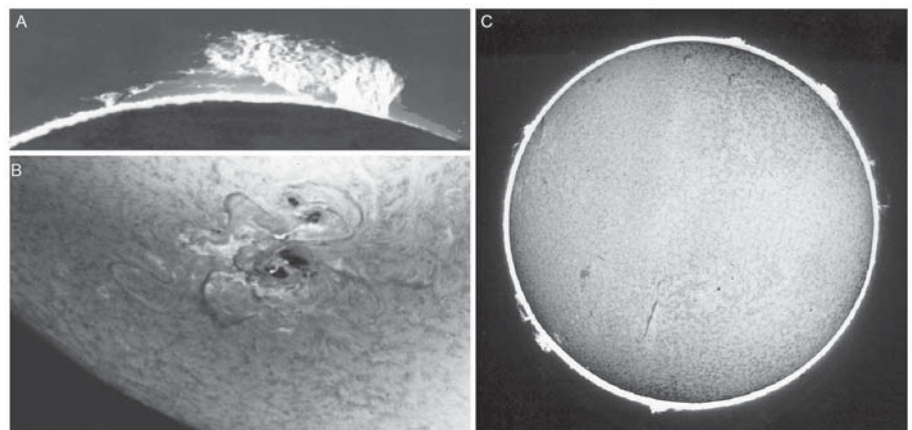


Figure 5. Solar prominences and plage, photographed on TP 2415 film with a Daystar 0.7Å H-alpha filter and 6-inch Cooke OG stopped to 100mm, by M. J. Hendrie. (A) An enormous hedgerow prominence at the NE limb, 2000 July 31, 16:40 UT; (B) Plage & flocculi associated with the large and complex naked-eye sunspot group, 2003 Oct 26, 09:52 UT; (C) A composite of two images taken on the day of the last UK total solar eclipse, 1999 August 11, 14:41UT (1/15s for prominences, 1/125s for the surface.)