



## Obituary

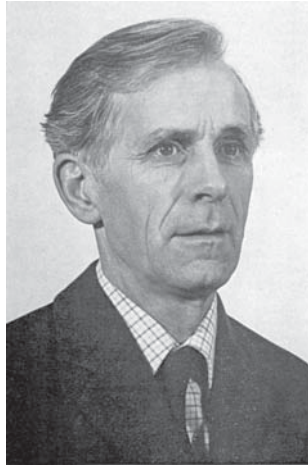
# Howard George Miles (1922–2016)

Howard G. Miles, one of the BAA's most eminent and respected members, died on 2016 May 20, just a couple of months short of his 94th birthday. In his 56 years as a member, Howard served the Association in many capacities including Section Director, Business Secretary and President and made many important and lasting contributions to its work. His many interests included not only astronomy and mathematics but also geology, meteorology and megalithic archaeology. He was an acknowledged expert in all of these fields.

Born on 1922 August 5 in Coventry, Warwickshire, Howard became interested in both astronomy and mathematics at an early age, and after obtaining his BSc became a lecturer in Mathematics first at Coventry Technical College and from 1961 at the Lanchester College of Technology. In 1970 the Lanchester College of Technology and the College of Art, along with the Rugby College of Engineering Technology, amalgamated to form the Lanchester Polytechnic and Howard became Lecturer in Mathematics, later Senior Lecturer, at the Polytechnic. He would remain there until his retirement in 1983. (Lanchester Polytechnic subsequently became Coventry Polytechnic and then Coventry University in 1992.) His colleagues at the Polytechnic recall that Howard undertook the very onerous and rather tricky task of producing the timetable for all of the courses and the lectures therein. Howard received the British Empire Medal (the precursor to the MBE) 'for civic services to education' while at the Coventry/Lanchester Colleges.

While at Lanchester College, on 1961 September 9, Howard arranged a BAA 'provincial' meeting in Coventry, the very first general meeting to be held outside the capital. Thus did Howard inaugurate the so-called 'Out-of-London' meetings, a practice that continues to this day. The BAA would return to Coventry again for its 'provincial' meeting in 1977 and several Section meetings were held there. Howard also organised the second BAA weekend astronomy course at Moor Park College, Farnham, Surrey on 1965 September 17–19, a similar course at Westham House, Barford, Warwickshire on 1966 March 4–6 and another course at Moor Park on 1966 September 16–18. In 1967, the BAA's residential Winchester Weekend Course was established by Alfred Curtis, and Howard was a frequent member of the panel of lecturers at these annual events.

As a teenager, Howard had been a founder member of the newly formed Coventry Technical College Astronomical and Meteorological So-



Presidential portrait of Howard Miles, from the *BAA Journal*, 1977 February (Vol. 87, No. 2, p 112). Howard was BAA President for the sessions 1974–'75 and 1975–'76.

ciety in 1939, serving as the group's secretary for many years. In 1959, a breakaway group founded the Coventry Telescope Making Society, but these two groups merged to form the Coventry & Warwickshire Astronomical Society in 1974. It seems likely that the Technical College society was affiliated to the BAA, since Howard was borrowing instruments from the BAA's loan collection prior to 1960 November 30 when he officially joined the Association as an individual member.

Over many years, Howard used several instruments borrowed from the Association's loan collection, including a 5-inch Cooke refractor (no. 169) between 1957 and 2007. A pair of 20x100 binoculars (no. 125) used by Howard from 1986 to 2006 had been loaned by the Air Ministry in 1949, and was used by J. P. M. Prentice and Michael Hendrie before being loaned to Howard.

No sooner had Howard joined the BAA in 1960 than he was appointed to the post of Director of the newly formed Artificial Earth Satellites Section. (In 1990, Howard was still the Section Director and was thus the longest-serving member of Council in the BAA's Centenary year.) Before 1960, satellite observing was included in the work of the Radio & Electronics Section. This Section was mainly concerned with radio observations of the satellites, but it was essential in those early days for the radio trackers to have data provided by optical observations. From the launch of *Sputnik 1* in 1957 October satellite predictions were issued by Gordon E. Taylor at the RGO. These predictions were published by the BAA as *Circulars* and sent to all members wishing to receive them.

Because of the tremendous interest in optical tracking at that time, the ever increasing workload in the days before electronic computing, and the wishes of the Radio & Electronics Section to concentrate on radio tracking, the BAA Council formed the Artificial Earth Satellites Section (later simply Artificial Satellite Section) with Howard as its first Director. This catered for

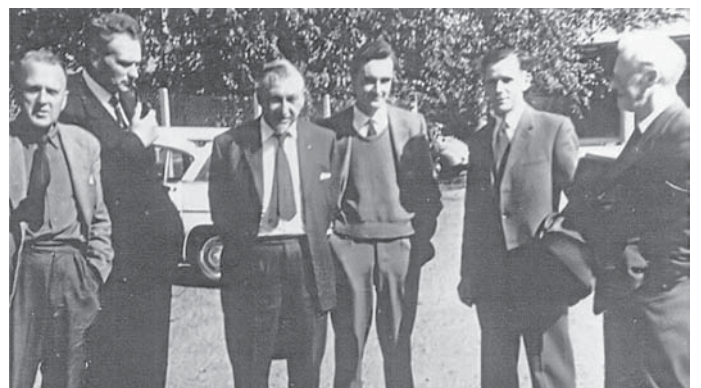


Artist's impression by the late Paul Doherty of the Barwell fireball descending on the evening of Christmas Eve 1965.

the core of enthusiastic observers who had quickly made their mark in the field of optical tracking, developing observing techniques and producing the necessary charts and numerical tables to reduce the amount of preparatory work needed to convert the Equator Crossing data given on the prediction sheets to a series of altitudes and azimuths and, if necessary, to reduce these to RA and Dec. using the spherical conversion tables provided by the Section.

Under Howard's careful guidance, the Artificial Satellite Section's main work was in the training of visual observers. Although the satellite predictions were prepared and despatched by Howard, the collection and sorting of observations was carried out by the Assistant Director, David Brierley, and later by Russell Eberst.

The Section was also involved in the prediction of satellite decays or re-entries which could be visible from the British Isles. Because of the many similarities between satellite decays and natural objects entering the Earth's atmosphere, Howard took on a number of other responsibilities, namely the Reporting of Fireballs (1971–'74), and the Reporting of Transient Celestial Phenomena (1974–'80). In 1980 the British Fire-



Attendees at the first BAA Out-of-London meeting, in Coventry on 1961 September 9. Left to right: Bill Baxter (Secretary, and later Director, Solar Section), Patrick Moore (Director, Mercury & Venus Section), Frank Hyde (radio astronomer), Kenneth Fea (radio astronomer), Howard Miles, Bill Fox (Director, Jupiter Section). (Courtesy Alan Heath.)



BAA members searching for fragments of the Barwell meteorite in early January 1966: Left to right: anon., Rossie Atwell, Gladys Stone, Patrick Moore, Howard Miles. (Photograph courtesy Ernest Beet.)

ball Survey was set up jointly by the Meteor and Artificial Satellite Sections, with Howard at the helm, to handle the reporting of fireballs and other transient or unusual phenomena.

Even before his official role within the BAA of handling these reports, Howard had gained a certain amount of notability in this field. He was a recognised authority on meteorites and on Christmas Eve 1965 at about 4:15pm, Howard

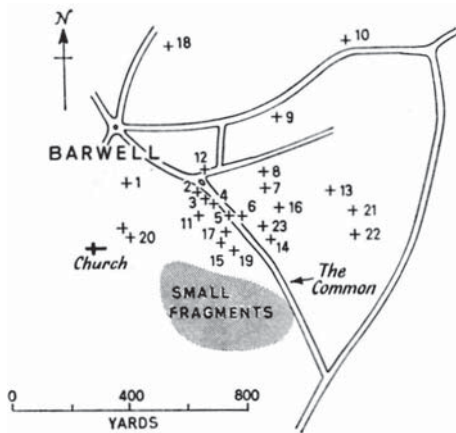
ite, worked with museum curators in Leicester and London, and interviewed hundreds of eyewitnesses in Barwell and surrounding villages and throughout the Midlands, producing a most detailed account of the event for the journal *Nature*.<sup>1</sup> Harold Ridley, Director of the BAA Meteor Section at the time, described the ‘immense skill and energy’ that had characterised Howard’s extensive investigation of the Barwell affair, which remains the largest meteorite fall observed in Britain in modern times. Howard was also in-

involved in the thorough investigation of the Bovedy fireball and meteorite of 1969 April 25<sup>2</sup> and the major fireball of 1981 May 25.<sup>3</sup>

Howard’s lifelong interest in fireballs and transient celestial phenomena led to his being frequently involved in investigating sightings of UFOs. One such major event was the famous Devon ‘flying cross’ case of 1967 October 24 in which two police constables chased an apparent UFO in their police car along country lanes at up to 90 mph in the early hours of the morning. Howard had quickly recognised that the ‘flying cross’ was a classic sighting of Venus, which was bright in the dawn sky at the time (an explanation accepted by the two policemen), but a local UFO ‘expert’ had other ideas. Howard was interviewed by the local TV station at Plymouth along with the UFO ‘supporter’, who was completely confused about the positions of the planets, and Howard came out with the classic line ‘For God’s sake talk a bit of ruddy sense’. The camera crew and producer roared their heads off.

Howard would later be involved in investigating the re-entry of *Cosmos 749R* on Christmas night 1980,<sup>4</sup> an event which is likely to have precipitated the famous Rendlesham Forest ‘incident’ in Suffolk.

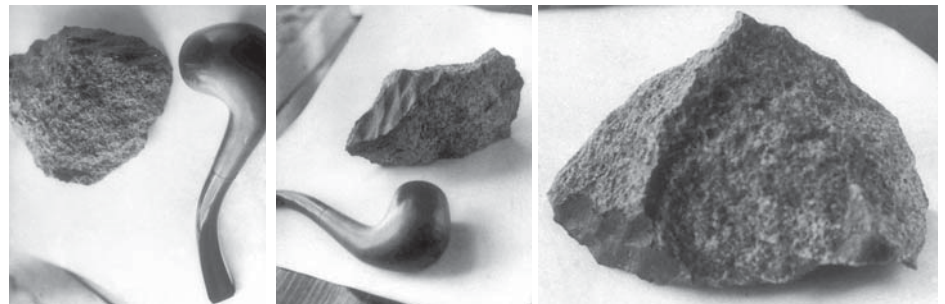
Howard was also very interested in solar eclipses. In 1970 he became convenor of a small BAA subcommittee tasked with looking at the possibility of arranging for a large party of members to observe the total solar eclipse of 1973 June 30. With the assistance of Gordon Taylor, Cdr Henry Hatfield and David McGee (Transolar Travel), a 14,000 ton vessel, the *MS Monte Umbe*, was chartered and 312 members and friends sailed to a position close to the centre line, off the coast of Mauritania, and observed the 7m5s of totality under relatively good conditions.<sup>5</sup> Howard, who had moved from Coventry to near Wadebridge in Cornwall on his retirement, was a valuable and characteristically enthusiastic source of local knowledge in the run up to the 1999 August 11 solar eclipse, which was total from locations in Cornwall and Devon.<sup>6</sup> After much investigation, the Association decided to set up an eclipse ‘camp’ in the buildings and grounds of Truro School, and although clouds spoiled the show on the day, it was the first time since 1973 that the BAA had organised such a major eclipse viewing event for its members and their families. The author of this obituary has very fond memories of the time spent with Howard looking at the megalithic artefacts on Bodmin Moor, about which Howard



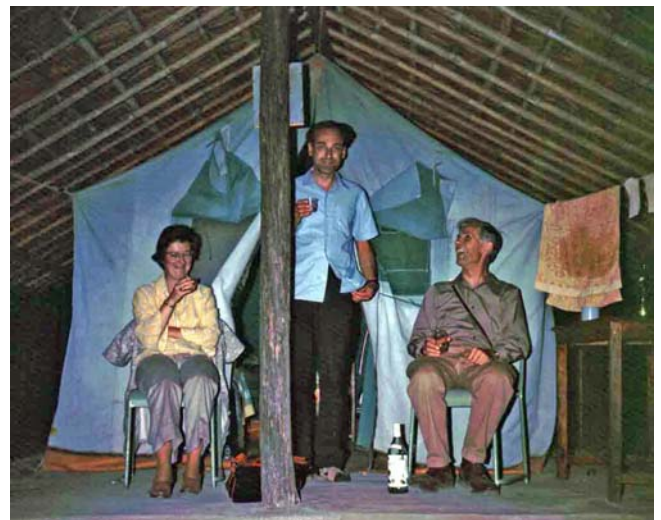
Sketch by Howard Miles showing the location of the principal meteoritic fragments recovered in and around the village of Barwell. The area in which small pieces weighing less than 0.03kg were found is shown shaded.

saw a very bright flash, which he at first thought was lightning – but there was no thunder. Then, over a minute later, he heard what seemed to be a sonic boom. It was not until after Christmas when reports came in of a major meteorite fall near the villages of Barwell and neighbouring Earl Shilton in Leicestershire that Howard realised the importance of what he had seen.

Along with several other BAA members including Patrick Moore (who had been a good friend of his since the 1950s), Howard searched the fields and hedgerows around the village of Barwell and carefully mapped the locations of as many of the fallen meteorite fragments as he could. He examined pieces of recovered meteor-



Fragments of the Barwell meteorite recovered by Howard Miles & Patrick Moore in early January 1966. (Courtesy Patrick Moore.)



Howard Miles relaxing with Michael & Wendy de Faubert Maunder during a total solar eclipse expedition. (Courtesy Michael de F. Maunder.)



Howard Miles observing the total solar eclipse from Zanzibar on 1976 October 23. (Courtesy Michael de F. Maunder.)

was clearly extremely knowledgeable.

As well as being an expert on artificial earth satellites, Howard also took a keen interest in interplanetary spacecraft and was an authority on the subject. He contributed articles for the *Journal* over many years on the *Apollo*, *Luna*, *Mariner*, *Pioneer*, *Ranger* and *Surveyor* spacecraft, and was also invited by Patrick Moore to appear on his BBC *Sky at Night* TV programme on several occasions in the 1960s to talk about various space missions. He also contributed articles for Patrick's annual *Yearbook of Astronomy*. Among his many BAA publications, Howard authored the *Satellite Observer's Manual* in 1974 and the *Explanatory Supplement to the BAA Handbook* in 1988. He regularly contributed sightings of aurorae seen from his home in Cornwall, including a report on the great auroral substorm of 1989 March 13–14.<sup>7</sup> One of his final contributions to the *Journal* was a letter published in 2006 entitled 'A sighting of mock moons',<sup>8</sup> demonstrating his very broad interest and knowledge of transient astronomical and meteorological phenomena.

Howard's contributions to the BAA were many and varied. In addition to his extensive roles outlined above, he served as President (1974–'76) and was Acting Business Secretary in 1987. He was a recipient of the Merlin Medal and Gift (1970) and the Walter Goodacre Award (1984). Over a period of more than forty years he published more than 150 papers, articles, reports, and notes in the *Journal*. In recognition of his many contributions to astronomy, the asteroid 1983 BE, discovered by Ed Bowell at Anderson Mesa on 1983 January 16, was officially named (4119) Miles by the International Astronomical Union.

Howard enjoyed a long and happy retirement (33 years) in Cornwall with his wife Norma, whom he had married in Coventry in 1947; they celebrated their diamond wedding anniversary in 2007. A few years before his death, Howard suffered a stroke and this caused a loss of memory of much of the mathematics, science, and astronomy which had been the basis of his life's work. Several BAA members who spoke with him after this episode recall that he was quite upbeat about it all, and with characteristic determination was starting to re-learn

his technical books to try to re-learn what he had forgotten.

Howard Miles was the very first BAA 'official' written to by the author of this obituary back in 1969. It was Howard's long and most encouraging letter received in reply that encouraged the author to join the BAA. He will be greatly missed.

### Acknowledgments

The author would like to thank a number of individuals who have very kindly helped him with material for this obituary: Barinder Johal–Skalski & Jim Tabor of Coventry University; Martin Mobberley for his unique insights into BAA personnel and events; Bob Marriott

for his most useful tribute to Howard in the BAA's *I&I Newsletter* No. 27 and for provid-

ing a complete bibliography of Howard's numerous contributions to the *Journal*; and Ian Ridpath for his helpful account of the famous Devon 'flying cross' case of 1967.

The author would also like to acknowledge the BAA *Memoir*, 'The History of the British Astronomical Association: The Second Fifty Years', published in 1990 and edited by Dr Richard McKim, as an invaluable source of much useful background information for this obituary.

John W. Mason

### References

- 1 Miles H. G. & Meadows A. J., *Nature*, **210**, 983 (1966) & *Nature* **212**, 1339 (1966)
- 2 *J. Brit. Astron. Assoc.* **80**, 313 (1970)
- 3 *ibid.*, **91**, 111 (1981)
- 4 *ibid.*, **91**, 561 (1981)
- 5 *ibid.*, **83**, 429 (1973)
- 6 *ibid.*, **105**, 141 & 288 (1995)
- 7 *ibid.*, **99**, 201 (1989)
- 8 *ibid.*, **116**, 333 (2006)

## The 'Back to Basics' Workshop

at King's Lynn, Norfolk, 2017 October 7

On a deluge of a day we all trooped into the bright and spacious hall of the King's Lynn Academy to deliver the Back to Basics meet, kindly hosted by the King's Lynn and District Astronomy Society. With a turnout of over 50 people and a wonderful mix of young and old it promised to be an interesting event, with lots of questions to test the expertise of our speakers.

First up was an official welcome by Callum Potter, then straight into a lively talk by Hazel Collett: 'What astronomy can I do?' This was followed by Stewart Moore demonstrating to new beginners what equipment and

books were best to invest in. As the meeting was supported by BAA Sales, W&W Astro and Green Witch there was already a good choice nearby to spend on.

Next up was Nick James on Lunar Observing. With a wonderful video of what we cannot see – the whole of the Moon rotating – he readily enthused the beginners with how to get started on our nearest object.

King's Lynn Academy then produced a very welcome lunch, including some of the most sinful pastries I have tasted in a long time. Then it was time to return for a short presentation by John Craythorne, Chairman of the KLADAS, on



Speakers and organisers at the Kings Lynn 'Back to Basics' workshop. Left to right: Frank Dutton, Stewart Moore, Callum Potter, Janice McClean, Hazel Collett, Graham Collett, John Craythorne (back), Nick James (front – on his knee!), Alexis Brand, Alan Gosling, Philippa Sillis. (J. McClean)