Obituary

George Eric Deacon Alcock, 1912-2000

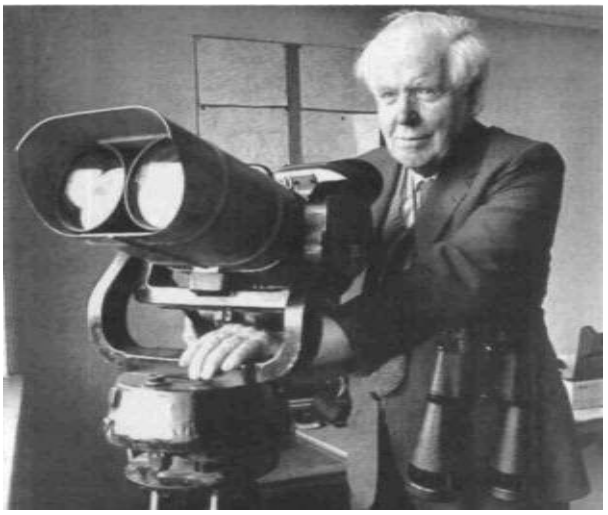
It is with considerable sadness to all astronomers, but especially those who are active observers, that we learnt of the death of George Alcock on 2000 December 15 at the age of 88 years. George was surely one of the most successful visual discoverers of novae and comets who has lived in and wrestled with the uncertainties of the British climate.

The dramatic entry into the world of George Alcock, the first child of William and Jennie Alcock, occurred on 1912 August 28 during the great East Anglian flood. A doctor had to be ferried to No. 59 London Road. Fletton near Peterborough and, looking back, these events were surely a signal of more drama to come. The writer was born just 20 miles from here and can appreciate why many regard these areas of 'The Fens' as boringly flat, but of course they provide very clear horizons for astronomers.

George's early life has been described in fascinating detail in the biography by Kay Williams.[1] There appear to be key events, which triggered great successes which were to follow in astronomical discoveries. One of these happened when he was attending New Fletton council school in the 1920s. The headmaster, a Mr Tillett, gave art classes and often asked his pupils to repeatedly draw such items as glasses, cups and saucers. This would be repeated over and over again as the headmaster urged George to: 'Use your eyes, boy, use your eyes'. George often said that this discipline was vital to his life-long study of meteorology, wildlife and architecture where it was not only his ability to see fine details in such subjects which was important but also to be able to convey them to drawings and paintings on paper and even memorise them.

His interest in astronomy was triggered on 1921 April 8 when he observed a partial eclipse of the Sun through smoked glass from the school playground. The momentum was continued when he was allowed to borrow his father's 1¼-inch refractor to observe the heavens and, unlike the present-day astronomer of Peterborough, George enjoyed fairly dark skies. In 1925 he moved up to Fletton Grammar School and on 1927 June 29 he tried to see the solar eclipse which was total from northern England, but the cloud patterns, which held a life-long fascination for him, defeated him on this occasion with only a strange darkening of the sky being seen.

As a prelude to obtaining a two-year teaching-training course in Leeds, George spent time as a student teacher at Old Fletton Council School. On several visits to see him he relayed to me a crucial lesson he provided on Oliver Cromwell. The headmaster admonished him for reading from a book and told him in future he should memorise the key passages. George often said that this salutary lesson emphasised to him the need to memorise the heavens and not rely on frequent reference to books and atlases. He finally gained his place at Leeds and quickly discovered that the college principal, Dr John Airey, also had a strong interest in astronomy and possessed a 4-inch refractor. George spent many hours in discussion with his principal stimulating his interest in astronomy still further.



A further crucial event in George's destiny as a great observer occurred on 1930 December 30 when he saw a magnificent fireball from Peterborough Town Bridge. He later found details of the Meteor Section of the British Astronomical Association and his brief report finally reached the Director, J. P. Manning Prentice, who invited him to a Section meeting in London on 1931 July 4. The death was announced of W. F Denning, who himself had found five comets and a nova. Grace Cook, a 90-year old member present at that meeting, who had never previously met George but had been an active observer with Denning, sensed that here was a young man who could make an impact in the tradition of visual discoveries. She urged George to follow in the footsteps of Denning whose last comet was found as long ago as 1894. It was this encouragement, coupled with his developing friendship with the meteor director, Manning Prentice, who himself was shortly also to make a major contribution in the study of novae, which was shaping his future role in astronomical history.

His initial observing programme was dedicated to the study of meteors and the Perseids of 1931 presented him with his first chance to study a meteor shower in detail. A 'two-station' approach with Manning Prentice (Stowmarket) enabled the team to study the height and track of such objects. Prentice did not favour stopping to plot them on charts and miss the next meteor so he encouraged George to memorise more than 1,000 stars as reference points and, with his early discipline in teaching, this seems to have been a major factor in his later successes. George often said that searchers of novae and comets should avoid frequent references to atlases but rely on their memory, in the first instance, to find the intruder.

On 1934 December 12/13 he had been meteor observing with Prentice but went to bed just after midnight. Later that night Prentice discovered a nova of first magnitude in Hercules and George often wondered whether he would have spotted it but for the necessity of sacrificing part of the night for the sake of his job. The nova, now designated DQ Herculis, and still regularly observed by members of 'The Association', was also highly significant, as it was later determined to be a binary star and greatly added to our understanding of such objects. George was later to be recompensed for the 'loss' of the 1934 nova when he found one in the same constellation in 1991.

After several years of sending in his meteor reports with much encouragement from Prentice, George finally joined the Association in February of 1936 and, in the same year, met his future wife, Mary Green. Whilst his meteor observations continued, (even through the time he was away in the war), he also devoted some time to drawing the planets and submitted drawings to the Association although was disappointed not see them appear in print.

In 1941 he qualified as a wireless operator and found to his delight that he was to be stationed at Polebrook, close to his home and Mary. They were married on 1941 June 7. During his service abroad in the Forces, he made an excellent drawing of the eruption of Vesuvius in 1944. Meanwhile, back home, Mary had selected a plot of land in Yaxley on which the house was later to be built which

would be the base of George's amazing astronomical achievements.

At the end of the war, George returned to teaching at the Old Fletton council school. His life-long interest in meteorology was always a key factor in his planning of observing sessions and he would spend half an hour each evening taking weather data by Morse. In November of 1947 George and Mary moved into the new house at Farcet, which they named, very appropriately, Antares'.

Although meteor observing had, until now, been his greatest passion in astronomy, in 1953 he resolved to try and find a comet. The memory of that BAA Meteor Section meeting of long ago and the fact that a comet had not been discovered from England since 1894, illustrated the considerable challenge ahead. Although by 1955 he had no success, he decided to widen his searches to also include novae, no doubt recalling his 'loss' of DQ Herculis in 1934.

In 1957 George became a Fellow of the Royal Astronomical Society, The Royal Geographical Society and the Royal Meteorological Society, which clearly illustrated his wide interests, which never ceased to amaze astronomers who imagined he only specialised in astronomy! During this period George was learning, in the most astonishing detail, star fields in the heavens. He often said that it was 'patterns' which he remembered and he hoped that if a 'new' star appeared, he would notice how they were distorted from their usual appearance.

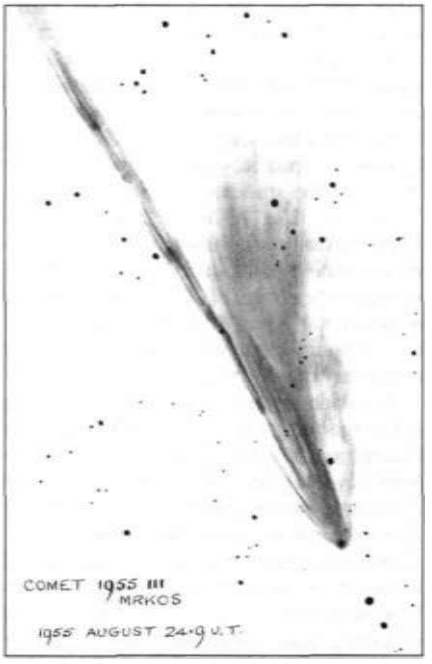
He received encouragement from Harold Ridley, Meteor Section Director of the Association and Reginald Andrews, director of the Variable Star Section. Tragically, he learnt from a telephone call to the school on 1958 December 20, that his wife Mary had suffered a serious fall at the front of the house. Then in January of 1959 another key event occurred when his brother, John Alcock, saw a large pair of 25x100 tripod-mounted binoculars at the London Boat Show and managed to obtain them on loan for George to try. He had used similar binoculars earlier but these were in better condition and were purchased at a bargain price. During the period that followed, George provided extensive care for his wife who was in and out of hospital with the after-effects of her fall, and made weekly trips to the surgery to collect painkiller tablets for her.

Just seven months after his brother John had spotted those binoculars in London, George swept up a comet in Corona Borealis on the night of 1959 August 25. The prediction of Grace Cook had been fulfilled; George had found his first comet, the first from Britain since 1894. There was tremendous pride and a sense of achievement when the Central Bureau for Astronomical Telegrams, then in Copenhagen, issued the circular confirming the discovery of Comet Alcock (1959e).

Remarkable though this discovery was, even more dramatic events were to follow. Great observers do not stop at the first achievement and put their feet up. In the early hours of August 30, just five days later, he noticed another comet! He carefully checked the nebulous object later for movement thus eliminating 'deep sky objects', a classic lesson for the modern astronomer. A further circular followed from Copenhagen, announcing his find as Comet Alcock (1959f).

As with many discoverers, George often said he found the inevitable intrusion of the media made him feel very uncomfortable. However the discovery of two comets in quick succession, and after a famine since 1894, was understandably a major news story and will surely go down as one of the most amazing achievements by a British amateur astronomer ever. Despite this extraordinary success, his mind still went back to 'DQ Herculis' and his heart was set on finding a nova.

On 1961 December 27, he received the Association's first Merlin medal for his achievements. He later went on to receive the Merlin again in 1972 and 1992. In 1963 the



Drawing by George Alcock of Comet Mrkos, 1955 III, from the BAA Comet Section archives. *(Courtesy J. D. Shanklin)*

Royal Astronomical Society awarded him its Jackson-Gwilt Medal for the comet discoveries. This spurred him on to find his third comet on 1963 March 19, designated Comet Alcock (1963b).

The group that was initially called *The Casual Astronomer and* later *The Astronomer (TA),* was formed in April 1964 by Jim Muirden and John Larard. George is recorded as the 8th member to join and by the second issue of its magazine in May of that year, he was a contributor. He once told me it was the rapid feedback aspect of the publication which appealed to him on the one hand, and also that anything unusual in the night sky was considered for publication. To this end George began an extensive cataloguing of star omissions from *Atlas Coeli* and regular lists were published in *TA.* His nova patrolling, with a newly acquired pair of 11x80 binoculars, was often hampered by confusing detail on star atlases where some stars were missing. Additionally telescopic meteor reports featured regularly in *TA* even though this aspect of his work was recognised by only a few.

In May of 1965 George Alcock was the first recipient of the annual award of *The Astronomer* with a £1 book token. In his response, George said: 'It is curious that I should receive this award for discovering objects which are purely of nuisance to an observer trying to discover novae.' Jim Muirden prophetically responded in his *TA* editorial: "Those who know his diligence, cannot doubt that he will one day reap the harvest he so richly deserves.'

The Central Bureau, which by now had moved from Copenhagen to the Smithsonian Astrophysical Observatory in Cambridge, Massachusetts, was again in action to announce another discovery by George, this his fourth comet designated Comet Alcock (1965h) which he found on 1965 September 26. Although M. P. Candy confirmed the new object, the comet subsequently attracted little attention or mention in the literature which clearly upset George. After all, he had then put in 1,154 nights on comet sweeping since he started in 1953. He was unlucky on 1966 October 15 to detect a possible comet in the form of a large faint diffuse patch near γ Ceti but later could not confirm it. Ironically the object had been photographed that same night in America and was designated Comet Rudnicki. He wrote to *TA* stating that he had no wish to make a late claim to the discovery, so he told no one for several months.

Despite the four comet successes to date, he had always hankered after that elusive nova and finally on 1967 July 8 he found a sixth magnitude star in Delphinus, which was not plotted on *Atlas Eclipticalis.* Incredibly Nova Delphini 1967 (now designated HR Del) was the first nova found from England since that key date in 1934 when his friend Prentice found the nova in Hercules after George had retired for the night.

There was no repeat of the muted response to his fourth comet. Now the world's press were reporting the extraordinary achievements of this observer from England. George also felt that all his hard work memorising the patterns of 30,000 stars in the Milky Way as a key part of his nova search strategy had finally paid off. As an added bonus the nova went on to display one of the most unusual and erratic light curves ever known, and

Harold Ridley, John Mason (President) and George Alcock at the presentation to George of the BAA Merlin Medal, 1992 June 20. *(Photograph: Alan W. Heath)*

remains a fascinating object of study by observers even today.

He was so inspired by this discovery and his quest for novae that it was surely only a matter of time before he found another. Brian Marsden, Director of the Central Bureau, often joked 'that one nova find might be a fluke' and it was clear George could never fall in that category.

On the morning of 1968 April 15, despite thin clouds and moonlight, he started observing at 3.15am and found a magnitude 5.6 intruder in Vulpecula. He was fascinated that this nova (LV Vulpeculae) had occurred so close to the place of Nova Vulpeculae 1670 (CK Vul) although later a connection was discounted. Roy Panther, a close friend and observer commented that George's achievements were unparalleled in the history of visual astronomy. For a brief period both of his novae were visible to the naked eye and one wonders if ever again a visual discoverer will witness such an event?

George continued to record star omissions from various atlases and on 1970 July 31 recorded one in Scutum. However on checking it again the following night, he noted it had faded by a magnitude. He at once realised that it was, after all, a nova and later it was announced as Nova Scuti 1970 (now designated V368 Sct). In 1976 George was co-recipient of the Walter Goodacre Medal presented by the Association.

My personal greatest regret was not to have had contact with George until the early 1970s when my own interest in serious observing developed, and thus I missed some of his greatest achievements. However I quickly realised that when the distinctive telephone call came through: Alcock here. I think I have found a nova in Vulpecula', then this could hardly be a false alarm. To this day I have the original telegram from Brian Marsden, sent via Paris, on the wall of my office describing his detection of his fourth nova on 1976 October 21. It was found in the 'Coathanger' group of stars and I still use slides of this event taken by Peter Birtwhistle as a modern classroom exercise for students to try to find the nova. The only difference is that George had to search the whole Milky Way and the students have only to check Vulpecula! The AAVSO Director, Janet Mattei, arranged for him to receive a plaque in recognition of his nova discoveries. There seemed to be no sign of George slowing down as he regularly sent me extraordinary statistics of hours spent searching which others could only dream about.

Accolades continued to arrive culminating in George being asked to attend Buckingham Palace on 1979 February 7 to receive the MBE. In 1981 he received the International Amateur Achievement Award of the Astronomical Society of the Pacific.

Whilst George's main pre-occupation was to find those elusive novae, he continued to look out for comets and on 1983 May 3 whilst observing from inside the house through a double-glazed window at the top of the stairs, he found his fifth new comet. When George rang me to seek confirmation, I well recall his excitement that this comet was virtually overhead and we speculated as to why it had not been found before. He described it as of magnitude 9 so I went out with 15x80 binoculars expecting to see a small faint object. To my horror I could not see anything. Then, a few moments later, I realised that I was looking at an extremely large but diffuse nebulous patch of about one degree diameter, and reduced the magnitude to about 6.5. Every comet observer knows how hard such diffuse objects can be to detect so how could he have spotted it without prior knowledge? The answer was another endorsement of his phenomenal skill. Our report was the first to reach the Central Bureau with accurate coordinates but eventually George shared his find with others and it became known as Comet IRAS-Araki-Alcock (1983d), famed for being the third closest approach to the Earth by a comet in recorded history.

1985 saw George carrying out another of his projects in which he checked existing novae for possible recurrent outbursts. On January 30 he noticed the recurrent nova RS Ophiuchi was in outburst. 1991 was to be a special year for George when, on 1991 March 25 he found a nova in Hercules. Not only was this a discovery from indoors with 10x50 binoculars, but it was also remarkable because he used his considerable knowledge of meteorology to plan his nova hunt in the early hours just before dawn. It had been cloudy virtually all night and one wonders who else would get up an hour before dawn to use this narrow time slot of clear weather? By the time Denis Buczynski confirmed the nova the sky was so bright only Deneb was visible to the naked eye. The nova was later designated V838 Herculis and displayed one of the fastest declines on record, illustrating how much science can be gleaned from discoveries by dedicated amateurs such as George.

Sadly, soon after this nova, George's wife Mary died on 1991 October 25. No further major discoveries were recorded. However he continued to send me many letters with fascinating details of his continued vigils of the night sky and progress in his other hobbies. As recently as 1995 May he reported that he had clocked over 124 hours patrolling in the preceding six months. On top of this his 'Nature News Sheets' issued had reached 190 and coloured cloud pictures around 690. He ended his letter by saying that there remained a faint chance he could make another discovery but opposition was increasing in the form of photography and CCDs.

Throughout all this time, the civic officials of Peterborough had not realised that a famous astronomer lived in their midst. Finally, on 1998 March 24, the newly appointed mayor, Yvonne Lowndes, arranged for a civic reception to be held at the Town Hall. The writer was privileged to attend this moving event and later to sit beside George at the hotel reception when we discussed his achievements. His memory recall of precise details of each discovery was astonishing.

George Alcock's extraordinary dedication to observing will always serve as an inspiration to others to search the heavens, whether visually or by imaging, for those elusive new objects.

Guy M. Hurst

1 Williams K., *Under an English Heaven: the Life of George Alcock,* Genesis Publications, 1996 (ISBN 0 904351 55 6)