



Obituary

Andrew John Elliott, 1946–2010

Andrew Elliott passed away at the early age of 64 on 2010 November 28 after a long and brave fight against cancer. Acknowledged by most as the leading UK amateur observer of occultations and other short-lived astronomical phenomena during the past 30 years, his loss was particularly sorely felt by his many friends and colleagues throughout the country as well as across Europe and the USA.

Andrew was born in York on 1946 March 10, the only child of Bob and Edna Elliott. Following a three-year spell at Heathfield Preparatory School in Ripponden, he began his education at Arnold School, Blackpool, where he continued his studies until the age of 18. As a youngster he had many interests including bird watching, hill and mountain walking, cycling, travelling, and archery. He acquired his first telescope as a birthday present at the age of 9. In his teenage years he learned to play the organ at the Methodist Church Youth Club in Blackpool. When 15, he and a friend undertook an extensive cycle tour through the Lake District and the Scottish Highlands to reach John O'Groats. With his father following a career in the Police Service, Andrew lived for a time in York, Wakefield, Barnoldswick, Halifax then Blackpool.

He won a place at the University of Edinburgh where he attended The Royal (Dick) School of Veterinary Studies from which he graduated as a Bachelor of Veterinary Medicine and Surgery (University of Edinburgh), entitling him to call himself BVM&S & MRCVS. He joined the Edinburgh University Mountaineering Club, with whom he had various escapades climbing in Glencoe and the Ben Nevis areas. One trip to the top of the Pentland Hills near Edinburgh was made after a night out at the 'pub'. He told his climbing friends that because it was a clear sky he would sleep out under the stars with just a sleeping bag inside a plastic bivvy sack. Although feeling the cold, he just had to see it through, so by dawn he was frozen to the marrow and covered in snow!

His first job in 1970 was at Aberaeron in Wales where he stayed until he joined the State Veterinary Service, after which he moved to North Leeds. His work as a vet involved animal welfare on farms, in particular, throughout much of Yorkshire including Swaledale, Coverdale and Wensleydale, which meant a lot of driving. He worked alongside a fellow vet named Brian Sinclair, who with his brother Donald was a colleague



of a certain Alf Wight, better known through his pen name as James Herriot, the author of a popular series of books written during the 1970s which was later used as the basis for the television series *All Creatures Great and Small*. The characters of Siegfried and Tristan Farnon were based on Donald and Brian Sinclair. Were any of the other characters depicted in the many James Herriot books possibly inspired by Andrew himself?

Some aspects of work as a vet can be particularly arduous especially those involving epidemics when he would spend day after day 'putting to sleep' the animals. Andrew was tempted by a change of career, possibly in Information Technology thereby extending his computing skills in astronomy. In late 1987, he was able to take a job with the Ministry of Agriculture, Fisheries & Food in the London area, and lived in Reading for many years. Much later an alternative, more attractive option came his way: he was able to take early retirement, fortunately a year or so prior to the terrible out-

break of foot and mouth disease in 2001.

Astronomy was a lifelong passion. On 1957 August 24, whilst living in Ripponden, Andrew made his parents promise to wake him later in the night. Afterwards he wrote in his diary... 'I am 11 years old and this is the most exciting night of my life. I have seen a new comet!' This was his reaction to seeing Comet Mrkos (1957 V). He joined the Leeds Astronomical Society in the 1970s and became interested in grazing lunar occultations about 1978. He was elected a member of the BAA on 1979 January 31 and was soon giving talks at BAA meetings and local societies. Whilst living in Leeds, he was numbered amongst the very first members of the Terrestrial Planets Section, Minor Planet Group, formed in 1981, prior to its becoming an observing section in its own right.

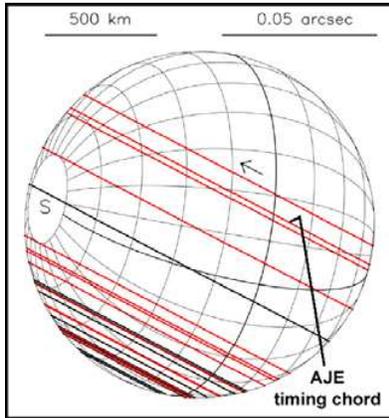
At the Lunar Section meeting of 1984 October 27 held at Greenwich, Andrew gave a talk on the prediction of occultations using a microcomputer, an account of which was reported in the *Journal* (vol. 95, p.132, 1985). He was Secretary of Leeds Astronomical Society in the 1980s and in 1984 assisted with the 125th anniversary of the founding of the society. Following his move to Reading he became a keen, active member and organiser at the Reading Astronomical Society, where he often helped with that society's functions, and showed his astronomical videos at public star parties. He became Occultation Assistant to the then Director of the Asteroids & Remote Planets Section, Andy Hollis, in 1990 and a little later to the Lunar Section. He encouraged amateurs to undertake expeditions to

observe grazing lunar occultations and to take part in asteroidal occultation observing campaigns, and with the help of Edwin Goffin contributed worldwide predictions of asteroidal occultations for the *Handbook*.

Following his retirement, Andrew joined the Blackpool & District Astronomical Society after moving house to Warton, Lancashire, at which point Reading AS made him an honorary life member. In 2000, he was awarded the Merlin Medal and Gift of the BAA – see photo above. He had been a major con-



In the early 1970s not far from Burlington House, Piccadilly.



The shape of Uranus' satellite Titania derived from 27 timing chords, most of which were secured by professional observatories across the world. Andrew's own timing result is indicated.

tributor to the Meteor, Lunar and Asteroids & Remote Planets observing sections of the Association.

Andrew's astronomical interests involved computing (used for lunar and asteroidal occultation predictions and determining lunar limb profiles); low-light imaging using several generations of image intensifier; video recording (both vidicon and CCD); precision timing of astronomical phenomena (GPS and time insertion from standard radio-time signals); meteors and fireballs; occultations involving a range of small solar system bodies; and solar eclipses. With the total eclipses of 1973, 1991 and 2009, he completed a dream of seeing and studying the three latest eclipses in the same Saros cycle. He was determined to view the third eclipse from China in 2009 July and to make this possible, his doctors postponed treatment for prostate cancer until he returned home. Andrew was remarkably steadfast and philosophical about his illness. In a private e-mail sent in 2008, he remarked 'I'm reasonably OK with it personally – someone has to draw the short straw, and I'm stoical – I can view it from the outside with scientific interest and detachment': a fine example of true northern grit and resolve!

His courage may well have stemmed from his experiences as a rock climber in the Scottish mountains during his youth. One of his climbing companions during his time at university was from Orkney, so the climbing group he was part of became known as the 'Honorary Orcadians'. Indeed, he made several journeys to the islands, the last time in 2008 when he was invited to take part in the Orkney International Science Festival. He gave a talk on the island of Hoy and another in Kirkwall. This was followed two months later when he repeated the long journey from near Preston to speak at the Highlands Astronomical Society as part of the Highland Science Festival, and a few days later to

Moray's Astronomy Club, SIGMA: his second visit to the venue near Elgin. Andrew also made several visits to the Scottish Astronomers' Weekend over the years to speak on the subject of video astronomy, and obviously inspired several observers since asteroidal occultations have been seen and timed by members of Dundee and the Highlands Astronomical Societies.

One of his favourite meals was fish and chips, with both Harry Ramsden's (in Guiseley) and Bryans (in Headingley) in North Leeds being very high on his gourmet list of quality. It was a delight eating out with Andrew not only because he nearly always insisted on paying the bill, but also in that he was good company and often introduced folk to 'interesting' drinks. On one occasion during the 2009 eclipse trip to China, the group's hotel didn't have a bar, but Andrew discovered that you could go over the road and bring in bottles from an 'Open All Hours' shop run by an elderly couple and their family. He duly procured a few bottles and sat with colleagues in the hotel foyer having a very relaxing time discussing observing projects and future plans.

Andrew's energy and generosity also extended to assisting in organising meetings. In 1997, with Bert Carpenter, he organised the 16th European Symposium on Occultation Projects (ESOP XVI), the annual meeting of the European Section of the International Occultation Timing Association (IOTA-ES), held on that occasion at the Royal Greenwich Observatory, Cambridge on 1997 September 5–10 (*Journal*, vol.108, p.116, 1998). It was a bitter blow to Andrew when Bert died from a heart attack in January the following year. Bert had been providing grazing occultation predictions to UK observers and it was Andrew who picked up the baton, supplying these predictions in time for publication in the 1999 *Handbook*.

Whilst in good health he attended annual ESOP meetings in various European countries and was a highly respected member of IOTA, often being asked to chair the proceedings; his qualities of being fair, kind and having an eye on efficiency with respect to time were perfect for these events. In 2010, he was a key adviser and instigator of ESOP XXIX held at the University of York (see page 173 of this *Journal*). Andrew was not well enough to attend the meeting in York, but he remained actively involved in its organisation and later enjoyed watching this writer's video recordings of the Symposium.

A friend of Sir Patrick Moore, he appeared on the long running TV series, *The Sky at Night*. Patrick often showed highlights of Andrew's videos of meteors and fireballs on his programme. His observations were also reported in *The Astronomer* magazine and presentations given at its annual meetings.

Andrew's video recordings of asteroid events took him to various parts of the UK and abroad, many having been successfully captured. On 2001 September 8, he travelled to David Strange's observatory at Worth Matravers in Dorset, where he successfully recorded a 73-second occultation of a 7th magnitude star by Uranus' satellite, Titania, even though the event took place at an altitude of just 11° above a sea horizon. Terry Platt and Chris Hills also recorded the event from the UK together with many other observers in Europe and the Americas. Andrew's timing chord, with 26 selected others (his being the only one from the UK), was used to determine the exact shape of Titania to an accuracy of about 600 metres, i.e. 3 times better than measurements made from close-up images taken by the *Voyager* spacecraft some years earlier (see profile diagram). The results were reported by Bruno Sicardy *et al.* in the journal *Icarus*, of which paper Andrew was a



**Pope Silvester II's
Astronomical Observatory
in Bukowiec**

To:
Andrew Elliott Family
and co-workers from BAA

Bukowiec - Poland
30th of November 2010

We were disturbed and saddened by the untimely death of our friend Andrew Elliott.
We will always remember Andrew as our friend and indefatigable occultation observer and astronomy enthusiast.

Our thoughts are with You all at this most difficult time of loss.

On behalf of Pope Silvester II's Astronomical Observatory staff



Paweł Maksym
Observatory Coordinator

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A tribute from Pawel Maksym and colleagues in Poland

co-author (*Icarus* vol.199, p.458, 2009).

Though seriously ill at the time, he was very satisfied when on 2010 February 20, with six other observers in the UK he managed to make multichord timings of an occultation involving the minor planet (130) Elektra: the most successful UK coverage to date and one of the highlights of the ESOP XXIX meeting held later in the year.

His paper entitled 'Video observations of the Geminid meteor shower in 1990', with Neil Bone (*Journal*, 103, p.181, 1993) was a

milestone in modern meteor observation. He attempted to monitor every major annual meteor shower and contributed valuable data for the analysis of meteor streams. His precision timings of the appearance of bright meteors have made a significant contribution to the work of the late Steve Evans *et al.* in the determination of meteoroid orbits, which have been accepted by the IAU Meteor Data Center.

On 1989 July 3, Andrew successfully recorded the occultation of the star 28 Sagittarii by Saturn's satellite Titan, and captured the central flash. In 1991, he made a video recording of the total solar eclipse from Baja California including audio time signals. He recorded numerous lunar occultations and also monitored the six-yearly mutual eclipses and occultation phenomena of the four galilean satellites of Jupiter. His Jovian satellite timings have been published in *Sky and Telescope*. He imaged and timed dozens of Leonid and other meteor showers, often working into the small hours of the night. More recently he wrote software to scan video tapes for the automatic detection of meteor trails in images.

Andrew presented talks on video astronomy to many local astronomical societies and pro-am events throughout the United Kingdom and overseas, and was often seen at BAA and other meetings surrounded by amateurs wanting to ask his advice. His telephone, e-mail and written correspondence almost invariably involved answering worldwide requests for information and assistance on low-light imaging. He had encountered and overcome virtually all the pitfalls during his long computing and observational career, and was keen to share his experience. Through his creative use of wide-angle lenses, image intensifiers, video cameras and video recorders he produced quality work of true scientific value. Indeed, all aspects of his activities, instrumentation, computations and presentations were undertaken

in a thoroughly professional manner. Through his enthusiasm and unstinting advice over many years, Andrew has inspired many amateur astronomers to adopt new technology in their quest for better results. He will long be remembered.

Andrew's funeral took place on 2010 Dec 8 at Lytham, not far from his home alongside the Ribble Estuary: it was attended by more than 100 friends and relations, many of them from the fields of astronomy and veterinary medicine. Unfortunately England was in the grip of severe winter weather at the time so many others were not able to attend. We received around 30 messages of condolence

from Andrew's friends across Europe and the States including many tributes to his memory (see for example that from Pawel Maksym). These were collated and printed so that they could be presented to Edna, his mother, after the funeral ceremony – she was greatly moved by everyone's kindness.

I would like to thank Melvyn Taylor, Valerie Carroll, Len Entwisle, Peter Franklin, Dave Gavine, Bill Leslie, Alex Pratt, Bruno Sicardy, and in particular Edna Elliott, for all of their contributions and invaluable assistance in compiling this obituary.

Richard Miles

New members

The British Astronomical Association cordially welcomes the following new members:

Elected 2010 November 20

BADMAN Samuel, Lyme Regis, Dorset
BAINBRIDGE Andrew, Winchester, Hants.
BALLANTINE Angus, Huntingdon, Cambs.
BENNETT-WOOLF Jacob, Brighton, E. Sussex
BITTNER Christoph, Hemel Hempstead, Herts.
BRAGA Raffaello, Milan, Italy
BYWATER Mark, Cromer, Norfolk
BYWATER Nathan, Cromer, Norfolk
CLARK Lawrence, Chiswick, London W4
CREED Dudley, Barnstaple, Devon
CRICK Eddy, Merchtem, Belgium
FOSTER Clyde, Centurion, South Africa
GILLAM Patrick, Lambeth, London, SE5
GRANSLO Bjorn, Fjellhamar, Norway
HARDWICKE Noah, Crickhowell, Powys
HARRINGTON Jeanette, Barnstaple, Devon
HEATHCOTE David, Bournemouth, Dorset
HENDERSON Kenneth, Dollar, Clackmannanshire
HINTON William, Dorchester, Dorset
HOPKINS Richard, Llandudno, Conwy
HOWES Nicholas, Cherhill, Wiltshire
HUGHES Karen, Livingston, West Lothian
IRELAND Matthew, Ffordd Bryniau, Denbighshire
JERRAMS-SMITH Jennifer, Bournemouth, Dorset
JOLLY Glenn, Arizona, USA
JONES Alex, Hitchin, Herts.
KENNEDY Ian, Paisley, Renfrewshire

LEITH Ryan, Lerwick, Shetland
MELVILLE Iain, Rickmansworth, Herts.
MILLARD Jenifer, Barry, Glamorgan
MORAN Tom, Whitley Bay, Tyne and Wear
NIXON Janice, Kidderminster, Worcs.
NIXON Francis, Kidderminster, Worcs.
PARKER Simon, Halstead, Essex
POLAND Raymond, Farnborough, Hants.
POMFRET Norman, Ross-on-Wye, Herefordshire
PRESTWICH Adrian, Exminster, Devon
RAJAH Mahmood, London, SW16
RANDALL Mark, Market Rasen, Lincs.
RANDALL Judith, Market Rasen, Lincs.
RANDALL Paul, Market Rasen, Lincs.
RATCLIFFE Robert, Rugby, Warwicks.
RUDOLPH Michael, Maryland, USA
SHEAFF Graham, Crondall, Surrey
SMITH Michael, Christchurch, Dorset
TAIT Kelly, Livingston, West Lothian
TINNING David, Market Bosworth, Leics.
WHITEHEAD Simon, Broadway, Worcs.

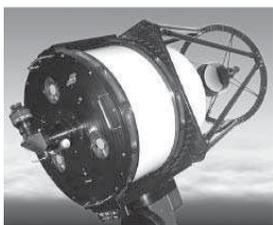
Elected 2010 December 11

CRACK Nalini, Bristol, BS4
DOWER Liam, Ely, Cambridgeshire
GRIFFANTE Augusto, Vicenza, Italy
HEDGES Lynsey, Wandsworth, London, SW18
INGLIS John, London, SE15
JELF Robert, Andover, Hants.
LONERAGAN Damian, Southend on Sea, Essex
O'CONNELL Bob, Florida, USA
WALTON Jay, Cambridge, Cambs.

...continued on page 180

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