



Obituary

Cmdr Henry R. Hatfield, 1921–2010

By the death of Commander Henry Hatfield, at the age of 88, the BAA has lost one of its most respected members. He was equally outstanding as an observer, a technician and an administrator; he concentrated upon astronomy following a distinguished naval career; and though he maintained his amateur status, his work was of the highest professional standard.

Henry Roland Hatfield was born on 1921 August 27 in Calcutta, where his father was concerned in an empire trading company. Returning to England, he was educated at Dulwich College. His family had naval connections – for instance, Andrew Hatfield served in Nelson’s fleet, on the *Inflexible*, and it was no surprise when Henry chose a naval career. He joined the monitor *Erebus*, used as a training ship in Portsmouth, in 1938, just three days over the age limit of 17 for cadet entry, and as soon as war broke out was appointed a midshipman on the battleship *HMS Malaya*. It was not long before he had his first experience of enemy action, and at short notice and with very little training found himself directing gunfire. During the bombardment of Genoa in February 1941, he mistakenly directed an armour-piercing shell into the twelfth-century cathedral, but it failed to detonate and may be seen to this day in the south-east corner of the nave.

For the rest of the war he specialised as a navigator in various areas; then, in 1944 he joined the hydrographic branch. Over the next decade he took part in surveys ranging from Cyprus, to Oman, Fiji and the Solomon Islands. From 1956 to 1963 he commanded three survey ships. He was then asked to update



the *Admiralty Manual of Hydrographic Surveying*, and when this was finished in 1969, the *Manual* was not only updated, but improved beyond all recognition, becoming the standard textbook for chartmakers. Between 1969 and 1974 Henry was seconded to Naval Intelligence, making a study of ships’ hulls in the fleets of the Soviet and Warsaw Pact. After officially retiring from the Navy, in 1974, astronomy became an absorbing interest, and in particular he paid great attention to the Moon.

I like to think that I had something to do with this. Henry was very happily married, and with his wife Susan and family (eventually, five sons and two daughters) was living at Sevenoaks in Kent, not so very far from my then home at East Grinstead. Out of the blue, he telephoned me one day and asked if he could come over to see my observatory. He came to dinner that evening; the sky was clear and I think we finally closed my dome as dawn was breaking. That was the start of a friendship which proved to be permanent.

Henry had already made small telescopes, but now produced something larger – a Newtonian

with a 12-inch (30 cm) mirror, a telescope equal to any professional and much better than most. He also built an excellent observatory. Very rapidly he became well known in scientific circles, both for his observational skills and as an excellent lecturer and broadcaster on both radio and television. In 1968 he published his *Photographic Lunar Atlas*, showing each area of the nearside of the Moon under varying conditions of illumination and libration; it was an immediate success, being quickly recognised as one of the finest atlases available for use by visual lunar observers. It has been reprinted twice, and in its latest edition (revised and extended by Jeremy Cook, former BAA Lunar Section Director) it is still in print. The photographs were all taken at Sevenoaks, and the clear format of Henry’s 16 maps and 88 photographic plates is especially suitable for use with a moderate aperture telescope. I think I can claim to know the Moon fairly well, but the Hatfield Atlas was always within my reach during an observing session.

Henry then turned his attention to the Sun, and constructed a spectrohelioscope, using a succession of mirrors to direct the Sun’s rays into the recording equipment in the basement. This device was used to observe areas of the solar surface at defined wavelengths, particularly hydrogen-alpha, enabling him to observe filaments, prominences and flares in great detail. It was indeed fascinating to see how, by adjusting the wavelength knob by just 0.5nm, one could tune in and out of features on the solar disk, thereby revealing their motions towards or away from the observer. Then Henry decided to move house (in the same Sevenoaks road) and had his new home designed around his spectrohelioscope – something that has certainly not been done either before or since!

To increase the scope of his solar observations, Henry taught himself the principles of radio astronomy, building all his own receiving and recording equipment to monitor bursts of solar radio noise and correlate these with the general level of solar activity. The outputs of his two radio receivers were fed to two paper roll plotters which were also home-built. His solar work became known internationally, and some people recorded it as even more valuable than his lunar cartography, though in this respect I admit to being prejudiced.



In his observatory in 1985. Photo by Richard McKim.



We went on several BAA solar eclipse expeditions, and, believe me, they were great fun as well as scientifically useful. Two eclipses were observed from ships, and I well remember a deck game of quoits between the BAA and the RAS. At one stage the BAA team was losing, but calm, careful play by Commander Hatfield saw us through to victory. On the 1973 expedition aboard the ship 'Monte Umbe' to view a total eclipse off the coast of Mauritania in West Africa, Henry constructed a stabilised platform for his camera, mounting the whole assembly on gimbals to compensate for the motion of the ship.

There is another episode which must be briefly reported. The 1986–1987 session had been a very difficult one for the BAA Council and it was clear that changes needed to be made. Henry Hatfield was – reluctantly – persuaded to be a candidate in the Association's one and only contested Presidential election. He was returned by a narrow majority, and spent the following months in putting matters right. By the end of his own first term as President (1987–1988) the situation was back to normal, but without Henry's firmness, tact and clear thinking the outcome might have been very different.

On retiring as President in 1989, Henry took over as BAA Treasurer from Lionel

Mayling – who wished to step down from Council – but Henry persuaded Lionel to stay on as his Assistant. They spent many hours on the telephone discussing potential investments for the BAA and how best to rationalise the accounts in order to put the Association on a really firm financial footing. This they achieved and in 1993 they were jointly awarded the Lydia Brown Medal and Gift in recognition of this most important work.

During his terms as President and Treasurer, Henry oversaw the setting up of the BAA's first computerised database of membership records and subscriptions, writing many of the programs himself. His work, over many years, helped to ensure that the day-to-day office procedures from the printing of address labels for the *Journal* to the maintenance of accurate membership records and the collection of annual subscriptions were all carried out in a timely and efficient manner.



Henry Hatfield (on right) with Patrick Moore, Alfred Curtis and J. Hedley Robinson, taken at the Winchester weekend in 1975. Courtesy Dr Richard McKim.

Henry continued his solar work until well into his eighties. He died peacefully at his Sevenoaks home on 2010 April 1, deeply regretted not only by his family but also by his colleagues all over the world. A great Naval officer, a great astronomer, and – perhaps above all – a great friend. He will not be forgotten.

Patrick Moore

(Additional material supplied by Dr John Mason).



Two images by Henry Hatfield from the *Photographic Lunar Atlas*. Left: Proclus to the Alpine Valley, Mare Serenitatis; Right: Birt to Albategnius.