

I first met Ron in the early 1980s at a meeting of the British Astronomical Association in London. I was a very inexperienced astro-photographer and was in awe of Ron's photographs of astronomical objects. He was very patient with me and we talked for a long time. This quiet and unassuming man was one of the great astro-photographers of his generation.

Ron's death came as a great shock to everyone who knew him but the loss is so much greater for Pat. They have been together for almost 60 years and all that time Pat has been the bedrock which has supported Ron's single-minded astronomical ambitions.

In his early life Ron was a keen biker and, as we shall see, his experiences dismantling and rebuilding motorbikes would come in handy as he started to apply the same skills to telescope building.

Ron worked as a micro-photographer at the University of Southampton but at home he applied his photography skills to obtaining exquisite images of the night sky. He set up an observatory named after the renowned astro-photographer Walter Pennel at his home in South Wanstons. He equipped this with a very high quality 16-inch telescope that he had designed and built himself.

In fact, much of Ron's success was down to his extraordinary attention to detail and his considerable mechanical skills. In the early 80s he built a camera which used dry ice to cool photographic film to very low temperatures. This was a technique pioneered by Ron's Canadian friend Jack Newton but Ron added his own modifications to improve the design. This allowed him to go much fainter than most other astro-photographers and it opened up many exciting areas of research in the days long before digital imaging.

In 1985 Halley's comet was heading back towards the Sun after 70 years in deep space. It had been detected by professional astronomers using the 200-inch Mount Palomar telescope in 1982 but no amateurs had yet picked it up. There was a great competition between UK amateurs to see who would pick it up first. Unfortunately, the comet would be faint and low down behind trees from Ron's observatory so, with his normal level of determination, he dug the telescope up and shifted it to the other end of the garden. He used his unique cold camera and an early computer-controlled mount to improve his chances of picking up the comet. All of this was demonstrated when Patrick Moore visited South Wanstons for an episode of the Sky at night, although I understand that the computer-controlled mount was not working well so Alan Dowdell pushed the telescope around manually just off camera. Nobody watching the TV broadcast would have noticed.

As usual, Ron's photos were of stunning quality but he was beaten by just a few hours by his great rival, Alan Young, who was using an even larger telescope. Ron was disappointed but they both had a great deal of respect for the other's skills.

After Halley, Ron decided to apply himself to a whole new challenge. He started searching for supernovae. These are stars in distant galaxies that have reached the end of their life and which explode, temporarily becoming bright enough to be detected from the Earth. These objects are very important scientifically and astronomers were very keen to find them. The basic approach is to take images of as many galaxies as possible each night and compare these images against a library of old ones to see if a new object is present.

Ron started this search in the era of photography but the limitations of this approach were quickly apparent. He could only photograph a few dozen galaxies a night. In the early 90s the digital imaging revolution arrived and film was replaced by much more sensitive CCD sensors. Ron embraced this technology being one of the first adopters of Terry Platt's SX CCD camera. He also used software from David Briggs to help automate the process and bought a commercial telescope to replace the 16-inch since it could slew faster and more accurately to take images of more galaxies each night. In true Ron style this commercial telescope was completely stripped down and rebuilt so that it conformed to his exacting quality standards. With this new system Ron could take images of 1000 galaxies on a good night. His attention to detail meant that he would be able to detect objects that were much fainter and nearer to the centre of the galaxy than others could do.

His first discovery came in 1998 and it was a suitable reward for his outstanding hard work. By 2016 he had discovered over 40 objects, many of which were confirmed as supernovae. His total discovery and co-discovery count of all types of object is approaching 50. An amazing achievement, ranking at third place in the UK after two other very accomplished observers, Tom Boles and Mark Armstrong, both of whom had taken their inspiration from Ron.

Ron was a Vice President of the British Astronomical Association, a long-term Council member, the founder and past director of its Deep Sky Section, and a director of its astrophotography section. He was also a founder and past Chairman of the Campaign for Dark Skies. In 2008 he was awarded the Association's most prestigious award, the Walter Goodacre Award, for his remarkable astronomical achievements. None of this would have been possible without the support of Pat. This support extended to allowing Ron to work on telescopes and mounts in their living room, encouraging Ron

to spend money on the best equipment available and actively supporting him during his long hours at the telescope. Ron's supernova discoveries were Pat's too.

Pat and Ron's parties at South Wonston were the stuff of legend and could be rather riotous affairs bringing together famous and not so famous astronomers and friends. All of these were documented in their fascinating visitors' book.

Ron was still observing at age 79 and had just bought a new telescope to make his searches even more efficient. Sadly he never got to use it.

He was a man of great determination and an inspiration to many within and outside the astronomical world. We will all miss his company and his dry sense of humour and his emails documenting his latest plans including photos of the insides of mounts and telescopes. I will miss our friendly arguments about the best kind of camera to use or the best way to use a particular telescope. Ron always had an opinion and most of the time he was right.

Pat and Ron were a devoted couple and Pat's loss is huge. I hope that it is some comfort to know how much Ron was admired and respected amongst his astronomical friends. He will be very sorely missed.