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## JOHN PHILIP MANNING PRENTICE: 1903–1981

John Philip Manning Prentice was born on 1903 March 14 at Stowmarket, Suffolk, and was educated at Gresham's School, Holt, in Norfolk. After leaving school he decided to enter the legal profession and was articled to his father in his practice at Stowmarket. At the Law Society's Honours Examination in 1925 June he was placed in the first class and was awarded the coveted Clements Inn prize. He entered the family practice and continued to practise at Stowmarket and later at Needham Market until shortly before his death on 1981 October 6.

While still at school his interest in astronomy was aroused by becoming acquainted with Miss A. Grace Cook who was then the Director of the Meteor Section and living nearby in Stowmarket. He was elected a member of the Association on 1919 November 26 and on the retirement of Miss Cook was appointed Director of the Meteor Section in 1923. From then until 1954 he directed the work of the Section with great ability and enthusiasm.

In the early years of his directorship, being dissatisfied with W. F. Denning's methods of determining meteor radiants, he investigated new methods of recording meteor paths and, in particular, decided in 1929 that two-station observation of meteors was the only reliable way to determine the radiants of the minor meteor streams. This method required at least two dedicated observers prepared to make long watches and clear sky at both stations, a combination not easily attained. For this work he found a willing and very able co-observer in G. E. D. Alcock, and with other members of the Section a great many true paths and radiants were obtained which would not have been possible from a single station. One of the first results of Prentice's observational work was the discovery of the Giacobinid meteor shower in 1926 October. Previously, in 1915, the Rev. Dr M. Davidson had predicted that a shower of meteors might be



J. P. M. Prentice in 1934, using an aircraft navigating machine for converting RA and dec. into azimuth and altitude.

expected from Comet 1900 III, Giacobini which passed close to the orbit of the Earth. No such meteors had been observed prior to 1926, but observing on October 9 of that year Prentice saw and recorded a number of meteors coming from a radiant in the north-west sky which, on plotting their paths, was found to be close to that predicted by Dr Davidson. The identity of these meteors with the comet was finally confirmed on 1933 October 9 by the great meteor shower of that date.

Between the years 1928 and 1933 Prentice, with other members of his Section, carried out a series of observations of the Orionid meteors, which appear in October each year, to investigate the claim made by Denning that the radiant was stationary. Their observations showed that there were, in fact, four subcentres of radiation all in eastward motion, with each coming to a maximum on the same meridian of right ascension, thus explaining the apparently stationary radiant. These results were communicated to the Association in three masterly papers in the *Journal* in 1933, 1936 and 1939.

Other meteor showers investigated by Prentice included the Geminids, Leonids, Perseids and Quadrantids. In 1937 he was given a grant from the Leverhulme Research Fellowship to assist his work on meteors, and with this he went to Madeira to investigate the  $\eta$ -Aquarid meteor stream.

It was during an all-night watch of the Geminid meteors on 1934 December 12 that Prentice discovered Nova DQ Herculis. At that time, owing to the town lights of Stowmarket, he used to go to Battisford, some 6½ km out of the town, to get a dark sky. From there on December 12 in the early evening, in conjunction with Alcock who was observing at Peterborough, observations were commenced and many Geminid meteors were recorded. Feeling the effect of fatigue on his observations at 16h 30m he took a short stroll before recommencing. Turning towards the north-east he had not taken more than two or three paces before he saw "that there was something very definitely wrong with the head of Draco". Immediately recognizing the presence of a bright nova, Prentice at once returned to Stowmarket and telephoned the Royal Observatory to announce his discovery in time for a photograph of the star's spectrum to be taken before dawn. Having notified Greenwich he returned home to continue observing the Geminids until dawn, such was his enthusiasm for meteor observing.

DQ Herculis proved to be an important nova and Prentice's discovery was recognized by his being presented with the D. B. Pickering Gold Medal of the American Association of Variable Star Observers and the Walter Goodacre Gold Medal of the BAA.

The Second World War ended the two-station observation of meteors but it was restarted in 1946 with an enlarged team of observers. It was, however, becoming obvious to Prentice that new instruments and

techniques, in particular the Baker-Schmidt cameras and radar, were beginning to replace visual methods of observation. Prentice was, however, to play a vital part in the development of radar in meteor research.

Early in 1946, Sir Bernard Lovell, working at Jodrell Bank with two ex-Army trailers of radar equipment, observed many short-lived radar echoes on the cathode-ray tube which he was told were probably associated with meteors. Having heard that Prentice was the authority on meteors he invited his help. Accordingly, Prentice went to Jodrell Bank to conduct simultaneous visual and radar observations to solve the problem. It was soon apparent that there was a clear connection between the meteors he saw and the radar echoes appearing on the cathode-ray tube. Proof was finally given when, at the maximum of the Giacobinid meteor shower in 1946, up to 10 000 meteors an hour were recorded by radar as against the normal 20-30 per hour of non-shower meteors. Subsequently, Prentice collaborated with Lovell on most of the major showers thus establishing this new technique. For this work Prentice was awarded the honorary degree of Master of Science by the University of Manchester and the Hannah Jackson-Gwilt Medal of the Royal Astronomical Society of which he had become a Fellow in 1935.

With the introduction of photographic and radar techniques Prentice felt that the visual observation of meteors had lost its importance and he decided reluctantly that in the future his life's work lay in other directions, namely in the service of the Stowmarket Congregational Church and the Boys' Brigade rather than in some other branch of astronomy. He had been an officer of the Stowmarket Company of the Boys' Brigade since 1926 and had a wonderful gift of working with boys upon whom his Christian witness had great influence for good. In 1934 he was made Captain of the Stowmarket Company and later, in 1967, Captain of the neighbouring Needham Market Company, an office which he held until 1975.

The welfare of the Stowmarket Congregational Church was very close to his heart and he gave devoted service to it by being its Secretary from 1954 to 1968, during which years he was instrumental in the rebuilding of the church after its destruction in the war.

In 1937 June he married Elizabeth Harwood whom he had come to know during his visits to Battisford for meteor observing. They had two sons and two daughters and there are eight grandchildren, by whom he was greatly loved.

## E. H. Collinson

## V. A. FIRSOFF: 1910-1982

By the sudden and quite unexpected death of V. A. Firsoff, the Association has lost one of its most colourful members and most prolific writers.



Axel Firsoff was of Swedish descent but spent much of his life in Britain, first at Lochearnhead in Scotland and then at Glastonbury in Somerset. He was for a time a patents' examiner in the Civil Service, and also translated books and papers from Scandinavian into English, but he was a man of varied talents; he was a highly accomplished artist, a political student (one of his books was The Disturbed Frontiers of Europe) and an athlete—for some time he acted as official skiing instructor to the British Olympic Team. Astronomically he concentrated largely upon the Solar System and paid special attention to the Moon. He wrote many books and papers, and was never afraid to express his own views even if unorthodox; for example, he never believed in the theory of the expansion of the universe. Most of his books were popular or semi-popular, and he was a master of the written word. He will be greatly missed, both by those who agreed with his opinions and by those who did not.

## **Patrick Moore**