

Cameron Dinwoodie, who was for many years Director of the Computing Section and Editor of the *Handbook*, was born in 1903 in Kelty, a mining village in West Fife. His early education was gained in the local school and at a secondary school in Cowdenbeath. A scholarship took him to Fettes College, Edinburgh in 1916 and in 1921 a United Free Church Bursary enabled him to read Mathematics and Physics at Edinburgh University, where he graduated M.A. in 1925. In later years he was to recall that another honours graduate on that day was James Paton, who was also born and educated in Kelty, and was to become Director of the BAA Aurora Section for more than 20 years. Paton was destined for an academic career, but Dinwoodie was to enter the Ministry of the United Free Church, and continued his studies for three years at New College, Edinburgh. At this theological College, he won the Eadie Prize for Hebrew, a subject which in 1936 was to lead to his Ph.D. degree. He was ordained in 1928, just a year before the Union of the United Free Church with the Church of Scotland.

In 1939 Dinwoodie was appointed to Rosneath, Dunbarton, and was minister there for the next 17 years. It was during his early years in Rosneath that he joined the BAA and chose to work for the Computing Section. His mathematical training and ability as a computer were very evident in his initial work on the paths and orbits of meteors, and by 1943 he had advanced to dealing with the perturbations of cometary orbits. For many years he continued to make predictions of cometary returns, generally working entirely on his own. The standard of his work was impressive, and in 1959 I asked him to take over the Directorship of the Computing Section. After some persuasion he said he would do it for four or five years until some younger man could be found. In the event, he directed the Section with complete success for the next 15 years.

From the outset Dr Dinwoodie was faced with many problems arising from the rapid changes in scientific method, and particularly in methods of computing. This was the beginning of the space age, and it led to an increase in the membership of the BAA (which more than doubled during his Directorship), and a corresponding increase in the amount of correspondence. In this he was greatly helped by the appointment of W. H. Julian as Assistant Director, but perhaps the greatest change that Dinwoodie had to face was the rapid growth in the use of electronic computers.

In his first Report to Council he was already anticipating the effect of these high-speed machines on the work of the Section. Even so, none of us realized that within a decade the pocket scientific calculator would become commonplace, and would render obsolete all the mechanical calculators and books of trigonometrical tables which the Section had acquired with so much difficulty over the years. In one of his rare and engaging talks to the Association in 1963, Dr Dinwoodie gave an interesting account of the work of the Section and of the tasks that could still be done by the amateur. But the pages of the *Handbook* over the next few years show how the major work of the Section was lost to the big electronic computers, which could deal in a few minutes with tasks which had taken weeks or even months with the old calculating machines. The more experienced members were of necessity diverted to other work, such as the improvement of orbital data by means of accurate observations—a task which involves that element of judgement that is not yet built in to pocket calculators.

In 1956 Dr Dinwoodie left Rosneath to take over the parish ministry at Langholm, Dumfries, and he remained here until his retirement in 1970. The family then moved to St Andrews, Fife, and here he found himself among many friends and in contact with a flourishing astronomical circle in St Andrews and Dundee. He retired from the Directorship of the Computing Section in 1974, and in that year was awarded the Walter Goodacre Medal of the Association. In presenting the Medal, the President referred to the care that was taken in the publication of the annual *Handbook*, and, indeed, throughout his Directorship, Dinwoodie continued to maintain the highest standards of computing practice. The more routine work could easily be checked, but where this was not possible, the calculations would be carried out by two members, working independently. He would not hesitate to remonstrate, kindly but firmly, with those who imagined that an electronic calculator could never make a mistake. His own standards were high, and he expected others at least to try to reach the same level.

Dr Dinwoodie was a man of many interests. He was a notable correspondent, and his lengthy and detailed letters were always full of comments on a variety of topics. As if his work as a Minister and the increasing work of the Computing Section were not enough, he yet found time to write reviews of theological books. In 1962 he revised and edited the third edition of Davidson's *Elements of Mathematical Astronomy*. He conducted Adult Education classes in astronomy and gave lectures in various parts of the country. He was a keen chess player, and for over 30 years had played chess by correspondence, winning several prizes. At the time of his death he was President of the St Andrews Chess Club. He died after a brief illness on 1979 April 8, and is buried, as he had wished, in the church-

yard at Rosneath. The Association owes much to Dr Dinwoodie, and those of us who knew him, if only by correspondence, will wish to extend our sympathy to his wife and family in their great loss.

J. G. PORTER