

## Douglas J. Smillie (1930–1992)

Doug Smillie of Wishaw, Lanarkshire, died suddenly on 1992 May 17 at the age of 62 as the result of a heart attack. Skilled in radio engineering Doug was a founder member of the Strathclyde Park Amateur Radio Club and he was active as a radio operator on all bands between 80 m and 70 cm. He was a regular contributor to the amateur radio press.

Doug became interested in the study of radio aurora propagation and frequently operated using the 2-m cw band. His studies extended to the magnetic loop ariel and to methods of determining the location of radio aurora ion clouds by means of antenna azimuth angles and a knowledge of the locations of distant transmitters.

As a very keen and experienced home constructor of instruments, Doug widened his interest to embrace magnetometry and developed the twin Hall effect magnetometer, making improvements to his original design. He then developed the magnetoresistive magnetometer to avoid some of the difficulties with the Hall units. Two units were built and the performance of the one compared with the other.

Doug joined the BAA and found some kindred spirits in the Aurora Section. Unable to see visual aurorae at Wishaw due to light pollution, he quickly estab-

lished himself as the senior Scottish BAA observer of radio aurorae. His monthly reports on radio and magnetic events became an important feature of the Section analysis of auroral activity.

Doug was an ever friendly enthusiast and attended astronomical meetings where aurora was to be discussed. He allowed his designs for magnetometers to be copied freely and the Section responded to well over one hundred requests by post for information. Doug himself corresponded with a number of enthusiasts direct. He wrote a paper on his work (*JBAA*, **102** (1), 16, 1992) and this is a fitting memorial to him which he was fortunate to see in print before his untimely death.

Doug's last act was to monitor the magnetic and radio events of 1992 May 10/11 and it was the wish of his that this last record be made available to the Aurora Section; this has been suitably acknowledged. Doug will be sorely missed by both his radio and his BAA colleagues.

I am grateful to Mr Gordon Hunter for providing additional information with respect to Doug's radio activities.

**R. J. Livesey**