

Obituary

ERNEST TILLOTSON

Ernest Tillotson, who died on 1981 March 29 at the age of 77, combined a full career as schoolmaster with keen interest and notable achievement in seismology. A pupil of Dr Robert Stoneley and friend of Stoneley and Sir Harold Jeffreys, he published original papers in seismology from 1928 to 1974.

He was a Fellow of the Royal Astronomical Society from 1928 until his death. He was Secretary of the Seismological Investigations Committee of the British Association from 1946 until 1979. He was proud of holding the Secretaryship in succession to J.J. Shaw and John Milne, and of being associated with Dr Robert Stoneley who was Chairman. Each year he produced a report on *Seismological Research in the UK* which gave a valuable conspectus of all the varied projects in progress throughout the country. He was methodical and persistent, and successful in obtaining material from busy scientists. During the same 33 years he was a member of the Seismology and Physics of the Earth's Interior Subcommittee of the Royal Society. He frequently represented the United Kingdom at meetings of the European Seismological Commission.

Tillotson was an authority on British earthquakes, which formed the main subject of his research (1969, 1974). He also wrote clear and lively semi-popular accounts of particular earthquakes (1931, 1940, 1941, 1969) and a very good general article on Earthquakes for *Endeavour* (1950).

His first paper (1928) was written with Stoneley on the effect of a double surface layer on Love waves. They obtained good estimates of the thickness of the granite and basalt layers of the Earth's crust in some continental regions. Later (1938) he investigated earthquakes which Turner had designated 'high focus' on account of anomalous large values of $T_s - T_p$ (where T_p , T_s are the arrival times of P and S pulses). Tillotson showed that such events were multiple and that S had been mistakenly identified.

In 1939 Tillotson gave tables of arrival times of PcP and ScS (pulses reflected at the core-mantle interface); for these he had himself read over a hundred seismograms for each of three earthquakes suitably chosen.

In all Tillotson published over a dozen original papers and wrote over 30 annual reports. All this work was done while he gave devoted service to Aireborough Grammar School, where he taught physics and headed the work in science. He was also a Lay Reader in the Anglican Church and a Mason. He rose to the rank of Lt-Colonel in the Army Cadet Force.

He had studied mathematics, physics and geology at Leeds University, and had written a thesis on the Geology of Nidderdale for his M.Sc. (1934). He remained a keen amateur geologist and naturalist all his life. He was a



ERNEST TILLOTSON, 1904-1981
Fellow of the Royal Astronomical Society 1928-1981

To face p. 468]

modest, friendly and kindly man, whose life of service to science and education inspired admiration and affection. His wife and son survive him.

E.R.LAPWOOD

PUBLICATIONS

- Stoneley, R. & Tillotson, E., 1928. *Mon. Not. R. astr. Soc. Geophys. Supp.*, **1**, 521–527.
Tillotson, E., 1931. *Mon. Not. R. astr. Soc. Geophys. Supp.*, **11**, 416–429.
Tillotson, E., 1934. *Proc. York Geol. Soc.*, **22**, 215–228.
Tillotson, E., 1938. *Gerl. Beit. Geoph.*, **52**, 377–407.
Tillotson, E., 1939. *Bull. Seism. Soc. Amer.*, **29**, 345–408.
Tillotson, E., 1940. *Nature, Lond.*, **145**, 13–15.
Tillotson, E., 1941. *Gold Coast Geol. Surv. Bull.*, **13**, 42–57.
Tillotson, E., 1950. *Endeavour*, **9**.
Tillotson, E., 1969. *Festschrift W.Hiller, Stuttgart*, 108–125.
Tillotson, E., 1974. *J. Earth Sci. Leeds Geol. Ass.*, **8**, 353–364.