OBITUARY

Arthur Gerard Boulton, MA

who was born on 22 February, 1904, died on 13 July, 1971.

Educated at Taunton School, he studied engineering at Sidney Sussex College, Cambridge, where in 1924 he received a BA degree in Engineering and Economics. He received his MA in 1927.

Starting his career with Vickers in Barrow-in-Furness in 1924, he left 3 years later to join John Cochrane and Sons, public works contractors of London. As engineering assistant he was engaged on road construction and sewer work until in 1929 he went to South America, where he became assistant engineer to the Buenos Aires Waterworks Company under G. H. Austin, Engineer and Manager. Here he was concerned with the design and construction of waterworks buildings, the laying of distribution mains, construction of deep boreholes and electrical pumping installations. It was as a water engineer that Boulton was to make his name, with particular distinction in the field of hydrometry.

In 1931 he was appointed chief assistant engineer on the design and construction of a pumping station at Monte Chingolo and the San Martin waterworks, and also engaged on concession designs for waterworks and sewerage for the township of Larate (value, £½ million).

His term in South America ended in 1934, the year in which he started work in Westminster with the Gas, Light and Coke Company as Divisional Service Manager, Western Area. Here he redesigned stores and service depots, modernized the company's transport, and in the new Heston organization controlled some 800 men on gas-fitting.

Five years later he became an engineering inspector to the Ministry of Health in Whitehall under Sir Roger Hetherington, Chief Engineering Inspector, to whom he reported on the progress of various grant-aided waterworks and sewerage developments. In the early years of World War II he supervized the maintenance of essential water supplies and sewerage from the Welsh and Bristol regional offices of the Ministry of Health, and in emergencies improvized mutual aid.

When the water and sewage functions were transferred to the new Ministry of Housing and Local Government, he continued as an engineering inspector under Sir George McNaughton, Chief Engineer, and conducted public inquiries into schemes for water supply, sewage, sewage disposal, coastal defence and public buildings. He was also involved with local government boundary extension proposals. During the period of economy cuts (1951–54) the Surface Water Survey, set up in 1935, was suspended, but reconstituted in 1954 with Gerard Boulton as the new Engineer in charge. Now he extended the pattern of recording the nation's river records and advised on the design and construction of river gauging methods, introducing new concepts—work much expanded by numerous hydrological surveys carried out in the 'fifties in important river basins—surveys which were published by HMSO and provided

valuable background information for the new water resource concepts developing there. In 1959/61 he was an Assessor to the Central Advisory Water Committee which played a substantial part in proposals for reorganizing water management in England and Wales, and led to the setting up of river authorities and the Water Resources Board.

His particular interest in this activity was of course the hydrometric work and the maintenance of adequate river flows. After assisting with the new legislation he transferred to the Water Resources Board set up under the Ministry of Housing and Local Government, where he expanded research into river behaviour and management.

In February 1969, he formally retired from the Water Resources Board, where for nearly five years he had been head of the Hydrometry Division. His unique knowledge of river basin management and flow measurement then became available to the OECD in Paris, to which body he became part-time consultant—work which his deep interest in France, the French language and science made enjoyable.

Boulton was Chairman of the Technical Committee on Flow Measurement of the British Standards Institution, and for many years—up to the time of his death—Chairman of one of the Flow Measurement committees of the International Organization for Standardization. In this sphere he carried out some highly important work and incidentally made many friends. From 1964–69 he was chairman of a group of experts advising the UN Economic Commission for Europe on the rational utilization of water resources.

He was a Fellow of the Institution of Water Engineers.

The Civils meant a great deal to him, and he acted as adviser on papers to the Publications Committee. In 1967 he introduced an Informal Discussion, 'Surface Water Survey and Modernization', P. 36 (Apr.), 909–13. He was on the Roll for 42 years: elected to corporate membership in 1929, he was transferred to the senior grade in 1959.

He is survived by his widow, and a son and daughter.

Selected writings:

Books:

'River engineering and water conservation works' (Chapter on hydrological surveys, etc.), Butterworth 1966.

'River management' (Chapter on flow measurement), Mclaren & Sons, 1967.

'Der Wasserhaushalt Grossbritanniens', Wasser und Boden, 1964.

'Surface water year book of Great Britain', Vols 1945–64 inc.

Papers:

'Minimum acceptable flow', J. Inst. Water Engrs, **19**, No. 1 (Feb.), 1965.

—*with* A. Bleasdale, 'Study and assessment of water resources'. Conservation of water resources, UK. Sep. Pubn, 1963, 121.

'Surface water and modernization'. Informal discussion, P. 36 (Apr.), 909–13.

'UK Development of Water Resources', ECE Committee on the Rational Use of Water in Europe. Geneva, 1965.