## Hugh Menown

HUGH MENOWN was an old-fashioned product-champion and entrepreneur who took an obscure electronic component and turned it into a world-beating export business by sheer force of will. Born and brought up on a farm in Newtownards, Co Down, he applied good farming principles to industry: produce quality goods, get them to market early, and command premium prices.

He read Physics at Queen's University, Belfast, and, after graduating MSc in 1951, accepted a job with the English Electric Valve Company in Chelmsford (now Marconi Applied Technologies). His plan was to spend a few years in England before seeking his fortune in the United States. In the event, he stayed with the company for nearly 50 years. Before he left Ireland he married, in 1951, a local girl, Margaret Stevenson.

Menown worked on the Hydrogen Thyratron, a "valve" used as a switch in radar. To supply demand, there were four other manufacturers of thyratrons in England alone. But the hydrogen gas in thyratrons makes their performance difficult to predict. Consequently, insight, ingenuity and imagination play a large role in the development process. These qualities he possessed in abundance, but he also had a strong business sense resulting from his farming experience. One by one the other manufacturers were unable to compete, and soon EEV was the only thyratron manufacturer left in Europe.

In the 1960s, radar technology led to a new application to treat cancer. This eliminated the need for radioactive sources, and the new dethe Medical Linear Accelerator or "linac" - was eventually produced in Europe, the US and the Far East. The largest manufacturers were in the US, and Menown's tubes (they were always "his tubes") were the preferred choice. He had recognised that, by adding a second grid to the thyratron, the performance and lifetime are greatly improved. The medical linac remains the front-line treatment for cancer, and thyratrons made at Chelmsford are in use in thousands of machines world-wide.



Menown: time to grow potatoes

At Cern, the European particle accelerator centre in Geneva, there was a need for the precise switching of "kicker" magnets used to switch high-energy particles, in the same way that railway trains are switched between different tracks by points. By the use of several high-voltage gaps in series within a single device, Menown provided Cern engineers with the ability to switch very high voltages with the sub-microsecond precision that was needed. To this day, at Cern and virtually every other high-energy physics establishment from Peking to California, thyratrons of Menown's design operate the 'points" in accelerator complexes. The thyratron division won the first of two Queen's Awards for Technology for that work.

Menown's blunt way of talking and forthright manner caused friction

with some members of EEV's board. A company reorganisation required the thyratron division to relocate to Lincoln. Hugh and Margaret Menown had a house with four acres in Writtle, close to Chelmsford, and were raising four children, chickens, ducks, and enough vegetables to feed half of the village. Menown refused to relocate the division.

For more than 10 years until Martin Jay became managing director, he was deprived of the privilege due him of a company car. Jay recognised his worth. In 1982 Menown was appointed MBE for export achievement. The following year, the division relocated again to the old Crompton Street works in Chelmsford. The multi-million-pound operation was moved without a single day's loss of production, some assembly time being made up by Saturday working during a company open day.



Menown used to relish rubbing his colleagues' noses in his successes. Once, during a divisional manager's meeting, the managing director was worrying about the company performance. Menown's divisional results were always over target and he commented, "Gentlemen, what is it that I'm doing right that you are doing wrong?"

He was probably happiest during the time at Crompton Street, saying, "I run the Irish Electric Valve Company within the English Electric Valve Company." He used to spend 75-100 days a year travelling, mostly in the US, leaving his loyal wife to look after the vegetables. In 1987 he was awarded the GEC Nelson Gold Medal for achievement. The citation said: "Hugh Menown is a leader, a salesman, an innovator and a world expert on thyratrons... but he still finds time to grow potatoes."

For a long time Menown had sponsored students working with Arthur Maitland at St Andrews University. This provided EEV with a succession of engineers, as well as supporting industrially focused research at the university. In consequence of this Menown was appointed a Visiting Professor.

He took pride in looking after "his boys", which he did with a mixture of old-fashioned people management and sundry farming epithets. He interviewed a young engineer from Larne, Cliff Weatherup, and wrote on the form "Employ this man, he's a good judge of cattle." Menown never lost an engineer to the siren call of the US, even though many of his engineers travelled frequently to that country.

His outbursts were legendary. At a Modulator Symposium Conference dinner, a US conference dedicated to pulse switching, a member of Congress was giving the keynote speech. Menown took exception to his analysis of Britain's contribution to radar development during the Second World War, and his Ulster accent cut through the proceedings like a sabre. Interrupting the speaker, he demanded that an eminent member of the British defence establishment present stand up and put the record straight.

Visitors to "The Willows" – Hugh and Margaret's retirement cottage – always left laden down with vegetables, Menown insisting on cutting fresh produce during the summer months. Although he retired in 1991, he continued as a part-time company employee until his death.

## PETER MAGGS

Hugh Menown, physicist and engineer: born Newtownards, Co Down 5 April 1926; Engineer, English Electric Valve Company 1951-65, Divisional Manager, Gas Tubes 1965-87, Director of Technology, Pulsed Power 1987-91; MBE 1982; married 1951 Margaret Stevenson (died 1999; three sons, and one daughter deceased); died Writtle, Essex 5 March 2000.