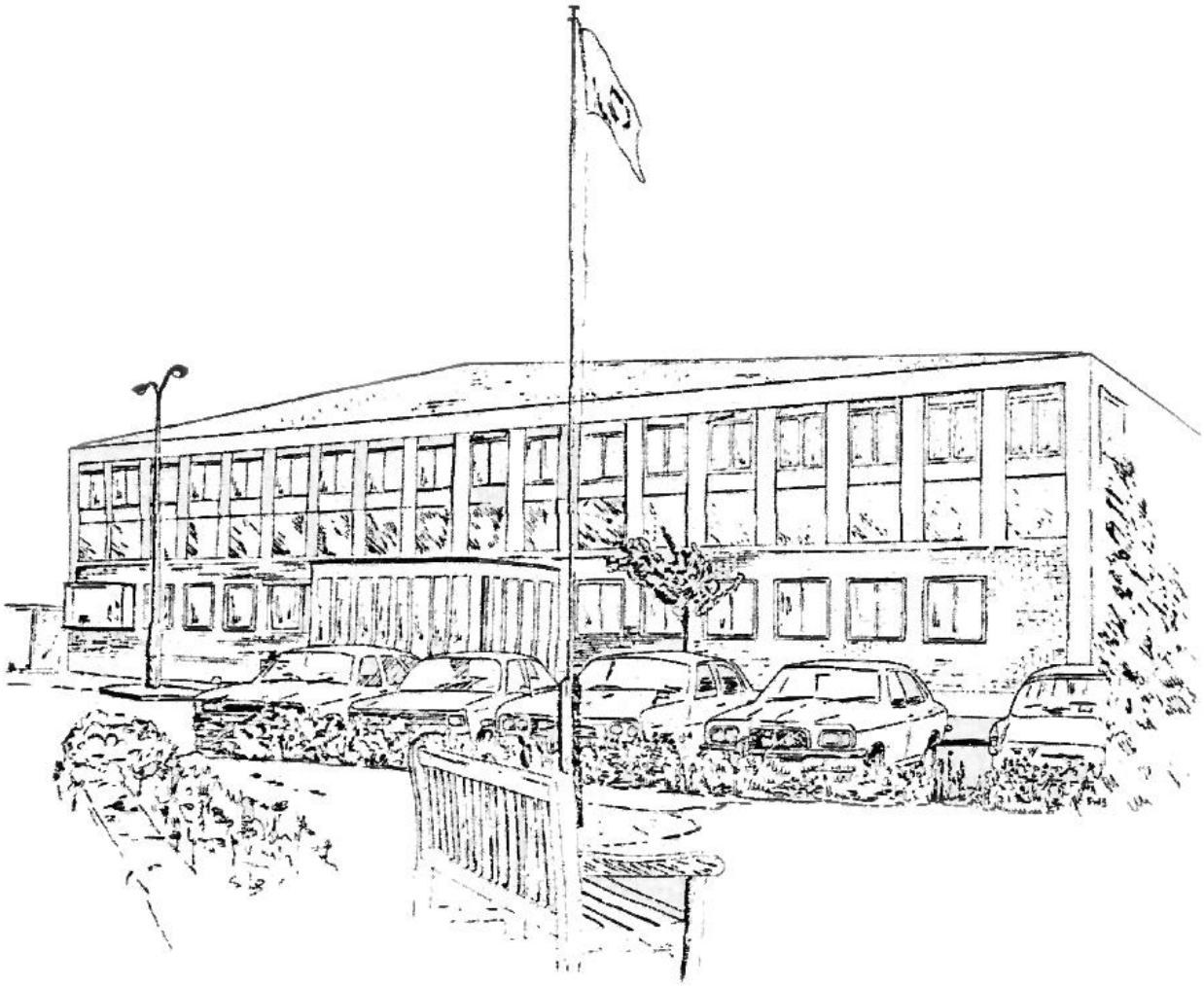
In the article below, which was written in about 1977, "Our Factory" refers to Mullard Mitcham. We have been unable to establish who author Claire Griffiths was, though the title suggests she was a Mitcham employee.

OUR FACTORY : ITS HISTORY AND DEVELOPMENT

by Claire Griffiths



Chapter One
The Company and Its Founder

Was there ever a Mr Mullard? How did he start the Company? What was the first product, and where was it produced? How did the Company develop, and what was its scope when it was taken over by Philips?

You may have many other similar questions about the Mullard Company. Too little is generally known about it, and about the dynamic and ingenious founder of the Company Mr Stanley Mullard who, at ninety-four years old, is alive and well and still able to project his strong personality. His pioneer work in developing transmitting valves was very important and gave him the basis from which to set up his Company which developed rapidly into a flourishing and profitable business.

The Beginning of Mr Mullard's Career

When he was fifteen years old, Mr Mullard was apprenticed to a firm of electrical engineers, and at that stage he earned the princely sum of ten shillings a week for working a fifty-six hour week. While he was completing his apprenticeship, Mr Mullard went to evening classes to increase his electrical knowledge, but he wavered in his determination to become a professional engineer when he learned how little it was possible to earn in such a capacity.

Mr Mullard's desire to do better for himself led him to seek employment abroad. He won an excellent managerial position in Germany, where he was able to demand a salary three times that which he could have received for a similar job in Britain. Mr Mullard did not, however, remain in Europe for long, and on his return to Britain in 1910 he took a job as a technical assistant in the Ediswan Company. His potential was recognised and the Company realised that he would be more profitably employed in a development laboratory.

Mr Mullard's Development Work for the Ediswan Company

Mr Mullard was offered his own laboratory at the works in 1913. He thought that his lifelong dream had been suddenly and unexpectedly fulfilled, and was delighted. The laboratory was completely fitted and prepared for his use, but when he finally moved in he realised that he had not been told what he was to invent. His enquiries received only the answer *"It is up to you"*. It seems that there was tremendous scope for the development of new devices and techniques at the beginning of the century!

Stanley Mullard was initially daunted by the vagueness of his employers, but once he began to think seriously about what to do, he remembered some experiments which he had carried out in his childhood. He had been amazed at the bright flash which could be produced when various live wires were touched against each other. He wanted to harness this power to make a brighter and more efficient electric light bulb. He encountered many problems in the initial work, but his determination and tenacity helped him to solve them, and he eventually developed the 'Pointolite' lamp. This invention made it easier to strike an arc between tungsten electrodes, by ionising the gas between the electrodes. The effect was to produce a brighter and more efficient lamp which was widely used in projectors as well as in domestic light fittings.

Mullard's success was widely acknowledged and by the outbreak of war in 1914 he became well known in electrical engineering circles.

Captain Mullard's Navy Career

Mr. Mullard enlisted in the Engineers Battalion of the Royal Naval Division in 1914, but because of his technical knowledge and expertise he was allowed to remain at the Ediswan Works and he started work in the field of radio communications.

In 1916 he became a lieutenant, and when he was posted to the Royal Naval Air Service he ran a special laboratory which did much development work on high-power transmitting valves. They were very successful and Mullard earned a military MBE, and when the RAF was formed in 1918, he became a Captain. The work of Mullard and his companions during the war provided a good basis for the development of the thermionic valve industry in peacetime.

Chapter Two
Technical Development

Silica Valves

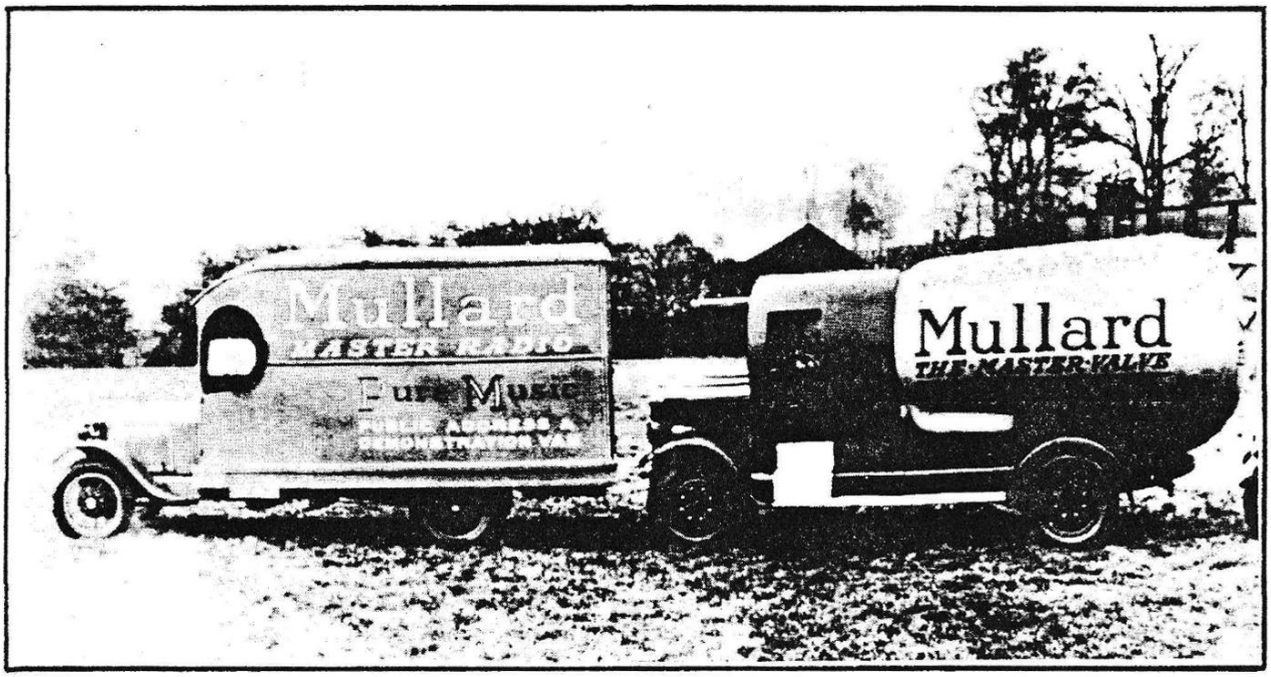
After his demobilisation in 1919, Stanley Mullard accepted a directorship of the 'Z' Electric Lamp Company. At his personal request and with the full approval of the Admiralty, Mullard reserved the right to keep up his wartime association with the staff of the HM Signal School,

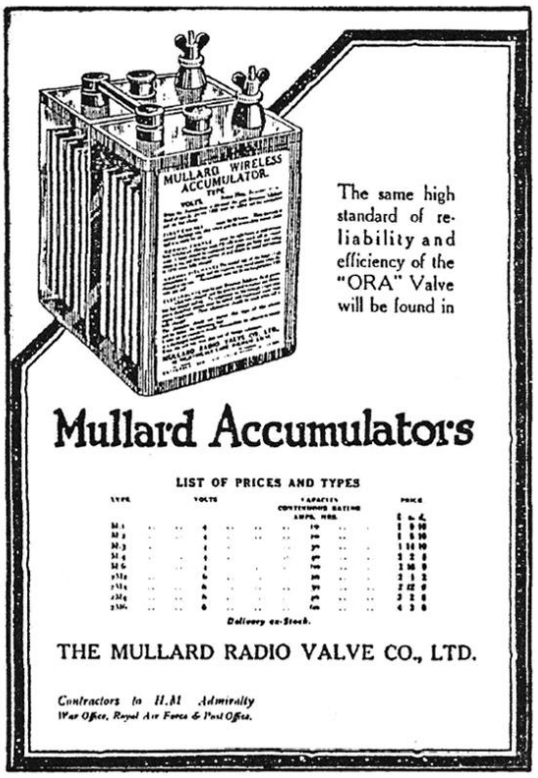
Portsmouth, so that he and a small group of colleagues could continue to work on the development of high-power transmitting valves.

This arrangement was satisfactory and the scientists were successful: they perfected the early silica valve. This was a high-power transmitting valve in a durable fused-silica envelope, rather than in a glass envelope which was liable to melt because of the great heat produced in the valve. The Admiralty recognised the importance of this innovation, but there was no real consumer market to make it a viable commercial product, therefore no companies could be persuaded to produce it. Once this became apparent, the Admiralty asked Mullard himself to go into manufacture. They agreed a contract with him which allowed him to enter the business with little personal risk. Mullard was granted the full commercial rights to any patents relating to the silica valves, and the Admiralty placed an order for 250 silica valves at £66 each. Accordingly the Mullard Radio Valve Company was formed in 1920. This was originally housed on an empty floor at the 'Z' Electric Lamp Company factory and the 'Z' Company was fully aware that Mullard was marketing valves under his own name.

The Rise in the Popularity of Radio

The founding of the Mullard Company largely coincided with a very fast increase in the popularity of radio and there was therefore a tremendous demand for both transmitting and receiving valves. These market pressures persuaded Mullard to extend his range to include receiving valves. Radio broadcasting stations were set up all over the country, and there were many excellent programmes. The Mullard company seemed assured of success at this time, and it expanded rapidly. In 1921 Mullard decided to move the plant to Hammersmith, and he placed his machinery in a converted stable. Even this accommodation proved to be too restricted; demand increased to such an extent that queues of radio enthusiasts were always outside the factory waiting for the opportunity to buy radio spares. Mullard again expanded and in 1924 he moved to a larger factory in Balham.





Chapter Three
Changing Organisation

Marconi v. Mullard Legal Wrangle

During this period Mullard's business position seemed almost impregnable, but the Marconi Company claimed he had infringed their patents and took the matter to court. There were a total of 23 court hearings and the case went on to appeal to the House of Lords who finally ruled in favour of Mullards.

Once this struggle was over Mullard was free to expand and improve, but the costs of the action had been an enormous drain on his resources. At about this time, he entered an agreement with Philips to fund further research. By the end of 1924 the factory was producing at the rate of 2,500,000 valves per annum.

Mr Mullard Relinquishes Control

As the rate of demand for valves increased, Mullard realised that it would be necessary to pay more attention to the commercial side of the company to ensure more effective distribution. This led to the foundation of a separate organisation: Mullard Wireless Service Company. This company tried to provide the customer with a really efficient service, advising the public which valves were most suited to which products, and also telling them how to achieve the best possible results from the valves. As part of the service Mullard launched a magazine in 1926. It was called 'Radio for the Millions' and it sold very widely among radio enthusiasts.

By 1927 Philips had acquired all the shares in Mullards and thus Stanley Mullard relinquished control of his company to Philips, although he was made a Director.

In 1930 Mr Mullard was advised by doctors to retire and he was succeeded by Mr SS Eriks, but he retained an active interest in the Company until 1970.

Thus it was the personality of Stanley Mullard which determined the development of the Company in the early years before it joined the Philips Group.