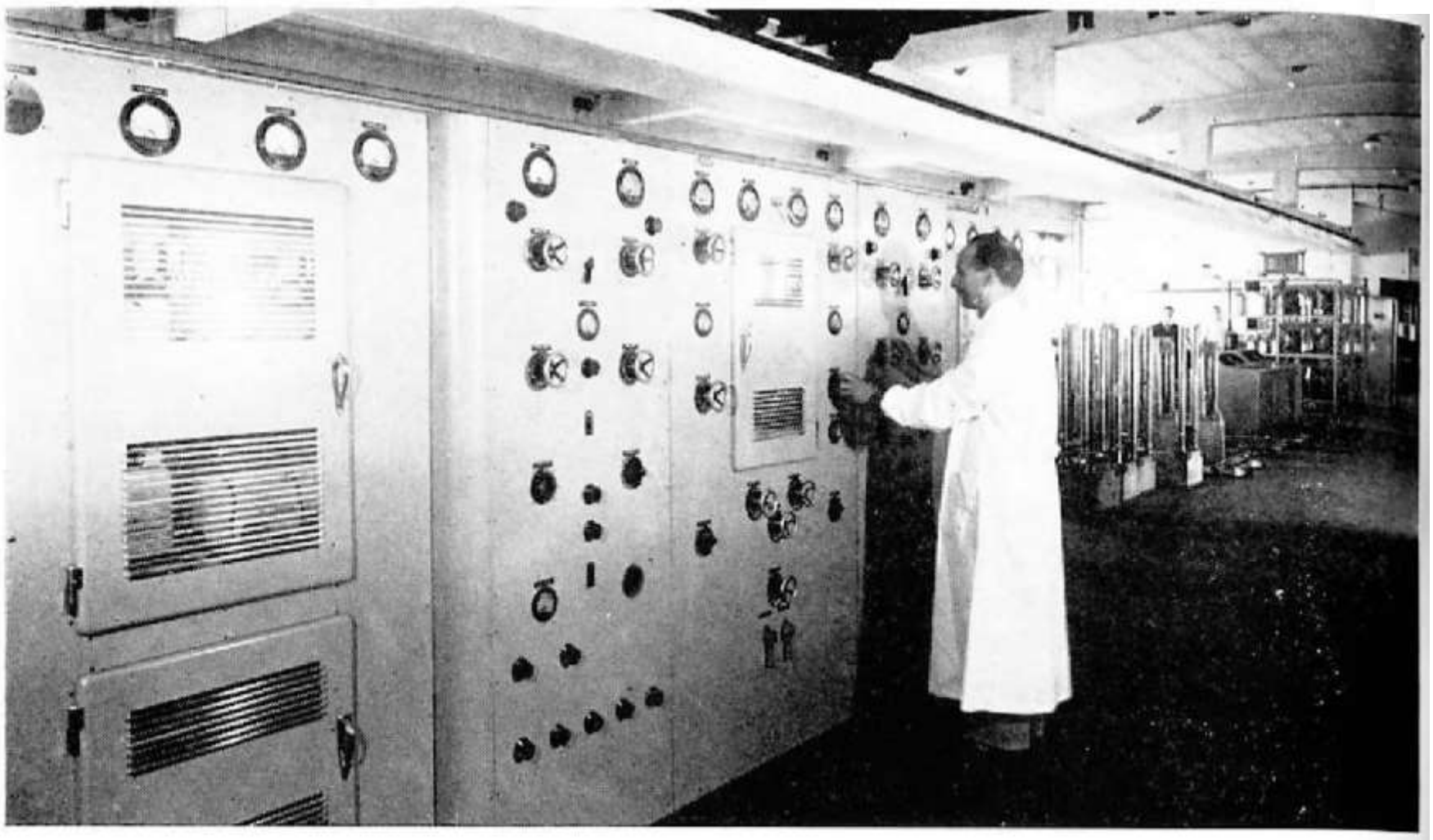


The Assembly Room for large equipment laid out on modern lines as are the other departments of the Genoa factory of our associated company Marconi Italiana-Societa per Azioni

ONE OF THE FAMILY

Marconi Italiana

From information kindly supplied by Dr. Chiodelli of the Italian Company

ITALY'S FIRST wireless telegraph station was set up in 1909 on a pier in Genoa harbour known as the Molo Vecchio under the supervision of Marconi himself. It was designed to communicate with ships, and possessed a storage room for marine wireless equipment with a small workshop in which ships' operators could get their apparatus repaired. Such was the birthplace of the Italian radio industry.

The infant soon outgrew its nursery. By 1912 the tiny workshop had grown into a small factory covering 800 square metres of ground, capable, with the most up-to-date machinery and tools available at the time, of turning out complete wireless installations up to 5 kW in power. The *Mafalda* was the first ship to be fitted with Italian-made equipment of this type, and Marconi himself marked the achievement by sailing with the ship when she put to sea, thus equipped, for the first time.

By 1914, therefore, Italy possessed in the Marconi works a reliable organisation fully capable of satisfying the peace-time technical and industrial demands of the moment. War, however, quickly exposed its limitations. The demands of the Services and the Merchant Marine soon outran the capacity of the factory. Radio technique, too, was rapidly adapting itself to the thermionic valve. This meant not merely that our factory must be enlarged to manufacture transmitting and receiving apparatus capable of using the new

vacuum tubes; the firm, obviously, must make such tubes. More space was essential.

But there was no more space on the Molo Vecchio. Nor was there any gas, without which there could be no blowing of the glass envelopes.

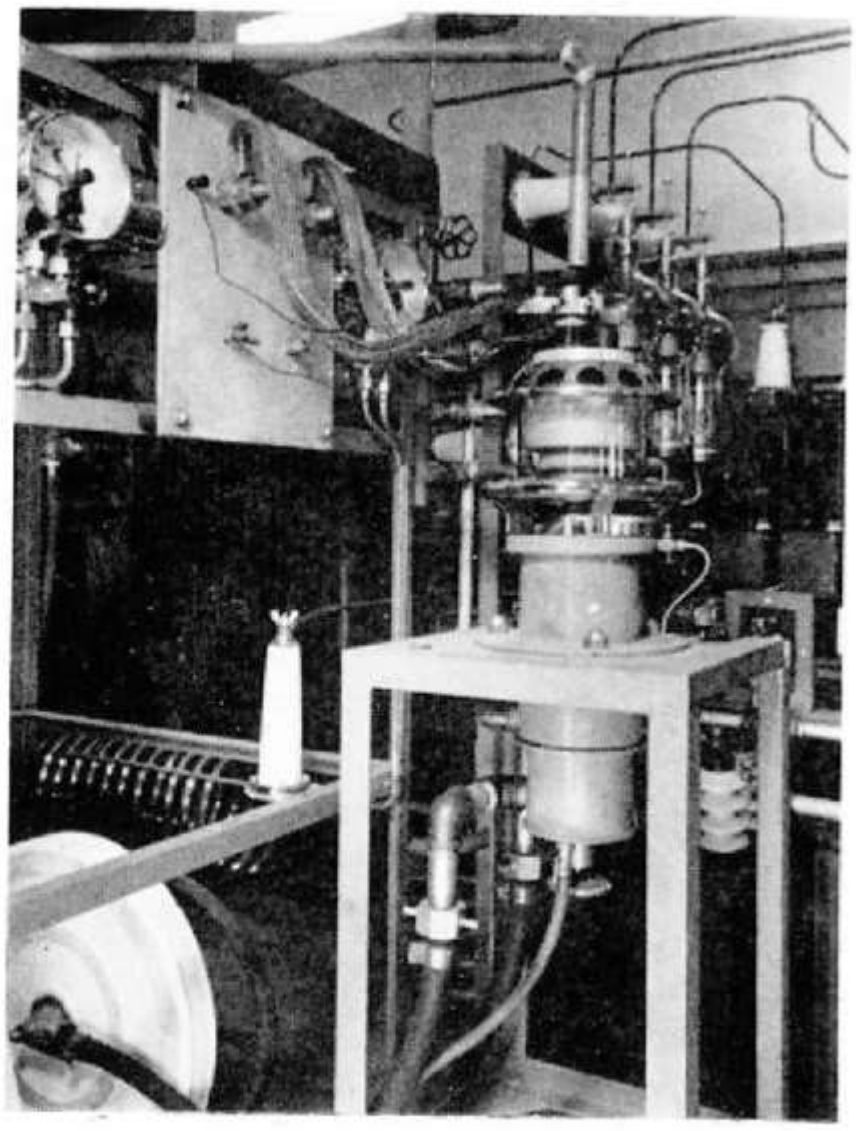
So a new three-storey building was bought in Genoa, close to the Brignole railway station, between Varese and Edmondo De Amicis Streets. This gave us 1500 square metres of floor space —additional, needless to say: the old Molo Vecchio shop was not abandoned.

Thus by the time the war ended in 1918 the Marconi works in Genoa were employing more than 350 hands and could turn out most wireless telegraph equipment in use at the time, and electronic tubes as well.

Development between the wars kept in step with the rapid advance of Marconi techniques. Production steadily

At the inauguration of the valve factory at Aquila: Marchese Giulio Marconi, Chairman of Marconi Italiana (l), Defence Minister The Hon. R. Pacciardi, and Managing Director Dr. R. R. Chiodelli (r)

To discuss SWB8 equipment, Dott. Ing. B. Valsecchi (r), Works Manager, Marconi Italiana, visited Chelmsford, bringing Signora Valsecchi and their sons. He was welcomed by F. C. Lunnon, Assistant Engineer-in-Chief, and Jean Threadgold, Receptionist



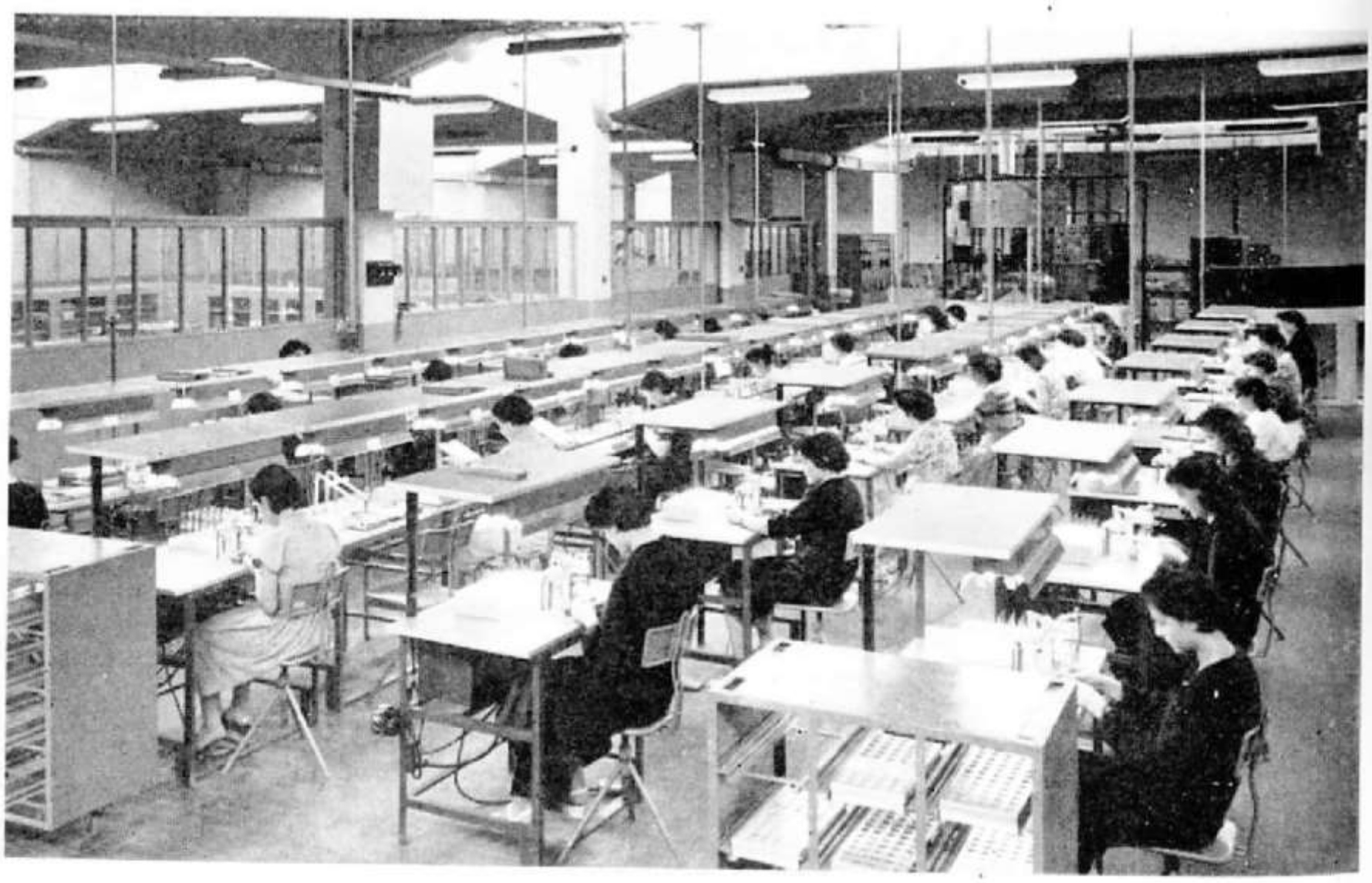
At the Aquila valve factory. Above, an inner view of a valve exhausting cabin, and below, the mounting room in the Receiving Valve Department. This impressive modern factory, also shown on the cover, was brought into full production last year

increased with the manufacture of wireless telegraph and telephone equipment ranging in power from a few watts to many kW for the Italian Army, Navy and Merchant Marine. Italian-made broadcasting equipment found its way into many stations at home, all over Europe and in many countries overseas. At the same time thousands of homes listened in on Italian Marconi receivers.

The Second World War brought disaster.

At the time it broke out, the Company's administrative offices were in Rome, its equipment factory and valve factory in Genoa, the former in the Via Varese, the latter inside Genoa harbour on the Molo Giano. Between the two of them they employed about 100 staff and 1200 workmen.

On 22 October 1942 the R.A.F. carried out a devastating raid on Genoa. Shortly afterwards, in November, they came again. For practical purposes they totally destroyed the valve works on the Molo Giano; the Via Varese establishment was too badly knocked about to be of any further use.



His Eminence Cardinal Canali blessing the new Marconi transmitter for the Vatican Broadcasting Station. After the ceremony the Cardinal threw in the main switch to start the new transmitter

Thus began a period of disintegration and even—for a while—of dismemberment so severe that the wonder is, one sometimes thinks, that, as in the case of Humpty Dumpty, it was not found impossible to put the bits together again.

To begin with, after the bombing, such machinery as could be salvaged was dismantled on Government orders and sent to Pistoia in Tuscany where it was set up in a big requisitioned garage. The valve business found a home with the San Giorgio Company. And in May 1943 Marconi factories began once again to produce, though on a minor scale.

Then in September 1943 came the armistice between Italy and the Allies. Much of Italy remained, however, of course in virtually German control, and the bulk of her industry as well. In such conditions the Marconi valve factory found itself packed off lock, stock and barrel to Valenza Po in Piedmont, while the machinery of the apparatus factory was scattered far and wide about northern Italy. A modest laboratory was set up in the Via Donghi in Genoa.

Ultimately, on 25 April 1945, when the German armies in Italy capitulated, northern Italy regained its freedom. It now fell to the San Giorgio Company, which had been entrusted by the Government with the wartime running of the Marconi factories, to track down, identify and collect together the dispersed Marconi machinery and tooling. All that was found was reassembled in one of the San Giorgio Company's establishments at Genoa Sestri; and it was here towards the end of 1945 that the Marconi works were able once again to resume some sort of production.

The means, however, were pitifully limited—utterly inadequate. The Marconi Company had unquestionably suffered during the war far more severely than its competitors. Moreover, the immediate outlook in the Italian market for capital radio equipment was extremely depressing. The dice, to all

appearances, were heavily loaded against mere survival.

Yet, somehow, the Marconi works did survive, though only a fraction of their means of production remained, and all the threads of their commercial relationships were broken or had, during so long a period of inactivity, withered away.

For practical purposes it meant starting the business again from scratch. Not until February 1948 could it be decided how the firm could legally resume activity. Then under the joint financial control of the San Giorgio Company and M.W.T. it re-emerged as the "Marconi Societa Industriale Ltd.". Ultimately it changed its name to "Marconi Italiana".

It was, however, as M.S.I. that the Company set to work to make up for lost time and regain in the Italian electronics market a place worthy of its great name.

The market for capital radio equipment obviously was narrow. Mass production of a consumer product must, it was seen, supplement the output of heavy equipment, if a satisfactory economic balance was to be maintained. It was accordingly decided to expand the production of receiving valves by building a modern plant to make both receiving and transmitting valves. This factory was duly built in 1951 at Aquila, 150 km. north-east of Rome. Full production of transmitter valves started on 1 March 1952 and of receiver valves three months later at the beginning of June.

This new plant with its 74,000 square metres of floor space is as up-to-date as anything of its kind in the world. At present it is geared only to half of its potential yearly output of four million valves, the receiver valves of G., G.T., and miniature types being made under R.C.A. licence. The machinery for making these receiver valves, supplied by R.C.A., is of the latest type. Transmitter valves, traditionally a Marconi speciality, up to 150 kW power are produced. The plant is self-contained, providing its own electricity, gas, water, air-conditioning, compressed gas, light and liquid air. It possesses its own research laboratory and, of course, test and measuring facilities. At present its staff and workers combined number 200, though they are expected to reach 300 in 1953. The engineers as well as some of the foremen and specialised workmen have all spent training time either in England with the English Electric Valve Co. or in America with R.C.A.

All capital wireless equipment is produced in the Genoa-Sestri factory, a modern building (1942) with 10,000 square metres of floor space spread over four storeys. (This building, as a matter of fact, is too small and larger premises are being considered now.) It employs 600 people at the moment and produces equipment including valves with an annual invoice value of about one thousand five hundred million lire. The plant is designed to produce the fullest range of wireless capital equipment for communications, broadcasting, mobile VHF, marine radio, radio navigational aid equipment, supersonic echo-meters, direction finders, auto-alarms, radar, airborne radio, multichannel VHF links, telephone terminal equipment, broadcasting studio equipment, television transmitting equipment . . . the whole gamut, in fact, of Chelmsford.

Apart from its own resources, M.I. is in a position to call upon those of M.W.T., the C.G.T.S. and exclusively of the Compagnie Industrielle des Téléphones, plus those of R.C.A.

The Chairman of "Marconi Italiana", Marchese Guilio Marconi, is the son and heir of radio's immortal pioneer. It can safely be said that the reborn Italian Company of today is fully worthy of the famous name it shares with the rest of the family.