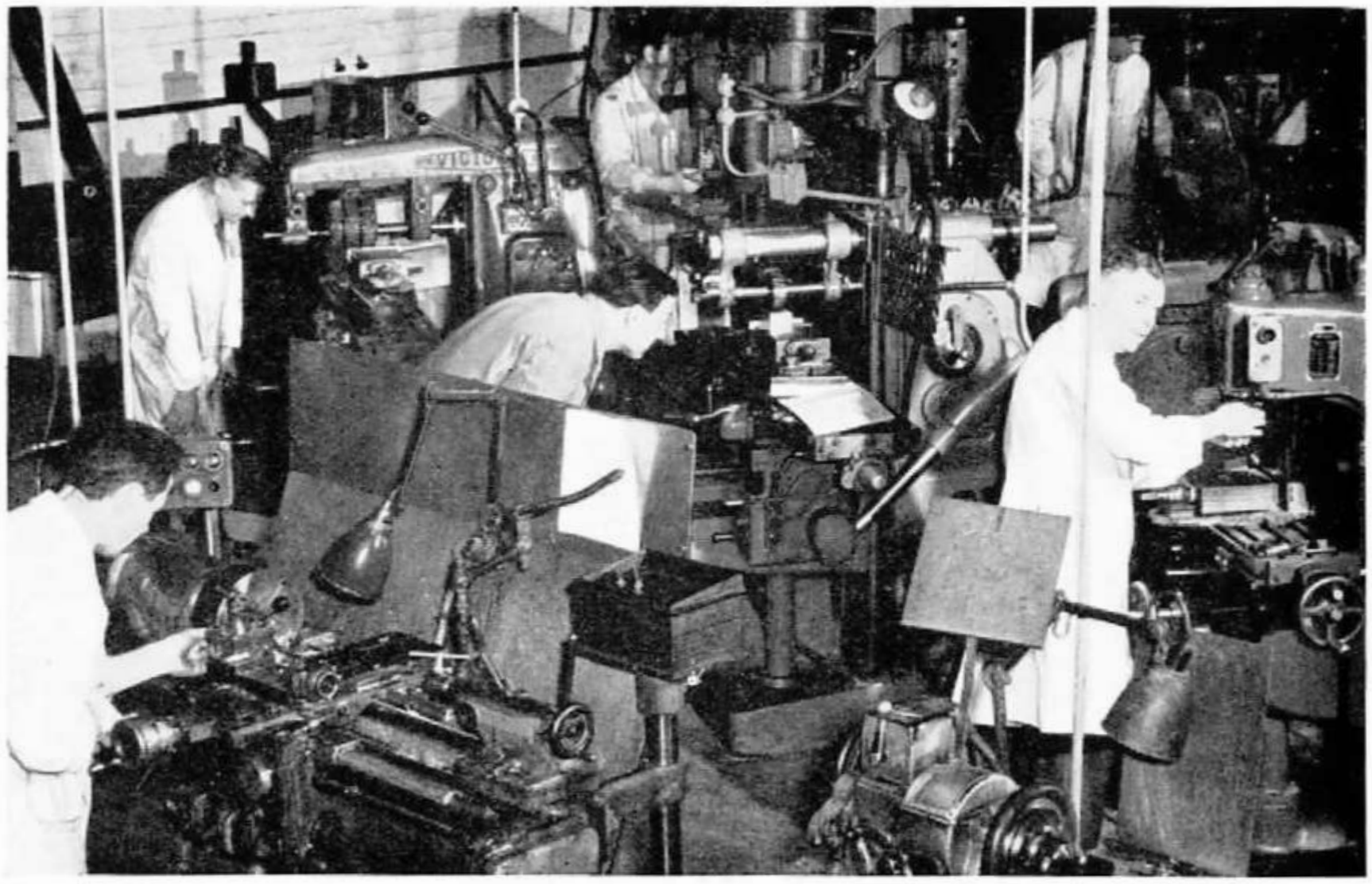


Part of the machining section of the Marconi Instruments Model Shop. With the increased demand for precision instruments, these craftsmen are busier than ever

Spotlight on

M.I. MODEL SHOP

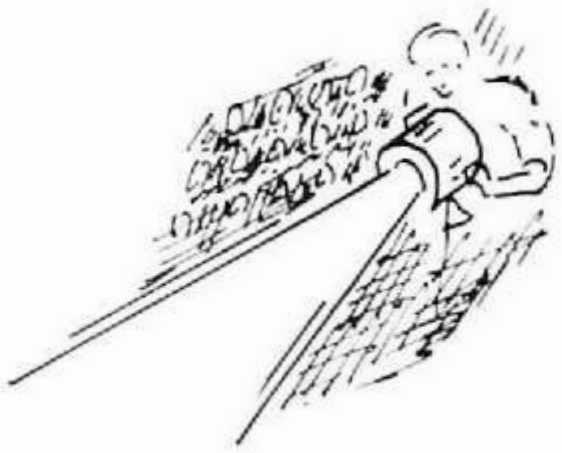
A Factory in Miniature

IN NO PART of the Marconi Instruments' Longacres Works are so many different operations carried out, skilfully and quickly, as in the Model Shop. Here is a factory in miniature, with its own stores section, machine shop, mechanical and component parts assemblies, and a special routing system which efficiently ensures that processes such as plating and spraying are carried out according to a strict schedule.

The Model Shop is the connecting link between Design and Development Test, a link made all the stronger by friendly co-operation and a high standard of "know-how". Before a job reaches the Model Shop it is usual for A. Haviland, Chief Development Engineer, to discuss the matter with Alan French, head of Model Shop. And then the job arrives in the form of detailed drawings or even freehand sketches, complete with the engineering team who are well versed in the intricacies of the project. A round table conference clears the air of any possible misunderstandings and the job is cleared for action.

We were lucky in finding a particu-

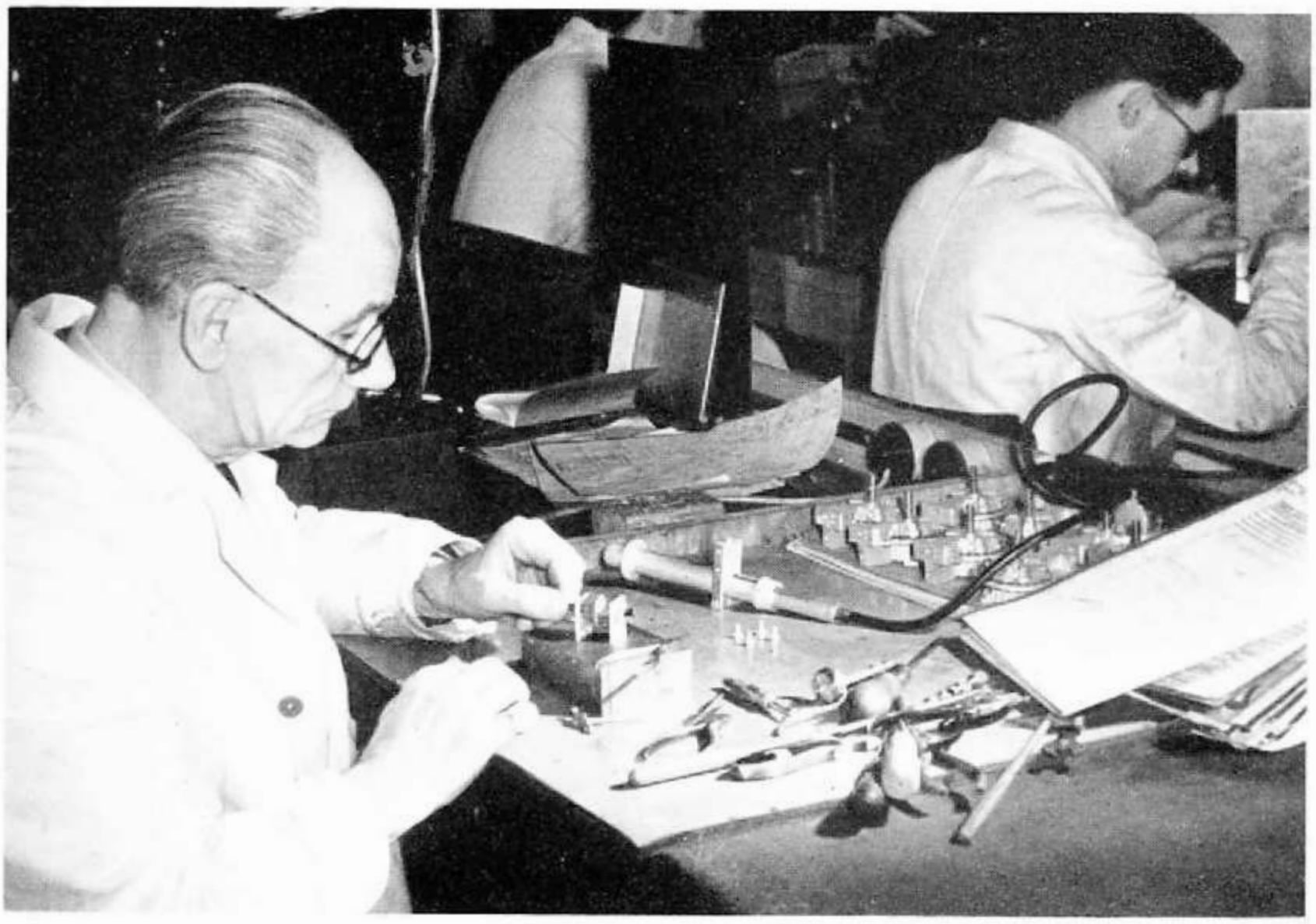
larly interesting instrument going through the shop when we took our photographs. This was a new U.H.F. Cavity Oscillator covering a wide frequency range. Amongst the different operations going on, we noticed George Godwin boring out the attenuator support, with Bert Eldridge close by. Roy Simpson was cutting a rack and pinion gear, also for use on the attenuator.

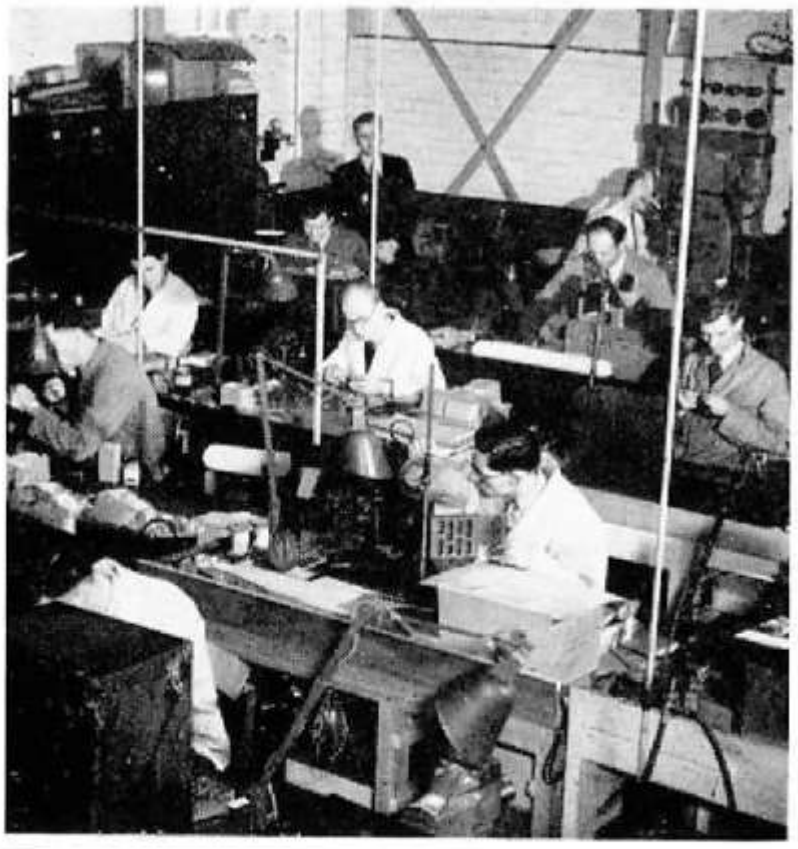


A high standard of precision craftsmanship is maintained in the Model Shop. A typical example we observed was Ron Archer machining and honing a component part, an operation re-

Susan Baker engraves a panel for a U.H.F. Cavity Oscillator. She has been eleven years in the M.I. Model Shop and can turn her hand competently to many jobs

Once a model maker always a model maker. George Sell, nearly forty years in the business, assembles an attenuator. At the bench in front of him are Jack Balding and Nick Stride





quiring an accuracy of plus or minus two-tenths of a thousandth of an inch which, as every engineer knows, is pretty fine work.

The males may like to believe that they hold the whip hand when it comes to craftsmanship but Susan Baker—eleven years in the shop—is equally at home with turning, milling, shaping, and bench work. When engraving, she produces her own "copy" and does her own setting without any supervision. For that matter, direct supervision of operations is rarely required in the Model Shop, due to the skill of the people employed.

Once a model maker always a model maker would appear to be the policy of George Sell. He has been in the model making profession for nearly forty years. Our photograph shows him assembling the various parts of the Oscillator attenuator.

It wasn't long before we saw the Oscillator fitted and assembled, ready for the wiring section and its subsequent very rigorous electrical checking by Development Test.

The instrument is already operating in a well-known north of England industrial plant, illustrating the versatile nature of the M.I. Model Shop which can produce one off for a particular customer's requirements, in addition to the normal prototype work which is the forerunner of the factory's production run.

Craftsmen at work: the bench fitting section of the M.I. Model Shop. Here many complex operations are carried out, including fitting and press tool work

George Godwin bores out the attentuator support for a U.H.F. Cavity Oscillator. With him is Bert Eldridge, chargehand

Roy Simpson has cut a rack and pinion gear for a U.H.F. Cavity Oscillator. He is holding the pinion in mesh with the rack