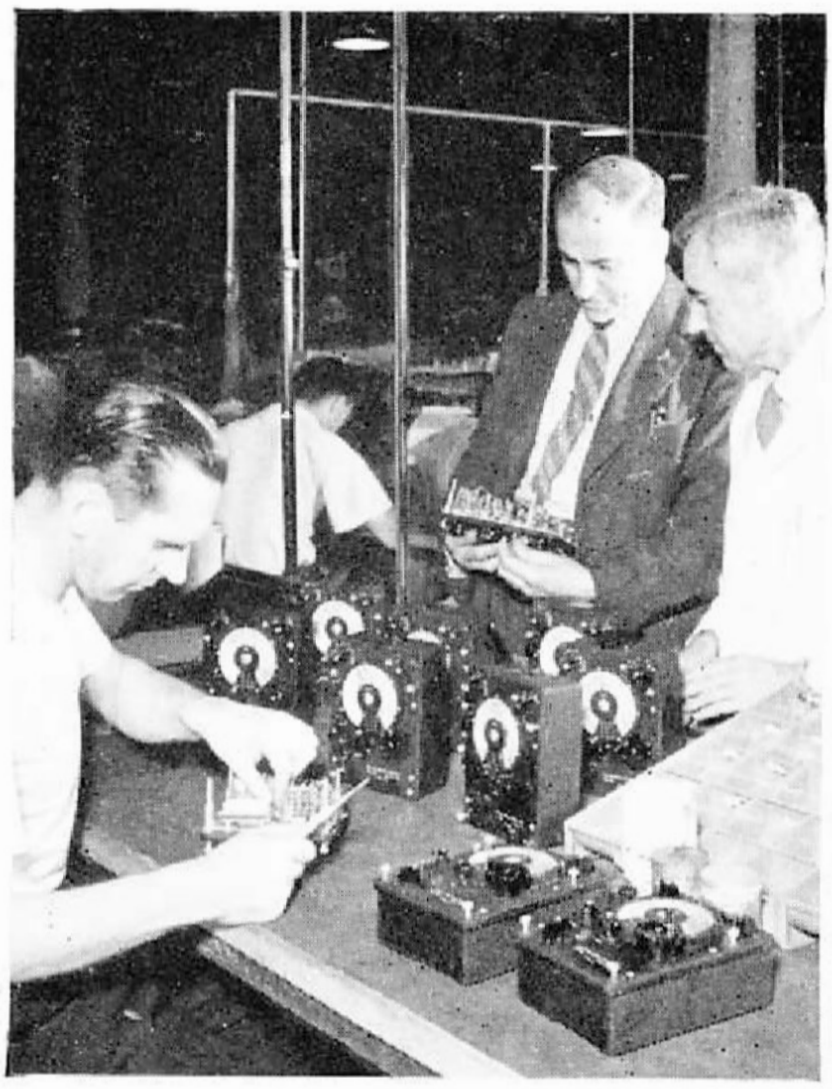


Above: wiring plugs for master controllers of automatic direction-finding equipment, Bill Wisbey, A. J. Burnell (Foreman), and Johnny Evans (Inspector)

Below: assembling and wiring AD108 receivers for Consul and Dove aircraft, Tom Ralph, A. J. Burnell, and Fred Fuller

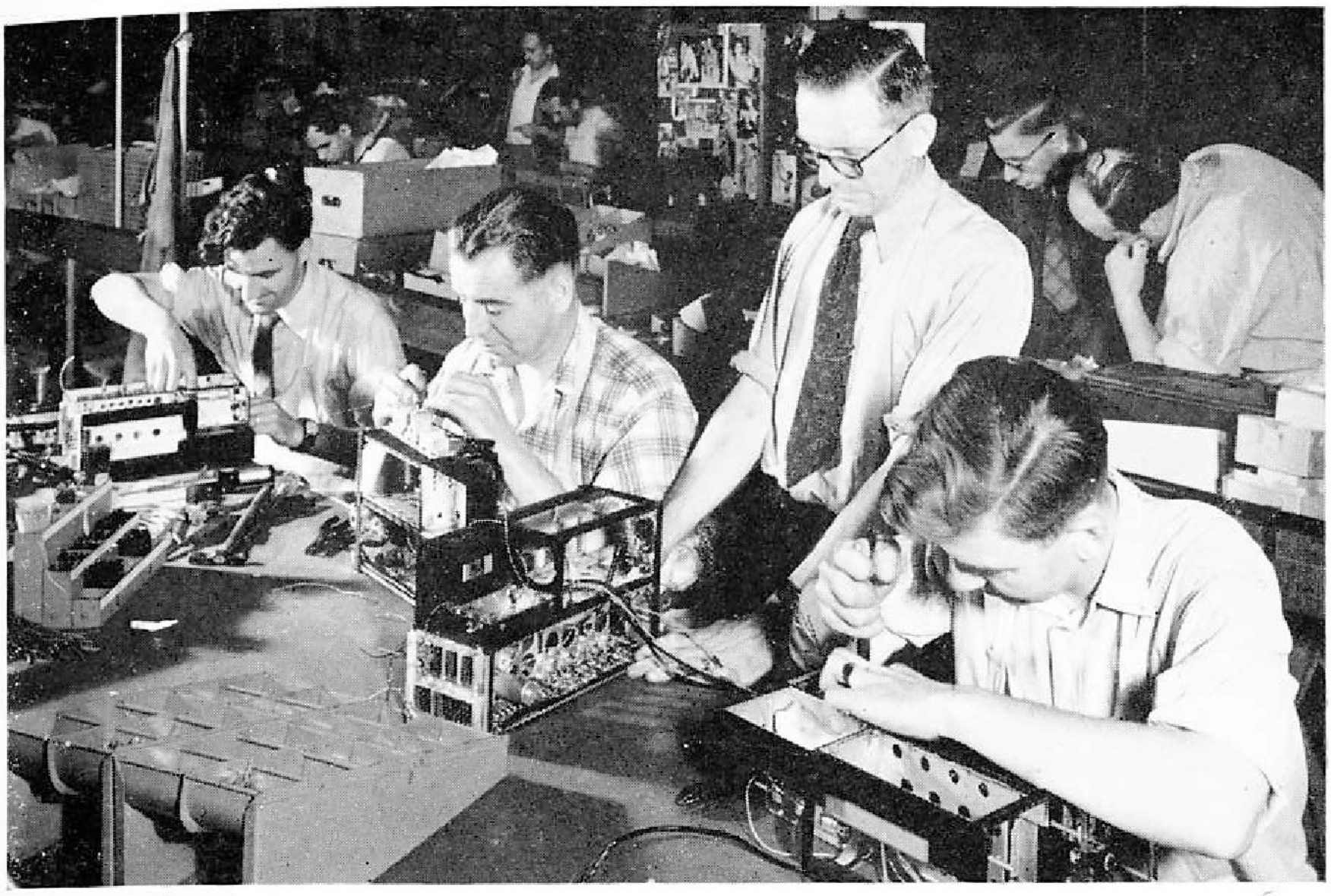
Spotlight on

SKATING RINK

THE CUSTOMARY use of a name lives long in our affections. Thus it does not seem in the least odd to us that the Section in which our equipment for the most modern aircraft is assembled and tested is called the Skating Rink. The Skating Rink it was and always will be.

To this section also come scores of parts from the feeder Sections of the Works, and from here they go as instruments: direction finders for airliners, aircraft communication transmitters, receivers and aerials; long range radio for ships, and gear for measuring the depth of the sea.

Our automatic direction finder for aircraft is known to us as the AD7092A, and is often referred to by airmen as the radio compass. You will remember that the Canberras used this D/F on their trip round South America. It is built in this Section. Detailed parts from the Works, such as gears from the Machine Shop, coils from Winding Shop, chassis and pressings from Waterhouse Lane, are built up first into sub-assemblies and then into main assemblies. These are fitted into the beautifully finished cases sent over from Processes and the ten separate units of the instrument pass into Aircraft Test, another Section under the same roof. Completed they leave for Finished Stores and Packing and for Vickers Viscounts and Comets, and most of the big airliners. A big batch of these equipments has just left, and 200 of them are being assembled for another order now.



Three early stages in the assembly of the AD7092A receiver of the Automatic Direction Finder, generally known as the radio compass. Allan Clarke, Doug Perkins, Tal Harris, senior chargehand, Ron Allen

It is interesting that the radio compass can be used by both the wireless operator and the navigator in the same aircraft. A master control unit is included on the panel so that the wireless operator can switch over to navigator who has a syncro-repeater system before him at his table. This is just one more unit being built into which go controller switch drives and the innumerable 24-volt motors which operate the tuning condensers.

The procedure of assembly is similar for other instruments as, for example, a transmitter with which aircraft in flight can communicate with Ground Control. This is our AD107, also used in the Canberras. The set is likewise built up from several units cannily compact on the racking—the blower, drive, voltage regulator, power, tuner, main amplifier, and modulator. The whole system is in a way similar to a miniature B.B.C. transmitter, and all the valves are cooled by one blower.

Moving through the Section at the same time are special receivers to partner this transmitter.

There are all sorts of auxiliaries to go with it, from generators, which supply the transmitting power, to regulators which ensure a constant voltage supply to valve heaters.

These are some of the assemblies which pass through the hands of A. J. Burnell, who has twenty-five years Company's service, and his chargehand, Tal Harris, eighteen years. And there are plenty more too, loop aerials—those that are carried in small torpedoes below the wing—and for high speed, those that are recessed in wing, body or tail. Special receivers for beam approach, and even telegraph morse keys for the radio operators.

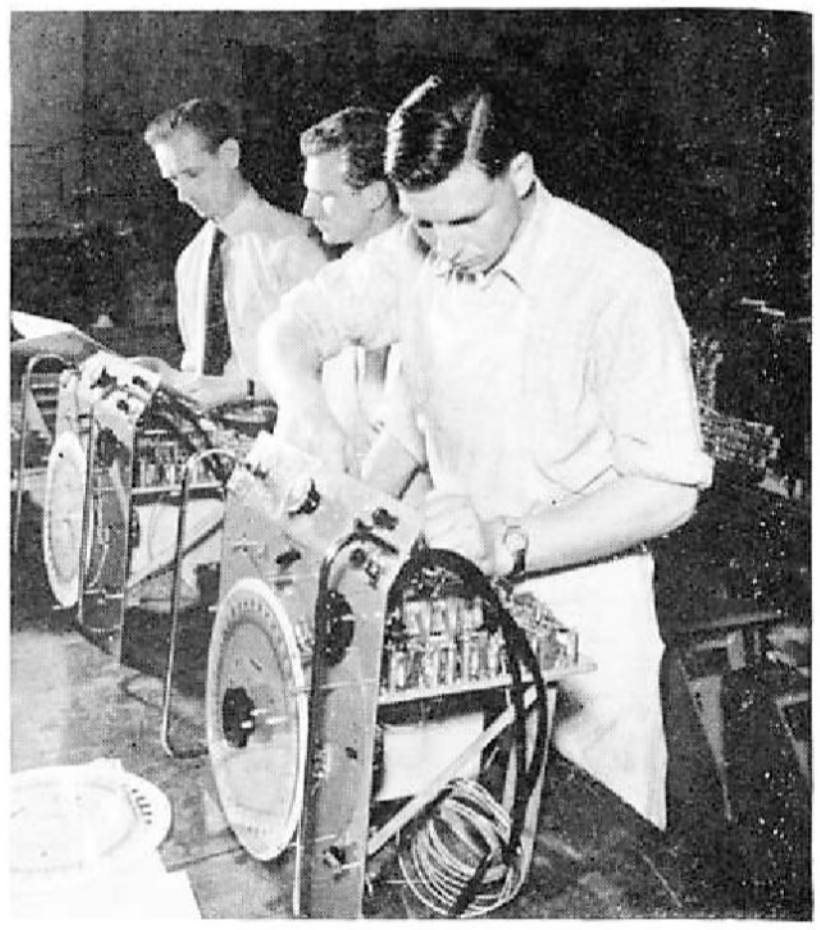
All these things pass on to Aircraft

Test Section, in the charge of D. J. J. Davies.

In a different direction, out to sea, goes equipment of another kind. Beside the business of M.W.T., the benches of the Rink supply M.I.M.C. Oceanspans and Lodestones, among others, are being built for mariners in batches of two and three hundred.

A ship needs a main working transmitter for long distance communication at sea—the Oceanspan. She needs a means of pin-pointing her position at long range; with the Lodestone she can take radio bearings on transmissions from coastal radio beacon stations or weather ships.

These necessities for the guidance and safety of our seamen and airmen flow in hundreds from the benches of the Skating Rink.



Assembling the underside of receiver chassis for the Lodestone Direction-finder, Tom O'Flynn, Chargehand, Marine Section, Tim Tyler, and Jim Ling

First Anniversary

THE MARCONI Nursing Division was "at home" to county and divisional officers of the St. John Ambulance Brigade to celebrate the first anniversary of the Division.

An unexpected pleasure was the visit of F. S. Mockford, Commercial Manager, who is one of the Vice-Presidents, with Mrs. Mockford. Unfortunately, it was not possible for H. C. Van de Velde, President, and Mrs. D. Sincock, Vice-President, to be present owing to previous engagements. Dr. Macbeth, the Divisional Surgeon, managed to pay us a brief visit and we were very glad to see him.

Mrs. Smellie, County Superintendent of Nursing Divisions, gave a very interesting talk on the work carried out by the Brigade during the floods on the East Coast. A further talk, which proved equally interesting, was given by Mrs. Gerrity, who has recently returned from abroad. She told us about the work done by the Brigade in Singapore and other overseas areas.

The birthday cake, made by Betty Mallows, a member of the Division, was a great success. Iced in white, it was decorated with the eight-pointed star of St. John with one candle in the centre. The refreshments, provided by F. W. Collins and Mrs. Warren of the Canteen, were delightful and appreciated by everyone.

Mrs. E. Clark, member-in-charge of the Division, welcomed the guests, and thanked Mrs. Smellie and Mrs. Gerrity for their interesting talks. She also gave a brief account of her visit to the Stoke Mandeville Hospital "Olympic Games" for Paraplegics. An invitation was extended to all present to accompany the Marconi Nursing Division on their visit to see *Chu Chin Chow on Ice* on 3 October 1953. E.C.