Information on



Editorial conference at M.I. St. Albans, K. H. Newhouse and Arthur Wray discuss the proofs of "Marconi Instrumentation"

ELECTRONICS is still an infant—at any rate in years, though maybe a precocious infant on account of the war—and the major problem of electronics today is in the widest sense an educational one. Its potentialities are fabulous, but society, above all industrial society, has still to learn how best to realise them."

An extract from a technical journal? No, these words are taken from the well-known business magazine Future. Big business wants to know more about this vital subject; there is a growing awareness of the need for efficient dissemination of information on all aspects of electronics, including instrumentation. Marconi Instruments at St. Albans are also making a significant

contribution to industry in this respect.

To appreciate the problem that confronts that Company's Technical Information Services it is necessary to consider the diverse types of instruments produced and the people served. The Company's Communications Catalogue alone lists fifty-three instruments, ranging from tiny wavemeters for the checking of harmonic frequencies, measuring about 5 in. by 3 in., to Precision Frequency Measuring Equipments with dozens of circuits, used by the B.B.C. particularly to ensure that their transmitters do not stray off frequency.

Industrial instruments too. Moisture meters, pH equipment, instruments for testing the thickness of plating and paint, and the Electronic Counter—a

Instrumentation

BY K. A. McKENNA

mathematician of no mean skill—which can count up to a million in a second. There's quite a story about this Counter, by the way. One of its less obvious uses is the checking of the thickness of ship's boiler plates, by a method which depends on the reflection of sound waves, to ensure that there is no flaw in the construction. Recently, Sales Department received an urgent telephone call from a well-known firm of Tyneside shipbuilders. "An aircraft carrier ready to put to sea for its trials. An Electronic Counter required immediately. Can you arrange?" We did arrange and the great ship joined the active list.

X-ray and electro-medical equipment

can count up to a million in a second.

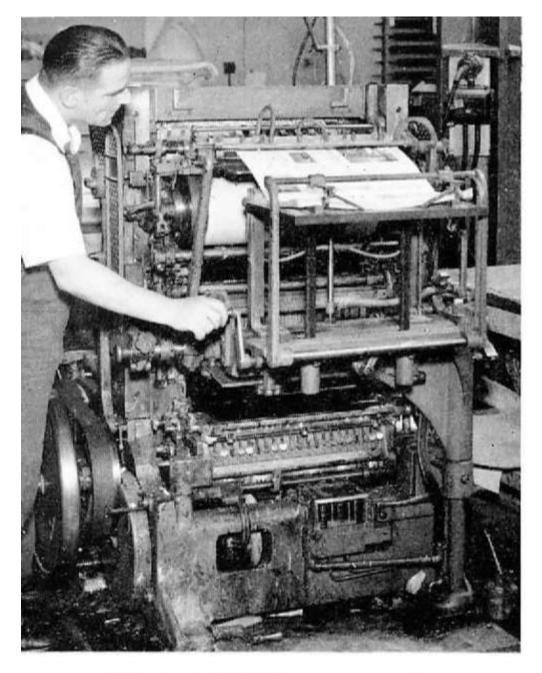
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for hospitals, clinics and doctors' surgeries. Special equipment for the Services. In the field of instrumentation the Company leads the way.

Of course, all these diverse types of highly technical equipment cannot be sent out to users without complete instructions on their operation, servicing and maintenance; information in the form of advertisements, booklets, catalogues and articles for technical journals on the Company's latest developments have to be prepared; courses of lectures in instrumentation practice are provided in the Company's works for users of equipment; a technical bulletin dealing

Marconi Instruments artist and copywriter get together: V. Gregory and K. A. McKenna, Publicity, decide on the form a leaflet will take





This vertical Miehle press prints four pages of "Marconi Instrumentation" from one forme at the rate of hundreds an hour. (By courtesy of Barnard & Westwood Ltd.)

with new techniques and instruments is issued bi-monthly. These are just some of the responsibilities of the Technical Information Services.

Marconi *Instrumentation* — that's the title of the Company's technical magazine. The circulation is now 4000, and still rising, the estimated readership is in the region of 25,000. There are few electronic engineers in this country or overseas who do not read it. The distribution covers such diverse places as Keforidua, on the Gold Coast, "For the attention of the Engineer-in-Charge of Broadcasting", the "Institute de Electrotecnica", Uruguay, and the Hudson's Bay Company, Winnipeg, not to speak * of the copies that are sent to engineers and research workers in this country.

It is easy enough to start off a journal of this nature. All you need is a few articles on such varied subjects as "Discontinuity Capacitances in Coaxial Lines," "Modulation Distortion Measurement to 0.1 per cent-30 c/s to 15 kc/s", and, in the X-ray field, "Ignitron Switching for Radiographic Timers". The trouble lies in maintaining the high standard of technical writing and ensuring a smooth flow of interesting articles. The increase in circulation of *Marconi Instrumentation* since its inception in April 1947 from 1000 to 4000, is proof, indeed, that the journal is capably handled and its present editors, A. G. Wray, M.A. and K. H. Newhouse, A.M.I.E.E., are keeping up the good work.

Unlike many technical publications, this journal depends almost entirely for its contributions from engineers within

The folded sections are being wire-stitched before they are trimmed in a guillotine, ready for despatch to all parts of the world





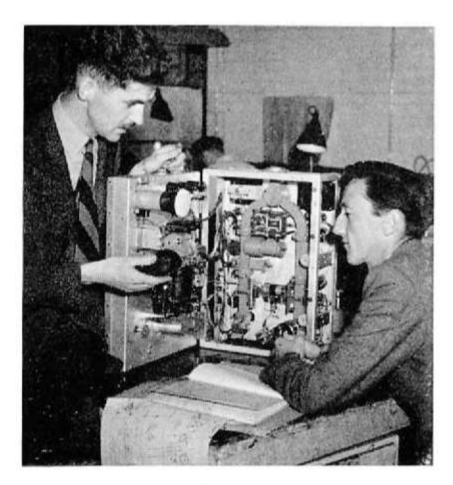
A display which tells a story quickly. A part of the Marconi Instruments stand at the 1951 British Instrument Industries Exhibition

the Company and this has the advantage that the writers are thoroughly at home with the Company's instruments.

It's a far cry from the jungles of Malaya to the industrial life of Longacres but the service men who maintain the vital links of communications with v.h.f. transmitters and receivers have their connection with the technical writers of Marconi Instruments. Detailed information is provided Technical Literature Department for the Ministry of Supply, covering the many types of instruments the Company provides for Services use, and this information forms the basis of the comprehensive manuals which play their part in ensuring that Kuala Lumpur and other trouble spots throughout the world have efficient communications with the outside world.

Just one of Technical Literature's many jobs. They also compile Specification Leaflets, Instruction Books, InSome of the manuals may run to as many as forty pages and include schedules of spares, notes on performance and maintenance, circuit diagrams and annotated illustrations which simplify the job of finding components. With X-ray equipment, particularly, installation and servicing provide special problems and the engineer on the job must be in the picture whether he is ten or ten thousand miles from the Works.

For many years the Marconi Instruments advertising campaigns have been designed to support the efforts of the Company's sales force in this country and of its agents and associates all over the world. The media used fall naturally into the same categories as the products —i.e. those covering radio and communications; industry and agriculture; medical practice; X-ray technique and applications; also a select few devotedto research.



Technical writer Peter Dyson (left) and development engineer Peter Green get together on the compilation of an Instruction Book for the R.F. Test Set

Advertising for Marconi Instruments is by no means confined to the U.K. Take the case of the American market. Soon after the Company's New York office was established, steps were taken to publicise the event in the U.S.A. and, at the same time, to draw attention to instruments specially selected for their appeal to the American user. For the first time the Company's advertisements appeared in American publications and, as a result, interest was aroused not only in the U.S.A. and Canada, but in Mexico, South America, the Philippines, Japan and certain European countries—proving once again that science is international even in these days of politically created barriers. In all cases the terminology used in these advertisements conforms with general practice in the States, just as the instruments themselves are supplied to operate from the prevailing voltages. Special catalogues were also produced, again designed specifically for the market concerned. Only by taking such special

pains can the American engineer be convinced that a genuine effort is being made to cater for his requirements.

While much of the Company's advertising effort is devoted to informative advertisements, sales literature, exhibitions and articles for technical journals on new developments must also be prepared. The Photographic Department are also in the picture and, at any time, may be confronted with a special request for, say, "Forty full plate prints", required same day to be sent airmail to Australia or South Africa for an exhibition.

Exhibitions are great fun for the organisers, providing one is endowed with a sense of humour and no propensity to gastric ulcers—they usually go together . . . "space, plans, exhibition catalogue, chairs, flowers, electricity, literature, telephone. All clear! Drat it, I've forgotten the instruments."

In the educational field, Marconi Instruments' engineers give lectures on instrumentation to institutes, colleges, firms and industrial organisations. And then there's the Education Scheme organised by E. A. Rea Palmer, Group Liaison Engineer, which has as its purpose the training of field engineers in the use of the Company's instruments. Typical, maybe, of such engineers, are the men from the Malay Telecommunications Service who recently spent some time at Longacres.

"The major problem of electronics today is in the widest sense an educational one." Marconi Instruments are playing their part in tackling this problem and, at the same time, giving valuable assistance to sales staff in maintaining a flourishing home business and building up a recognition of Marconi Instruments in world markets as representative of the finest British design and workmanship. And, what is more, they are bringing much needed dollars and sterling to the national exchequer.