Television for Nigeria

FIRST PERMANENT SERVICE IN AFRICA

A FRICA now has its first permanent television service since the two Marconi-equipped stations began programme transmissions on 1st November 1959.

The West Nigerian Government, having decided to establish a television service, placed contracts with Marconi's Wireless Telegraph Company for the supply and installation of transmitting and studio equipment for two stations, located at Ibadan and Abafon. A further contract awarded to Marconi's provides for the technical operation and maintenance of the stations for a preliminary period of one year during which Nigerians will be trained to help take over the operation of the new service.

Ibadan, the Regional Headquarters of Western Nigeria, has a station equipped with a 500 watt vision transmitter feeding into a three stack super-turnstile aerial, giving an effective E.R.P of 1½ kilowatts. This ensures good reception in Ibadan itself and the nearby villages. For the studios Marconi's have supplied a Broadcast Vidicon camera channel and telecine equipment with two 16 mm projectors and two slide projectors. An outside broadcast vehicle has also been supplied, equipped with two



The Television O.B Unit supplied to the Western Region Government, Nigeria.

Marconi Image Orthicon camera channels. These channels, being readily demountable, can be brought into the studio when additional camera facilities are required.

The Abafon station, equipped with a 5 kW vision transmitter, and having a nominal E.R.P of 15 kilowatts, covers the towns of Lagos, Abeokuta and Ijebu Ode. The transmitting stations are connected to the existing VHF telecommunications system (supplied and installed by Marconi's) to enable programmes to be interchanged between the two, but most of the programme material will originate at Ibadan. Marconi engineers have been in close consultation with the Nigerian Authorities from the beginning of the project and have given technical advice and assistance with the planning of the service. It is worthy of note that the Ibadan station has been brought 'on the air' with test transmissions within three months of ordering; to complete a project of this size and complexity in such a brief period constitutes a remarkable engineering feat.

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21" Monitors for B.B.C's new Television Centre

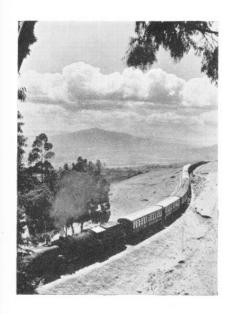
THE British Broadcasting Corporation has ordered 75 of a new type of 21 in. picture monitor designed and manufactured by Marconi's Wireless Telegraph Company. These are for the B.B.C's new Television Centre, near Shepherds Bush, where they will be used in Studio Production Control Rooms.

The new monitor has been designed to provide studios with a larger picture than those in current use. It is considered essential for studio control room and studio floor monitors to provide a picture as large as that seen by viewers on domestic receivers and the order reflects the growing popularity of the 21 in. screen in the home.

The new Marconi Type BD850, while basically simple, is a high performance equipment. To ensure maximum reliability and ease of maintenance extensive use has been made of printed circuits and long-life valves. It has been specially designed for monitoring and is not a modified domestic receiver.

The impressive new B.B.C Television Centre, near Shepherds Bush, London, where the monitors will be used. The BD850 is suitable for use on 405, 525, or 625 lines. Normally a monitor will be supplied to operate on one standard only but change-over from one to any of the other standards can be effected by four simple wiring modifications and changing one condenser. Alternatively a changeover switch can be fitted which enables the monitor to operate on any of the three standards without modification. A remotely operated brightness control is also available.





New Kenya Sound Service

THE new Kenya broadcasting service, which came into full programme service on 1st October 1959, represents an important step forward in the cultural life of that country. It provides a unified broadcasting system which radiates English, African and Asian programmes.

At the main transmitting station at Langata, near Nairobi, Marconi's Wireless Telegraph Co. Ltd have supplied and installed four new 10 kW transmitters of entirely new design, while four older Marconi transmitters have been trans-

The Uganda mail train on the escarpment of the Rift Valley, Kenya.

ferred from Cable & Wireless Ltd, who relinquished their broadcasting concession in Kenya on 1st October. The programme input and ancillary equipment has also been supplied and installed by the Marconi Company.

Two 10 kW transmitters (Type BD 268) operate in the high frequency band, the other two (Type BD227) being medium frequency equipments. The remaining four consist of two $7\frac{1}{2}$ kW HF, one 2 kW MF and one 5 kW MF transmitters.

The 10 kW transmitters are especially designed for simplicity in installation (no under-floor ducting is required) and ease of maintenance.

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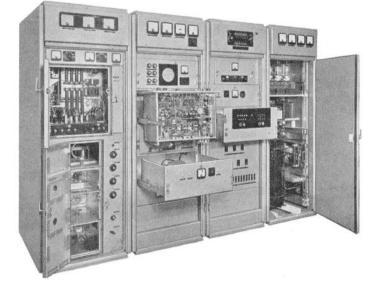
New Television Stations for Australia

EW contracts have been placed with Marconi's Wireless Telegraph Company for the supply and installation of television transmitting stations and studio equipments in Australia.

These orders have a value of about £400,000. They were obtained through Amalgamated Wireless (Australasia) Ltd.

Three out of four new National television transmitting stations will be Marconi-equipped. These stations are at Brisbane, Adelaide and Perth. Each of the three stations is being equipped with two Marconi 10 kW television transmitters Type BD371, two 2 kW sound transmitters Type BD325C, a Control Desk, Programme Input Equipment (vision and sound) and extensive monitoring facilities and spares. The aerial systems consist of split 8-stack arrays.

The vision and sound signals are conveyed in each case from the studio centres to the transmitters via Marconi wide-band radio links Type HM200, while ATE-



Marconi VHF equipments Types RLS3.1 and RLS3.2 are being provided as the communication links.

At each of the three stations the outputs of one vision and one sound transmitter are combined to feed four stacks of the aerial array, while a similar procedure with the second set of transmitters feeds the remaining four stacks. The Effective Radiated Power (vision) in each case is 100 kW.

For the studios at all four stations, Marconi's are supplying and installing the Master Control equipment, picture monitors and ancillary equipments. The two outside broadcast vehicles which form part of the order are intended for use in conjunction with the Brisbane and Hobart stations. They are 3-camera vehicles and one spare camera channel is being supplied for each. The cameras are the new Marconi Mark IV's.

The Brisbane transmitting station is at Mirrimbul in the Taylor hills, 870 ft a.s.l. It is approximately seven miles from the studios at Brisbane. The Adelaide station is being built on Mt Lofty, at a height of 2,300 ft a.s.l, and is about 13 miles to the east of the city. At Perth, the station is at Bickley, 14 miles to the east of the city, 1,130 ft a.s.l. All stations are designed for operation on Band I to 625-line standards, the sound transmission being frequencymodulated.

British Television for Brazil

ARCONI'S Wireless Telegraph Company Ltd has received a £250,000 order from Brazil for television equipment for a new station under construction at Recife, Pernambuco.

The luxurious contemporary building will contain a suite of three studios, completely equipped by Marconi's with seven Marconi 4½ in. Image Orthicon cameras, a master control equipment, two vidicon telecine units and lighting, sound, test and ancillary equipment. A three-camera outside broadcast vehicle and microwave link equipment will also be provided.

The transmission equipment will consist of Band I 18 kW vision and 9 kW sound transmitters feeding into a 6-stack quadrant aerial, providing an effective radiated power of 110 kW. It will be capable of handling a compatible colour service when required to do so.

The order was obtained by Marconi's through their agents in Brazil, Murray Simonsen S.A from the Jornal do Comercio TV Station, owned by Empresa Jornal do Comercio S.A, Recife. The latter Company has owned and operated for the last eleven years, Radio Jornal do Comercio, a broadcasting station considered one of the finest installations in South America. The equipment for Radio Jornal do Comercio was also supplied by Marconi's.



Recife is the site for the new station.