Airlift beats tight schedule

A rush order from the Nigerian Broadcasting Corporation for three Marconi Sound Recording Units was completed ahead of schedule. The order was confirmed in September and the units were urgently needed in time for the Second All-Africa Games in Lagos on Sunday January 7th. The three vans were air-freighted direct to Lagos and delivered on December 19th with 18 days in hand.

The units were specially designed to meet Nigerian requirements. The system was engineered to provide three separate areas, driving cab, technical area, and storage/power area, and each van accommodates two operators as well as the driver in the cab. The technical area is immediately behind the cab, with comfortable space for the sound controller, and for a machine operator. At the back of the van is the storage area, with heavy duty batteries, charger and other equipment, also storage space for equipment during transit.

Built into the technical area is an L-shaped desk which accommodates the modular 8-channel Sound Mixer type B1006. Four inputs are used for the two disc reproducers, one tape recorder and a cassette tape recorder, and the remaining four inputs for microphones. A high quality f.m broadcasting transmitter link equipment is installed together with communications facilities between van and studio. The quality of the transmitted signal can be checked on a monitor loudspeaker. An additional facility is a low-power amplifier with two horn loudspeakers mounted on the roof, enabling the unit to be used for public address if necessary.

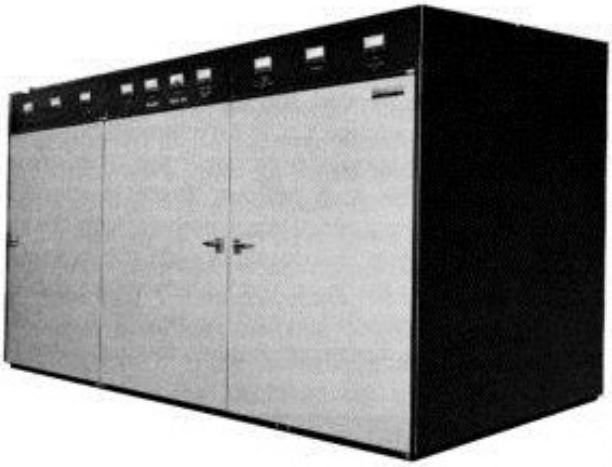
The Sound Recording units being loaded for airlift to Nigeria.

New Zealand buys Mark VIII O.B units

Two complete colour outside broadcast units, each equipped with four Marconi Mark VIII automatic colour cameras and full supporting equipment, have recently been delivered to the New Zealand Broadcasting Corporation. This order, the first major colour television equipment purchase by the N.Z.B.C was won by Marconi after extensive evaluation of the many tenders submitted by the world's leading manufacturers in this field. The Mark VIII camera was also evaluated under operational conditions by N.Z.B.C engineers in Wellington and Auckland, including the telecasting and recording of a National League football match.

An additional forty Mark VIII camera chains have been included in other recent orders placed by eight broadcasting organizations in Australia, Jordan, Lebanon, Yugoslavia and including yet another repeat order from the United Nations in New York.

One of the colour O.B units ready for despatch to New Zealand.



The B7318 55kW u.h.f transmitter. Two of these are being operated in parallel.

Five out of six

Three more u.h.f television transmitting stations will go on the air in Canada at the end of this year using Marconi equipment. The latest contract has been placed with Marconi by Global Communications, via the agency of the Canadian Marconi Company.

Global Communications is to transmit a colour service for the southern Ontario district and will use the transmitters in three stations. The largest of these will utilize two Marconi B7318 55kW u.h.f transmitters, operating in parallel. The other two stations will each use the Marconi B7315 10kW u.h.f transmitter.

Of the first six u.h.f television transmitting facilities purchased by Canadian Broadcasting organizations, all but one are being supplied by The Marconi Company.

Mark V cameras for Spain

International sales to over thirty countries of the Marconi Mark V 4½in image orthicon monochrome television camera now total nearly 400 with the recent placement of two contracts for TV Espanola. Included in the orders are twelve Mark V cameras, together with associated mixing, synchronizing and communication equipment, for use in Madrid and Barcelona.

Four of the Mark V cameras are being installed in the Barcelona studios of TV Espanola, and four more in an existing outside broadcast unit operating from Madrid. This O.B unit was originally supplied by Marconi fitted with Mark IV cameras.

The other four Mark V cameras are being installed in a new O.B unit for Barcelona which has been built locally.

The Alcazar, Seville. The original building dates from the 13th century.

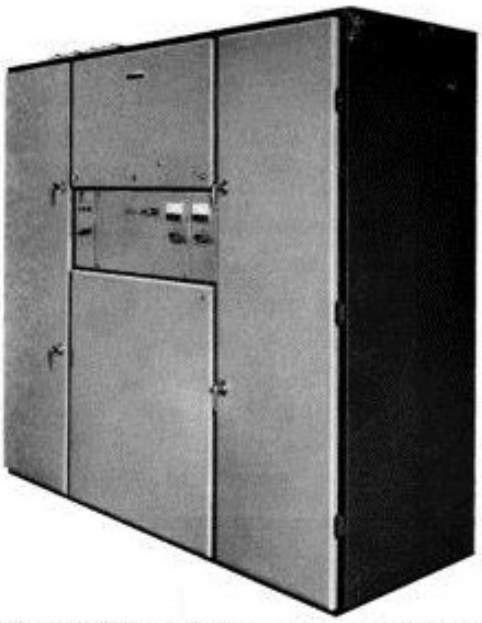
Sound and Vision—Summer 1973

I.B.A order 47 transmitters

The United Kingdom's first independent (commercial) radio stations are all going on the air via Marconi transmitters. The Independent Broadcasting Authority's first major contract for local radio equipment, of which delivery has already begun, was awarded to Marconi Communication Systems Limited in an order for all the v.h.f and m.f transmitters needed for the first group of local radio stations.

Marconi transmitters are the first in the national network being established by the I.B.A. The Authority's responsibility to provide local broadcasting calls for an eventual total of 60 stations, covering an estimated three-quarters of the population.

The order placed with Marconi's includes 21 1kW m.f transmitters, eight pairs of 1kW v.h.f transmitters, two pairs of 125W v.h.f, f.m transmitters and six 10kW m.f transmitters. All are standard equipments and those operating in pairs will have automatic changeover facilities.



B6029 10kW m.f transmitters are being supplied to the IBA for their independent commercial local radio stations.

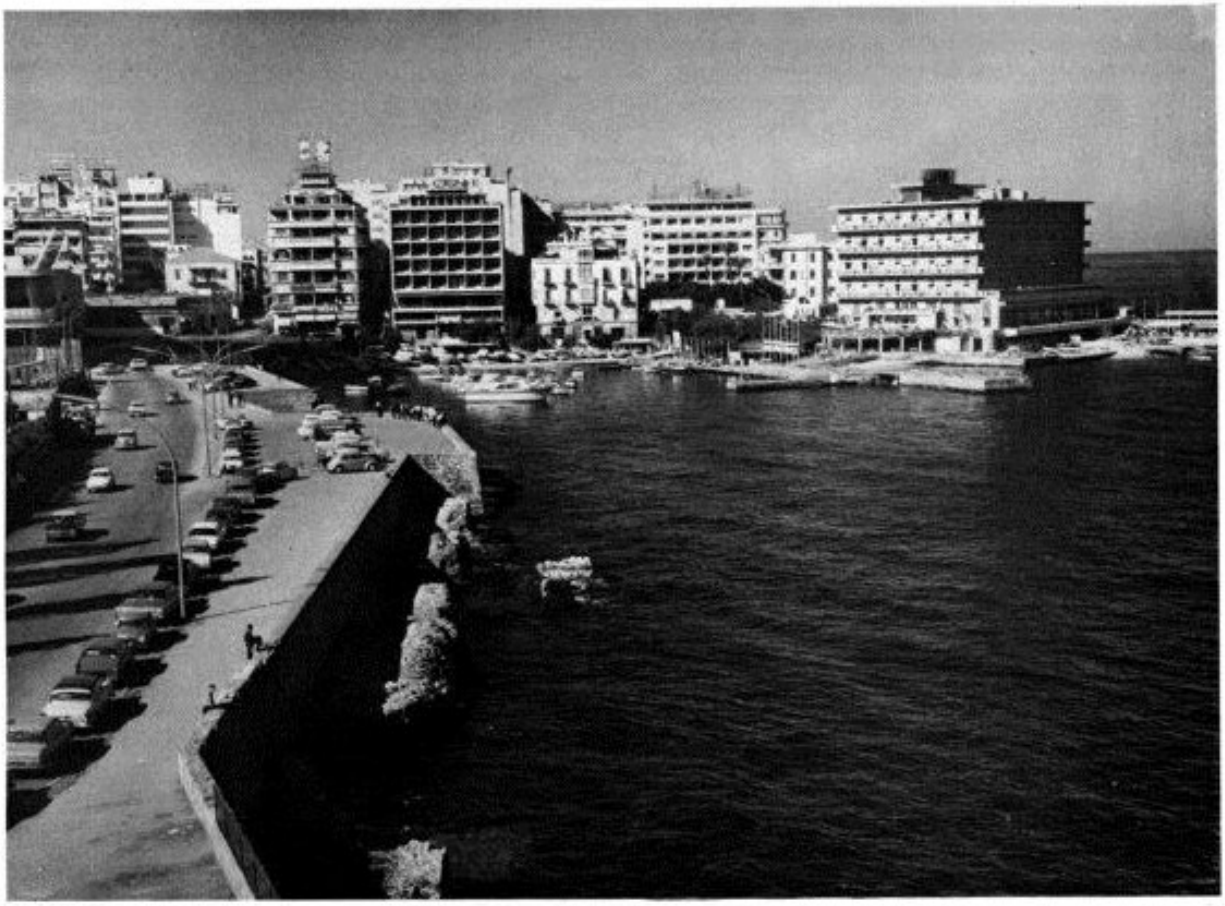
Sound and Vision—Winter 1973

Lebanon chooses Mark VIII colour camera

Another Middle East country recently commenced colour television broadcasting when Teleorient, the major television company in Lebanon, commissioned studio equipment installed in its Beirut studios by Marconi Communication Systems Limited.

MCSL supplied some of Lebanon's original television equipment in 1961, and Teleorient is totally equipped with Marconi studio and transmitter equipment. In addition to three Mark VIII Automatic Colour Cameras, the current order included vision mixing and switching equipment, together with the conversion of existing monochrome equipment to colour operation.

Lebanon is the third Middle East country to choose the Mark VIII Camera and joins also broadcasters in other countries in North and South America, Australia, New Zealand, China and Europe who have ordered nearly one hundred in recent months.



Beirut, from where Teleorient began a colour television service.

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Sound and Vision - Spring 1973

High-Power Transmitter for Nigeria

A powerful new high-frequency broadcast transmitter is to be installed at Kaduna in the North Central State of Nigeria by Marconi Communication Systems Limited.

The Northern Nigerian Broadcasting Company provides a comprehensive sound service for the whole of the northern states of Nigeria on both medium and shortwaves, and the new transmitter is intended to extend the shortwave transmissions to Northern Nigerians living and working in other states within the country. Broadcasting in Hausa and English, the Kaduna station will now be able to put out an all-embracing service which can be heard by all Nigerians.

Marconi's Broadcasting Division engineers will supervise the installation of the 250kW h.f transmitter, type B6122, in the existing station at Kaduna. Thirty-seven of this very successful model of high-power h.f transmitter will then be in operation throughout the world.

Market scene at Kaduna, Nigeria. A Marconi 250kW h.f transmitter is to be installed at Kaduna carrying programmes in Hausa and English to the whole of Nigeria.

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I.F modulated T.V transmitter sales pass 100

One a week, that's the impressive sales record of the current range of Marconi i.f modulated television transmitters since its introduction two years ago.

Designed and developed by Marconi Communication Systems Limited, sales of the transmitters now total 107 with orders having come from Europe, North America, The Middle East, Asia, South Africa, Australasia and the United Kingdom.

Hailed as a new generation of television transmitters when first announced, the new Marconi B7103 v.h.f series was the first design to exploit the full advantages of both i.f modulation and the latest circuit techniques.

The v.h.f series quickly became very popular with broadcasting authorities, and the more recently introduced u.h.f companion series quickly made an impact. In the U.K the Independent Broadcasting Authority is installing thirty-six of the u.h.f version while ten more are to go into operation in South Africa.

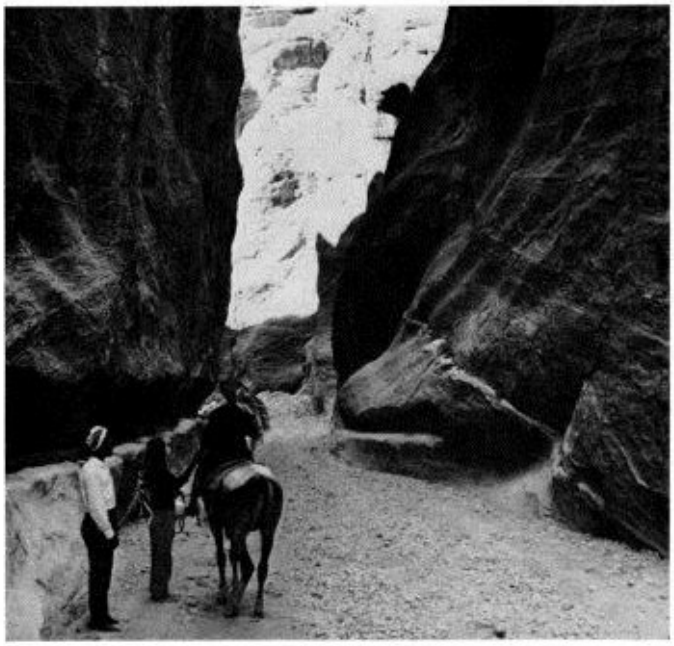
Marconi engineers were quick to recognize the advantages of the i.f modulated transmitter and developed the first v.h.f version back in 1956, but at that time the techniques employed proved too innovative to win ready acceptance. In 1971 the new B7103 v.h.f design was developed and the u.h.f B7320 series was added to the range in the following year.

Broadcasting authorities have since that time moved steadily towards i.f modulation which allows maximum exploitation of solid-state devices. This, together with the implementation of all recent significant advances in circuit design has contributed to the extremely high reliability of today's transmitter range.

The B7103 i.f modulated v.h.f transmitter.

Sound and Vision—Winter 1973

Colour comes to Jordan



Jordan Television will go into full colour operation next year using advanced design studio and transmitter equipment being supplied by Marconi Communication Systems Limited under a contract worth nearly £½ million. Marconi put Jordan's first television service on the air in 1968 when King Hussain personally inaugurated the new studios. The first colour programme was transmitted on the anniversary of that occasion, on April 27th of this year. For the occasion MCSL installed the first of five Mark VIII Automatic Colour Cameras in the Amman Studios.

The other Mark VIII cameras will be used to convert two studios to colour operation, together with the latest vision and sound mixers, monitoring and ancillary equipment.

To carry the new colour programmes Marconi are supplying a 15kW Vision Transmitter, type B7205, together with a new antenna. This is one of the latest range of Marconi transmitters, incorporating all the most recent design developments. The maximum use of solid-state techniques provides exceptional reliability and performance stability, resulting in a transmitter which is ideal for unattended operation.

The Siq, Petra, Jordan. Monochrome t.v began in Jordan in 1968 followed by the first colour transmissions on April 27th 1973.

High-power Transmitter for Egypt

Marconi Communication Systems Limited is to supply a new sound broadcasting transmitter to Egypt. The order, placed by the Egyptian Organization of Broadcast and Television Federation, is for a 100kW m.f transmitter to be installed near Cairo.

Marconi has a long association with the Egyptian Broadcasting Authorities dating back to an early 20kW Marconi transmitter installed in 1932 which remained in reliable operation for almost thirty years. Since then the broadcast facilities have been progressively extended, and in the fifties, Marconi installed a 100kW h.f and a 100kW m.f transmitter, both of which are still in operation.

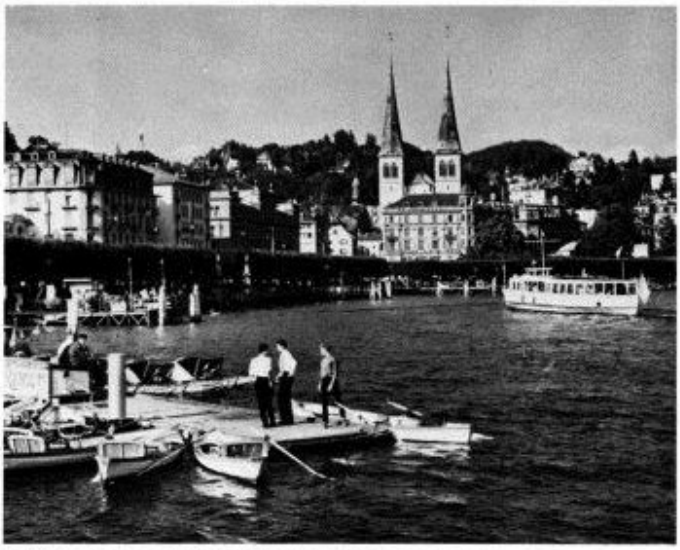
The equipment to be supplied under the present contract will consist of a pair of 50kW transmitters, Type B6031, operating in parallel and providing a very high degree of service reliability.

The B6031 transmitter combines the patented Marconi high-efficiency power amplifier of a well-proven equipment with the advantages of solid-state rectifiers and control circuits. Simplicity and economy of operation and installation are major design features, the equipment being air-cooled and thus needing no water supply or heat exchanger.

In recent years, 23 other Marconi 50kW m.f transmitters have been supplied to Aden, Cuba, Botswana, Italy, Kenya, Qatar, Spain, Tanzania and Uganda.

Alexandria harbour with its modern skyline.

Swiss transmitter orders top £¼ million



Lüzern where a pair of B6542 transmitters are to be installed at a height of 5904ft.

The Swiss Posts and Telegraphs Department has begun a major re-equipment programme for Switzerland's sound and television broadcasting services and has purchased equipment worth well over £¼ million from Marconi.

The first order was for four pairs of type B6524 f.m broadcast transmitters which provide main and standby operation with automatic changeover facilities. All solid-state except for the final stage, the B6524 has been designed to operate at unattended sites, has an extremely fast start-up time of four seconds from switch-on and uses the new Marconi all solid-state frequency modulated drive. One pair of transmitters will be installed on Mount Rigi-Kulm in Lüzern (5904 ft) and the second pair on Mount Säntis (8206ft) in Appenzell.

A second order is for six 10kW Band 1 transmitters which will be installed in pairs at Bantiger, La Dole and Utelieberg. These transmitters will also operate in a main/reserve configuration, with automatic changeover facilities, a mode of operation similar to that used for f.m broadcasting.

One pair of transmitters has been designed to operate on Channel 2, a very low-frequency channel which requires extension of the normal range of the B7103 series down to 48mHz.

Marconi engineers will supervise the installation and commissioning beginning in January 1974.

£3¼ MILLION TELEVISION ORDER FROM YUGOSLAVIA

One of the biggest contracts ever placed for television equipment has been won by Marconi Communication Systems Limited. The £3¼ million contract was closely contested by television equipment manufacturers throughout the world. Marconi were selected by the Yugoslav Joint Radio Television Committee, a federal authority representing the eight regional and semi-autonomous areas of the country, to provide the biggest single share of the order for the studio and transmitting equipment which will put Yugoslavia's second service on the air.

Each of the eight broadcasting and television stations has autonomous status, but the Joint Committee has established links between the various stations so that each may take and transmit programmes originated by the others. The second network now planned will carry a 625-line colour service throughout the country, and Marconi's current contract, placed by the Yugoslav importing agencies acting on behalf of four of the radio and television centres, will provide studio and mobile equipment for RTV Zagreb, Skopje, Pristina and Novi Sad. Transmitters for RTV Skopje and Pristina, where additional coverage is needed, are also included in the contract. Each of the stations operate independently and each has different geographical and economic circumstances for which their technical needs must be designed.

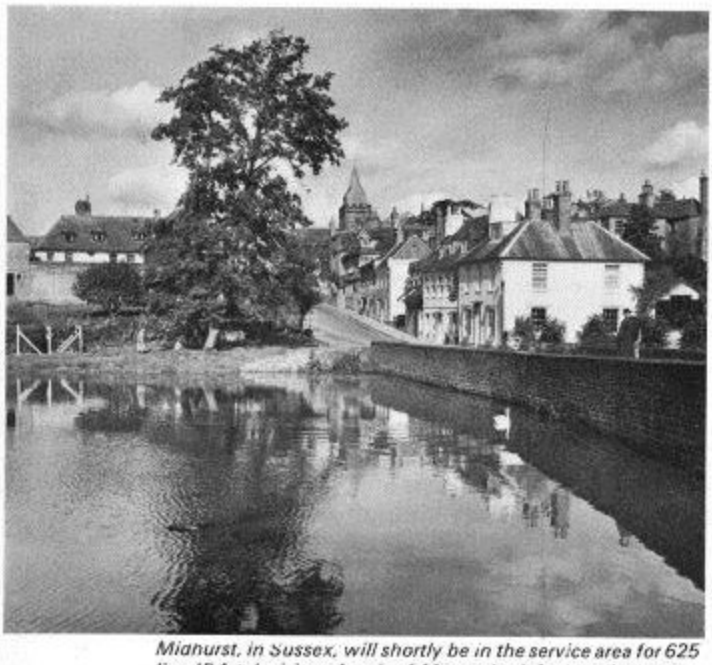
The first television o.b unit for Skopje which has been fitted with four of the Mark VIII automatic colour cameras.

Marconi's contract includes the design and equipping of several main and presentation studios, and the supply of a total of eight outside broadcast vehicles, four of which are to be equipped with the Marconi automatic colour television camera, the Mark VIII.

The Yugoslavs are also among the first broadcasting authorities to order the new Marconi designed telecine, announced earlier this year, and nine are included in the order. This is one of the most advanced and forward looking studio equipments to be developed in the television industry recently and is based on an entirely new concept of telecine design.

Transmitters to be installed include 40kW, 20kW and 10kW u.h.f and 5kW and 1kW v.h.f, all from the latest generation of Marconi transmission equipment, which includes i.f modulation.

Skopje



Midhurst, in Sussex, will shortly be in the service area for 625 line IBA television. A pair of Marconi u.h.f transmitters are being installed for this service.

Repeat Order from the IBA

The Independent Broadcasting Authority has placed a further order for u.h.f television transmitters with Broadcasting Division. The order, worth £¼ million, is for three pairs of transmitters to be installed at remote, unattended sites to extend coverage of the IBA's 625 line service.

One main and one standby transmitter, together with automatic changeover facilities, will be installed at each site. The main transmitter will be the recently introduced B7320 incorporating an integral drive unit which fully exploits the i.f modulation system. It has two klystrons, and separate vision and sound outputs are combined in an external unit. The B7320 can operate at 11kW peak vision power, while the reserve transmitter, with a single klystron amplifying a combined vision and sound signal, can operate at a peak vision output of 4kW.

These follow an earlier order for fifteen sets of u.h.f transmitting equipment to implement the authority's network expansion. In a previous order Broadcasting Division has also supplied and installed the u.h.f transmitters at the ITA's (now the IBA), Crystal Palace site which serves the London area.

Second U.H.F Transmitter for Canada

Canada's second high-power u.h.f television transmitter is being supplied by Marconi Communication Systems Limited, through the agency of the Canadian Marconi Company.

Marconi's Broadcasting Division supplied the first u.h.f television transmitter in 1970 to the Canadian Broadcasting Company who operate and maintain it for the Ontario Department of Education. The Department has been using the transmitter, which was installed and in service within six months of the initial order, for Canada's first full-time educational channel. The new u.h.f transmitter will be programmed in the French language, primarily from the CBC Montreal production centre with national news inserts from the nation's capital, Ottawa. Toronto studio facilities will be used to produce local news, weather and interview programmes.

The new transmitter is the B7318 55kW design, incorporating a solid-state drive and integral-cavity klystrons. It is being installed in a new extension to the Jarvis Street building in Toronto where the English-speaking programme on Channel 19 is transmitted. Both transmitters will eventually be relocated at the Metro Centre Tower, a new building planned to accommodate most of Toronto's t.v and f.m facilities in a single, central facility.

The harbour at Toronto.

Major Order from Egypt

The Egyptian Organization of Broadcast and Television Federation has placed an order worth nearly £¾ million with Marconi Communication Systems Limited as part of their Cairo television complex re-equipment program.

Included in the order are ten Mark V 4½inch image-orthicon cameras and seven Mark VI photoconductive monochrome camera chains. These are being used to re-equip two existing studios, and to equip a newly-built studio and a Marconi Outside Broadcast Unit which is included in the order.

Studio 6 will be re-equipped with four Mark V's, together with a 16-input vision mixer with special effects, communications and control facilities, monitoring and test equipment.

Studio 7 will be re-equipped with three Mark VI photoconductive camera channels together with picture monitors, switching matrices, communications equipment, a continuity vision mixer with eight primary inputs and 16 secondary inputs and special effects, and two black-and-white telecine systems, each with a 16mm and a 35mm projector.

The very large Studio 10 will be newly built and will be equipped with six Mark V's mounted on heavy duty dollies. A caption scanner, vision mixer and monitors, together with a telecine system, vision distribution system, a studio communication system and a 35mm backscreen projector will make this a very flexible and exceptionally well-equipped studio.

The new Shepheards Hotel overlooking the Nile at Cairo.

Marconi has supplied television and sound broadcasting equipment to many of the Middle East states, including Abu Dhabi, Algeria, Bahrain, Dubai, Egypt, Ethiopia, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Oman, Qatar, Sudan, Tunisia and Yemen.

In confidence

Part of HTV area, the Conway Estuary.

After a year's highly successful operational experience with their original Mark VIII automatic colour cameras, HTV Wales have placed a third order for a further two chains. This brings the total number of Mark VIII chains in use in their Cardiff studio complex to nine. The two latest Mark VIII's will be set up in a fixed mode as unattended cameras to televise announcers in a small presentation studio.

Another repeat order for the Mark VIII camera has been placed by TV Gazeta Fundas Casper Libero, a leading commercial station in Sao Paulo, Brazil, which started a colour service early this year using equipment supplied by Broadcasting Division. The latest order will expand the station's colour facilities and includes three Mark VIII chains.

The United Nations Organization in New York has used Marconi television cameras for twenty years. After successively using the Mark II, III and IV monochrome cameras, UNO chose the Mark VII colour camera when first converting its facilities to colour and has recently placed two orders for Mark VIII colour cameras.

O.B Vehicle for Australia

For twenty-five years Marconi's have made a continuous and significant contribution to the evolution of o.b unit design and construction. The illustrations show a unit recently delivered to the Australian Broadcasting Commission in Sydney, and which was designed in close collaboration with the customer's own engineers.

Incorporating four Marconi Mark VIII Camera Chains, the vehicle is divided into four separate areas; production, sound control, engineering and equipment, and the driver's cab which doubles as a cloakroom. The first three areas are interconnected to allow free movement of personnel. The transverse layout adopted allows maximum utilization of the axle loadings permitted by Australian regulations (8 tons rear and 4 tons front).

Particular attention has been given to the exceptional variations in ambient conditions the vehicle may encounter in service. These range from below zero to 60°C in sunlight. Multiple air-conditioners provide a capacity of up to 60,000 BTU and are reversible to provide heating. A dual-speed rear axle provides flexibility for the contrasting types of terrain likely to be encountered.

Production control includes all monitoring facilities required by the Producer, Technical Director and Producers Assistant, the production control desk housing the Vision Mixer Unit complete with Special Effects and Chromakey facilities, selectable between all four Camera Channels. This area also incorporates a sophisticated talkback and intercommunications system, custom-built to meet the *ABC*'s engineering requirements. Waveform monitoring, genlock and SPG controls, VTR machine remote controls and audio monitoring complete the complement of the facilities for this area.

The camera control units, vision mixer electronics, monitoring, picture matching, dual sync pulse generators, control panels, and test signal generators are housed in five equipment bays in the vision control and equipment area. These bays are mounted on rails to permit access to the rear for maintenance. The Vision Control Desks themselves, (containing a 10-way lighting control, camera control joysticks, and talkback facilities), are at convenient operating height and may be operated by only one vision engineer; the desks are also hinged so that when the racks are in their forward position personnel movement is not hampered. Also installed in this equipment area are the automatic voltage regulators, a caption scanner, microwave link, helical-scan colour v.t.r machine, mains distribution panels and mains switching and monitoring.