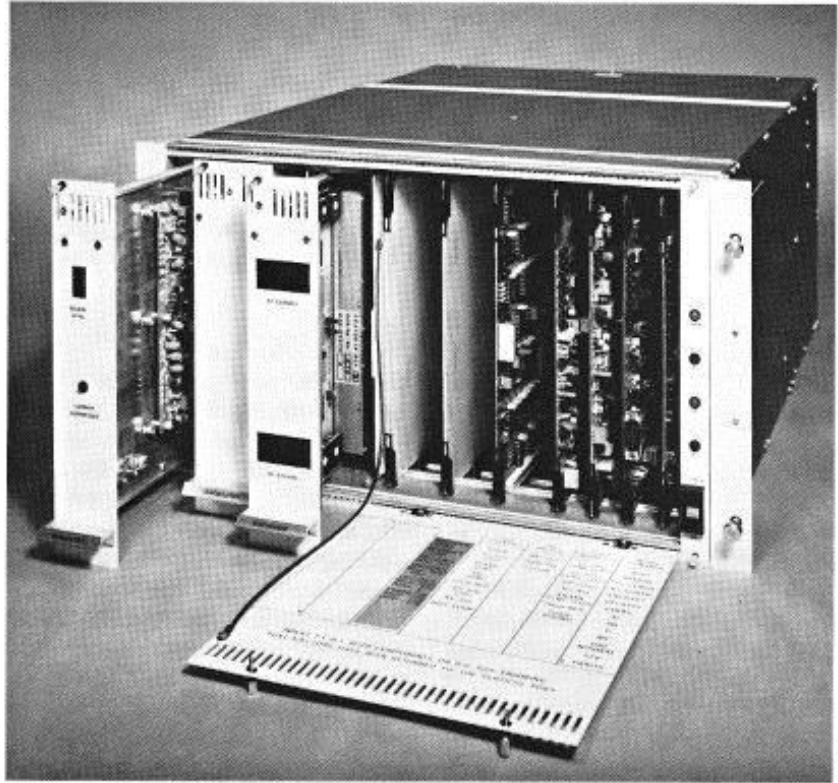


## France buys s.c.p.c modems

An order has been received for Alcatel Thompson of France for s.c.p.c modems to be used as part of an earth station working into the INTELSAT Business Services Satellite providing data communications between France and the USA. The equipment is comprised of two sets of common equipment with eight modem shelves. It is similar in form to that already supplied to British Telecom International for use with ECS but is designed to work to the T1 standard of 1.544Mbit/s.

*S.C.P.C.modem*



## Overseas order for train radio

Mobile Radio Division has been awarded a contract to supply a train radio system to Iraq.

The order is one of a number of sub-contracts placed by the main contractor, Hyundai of Korea, to the GEC group of companies for telecommunications and signalling equipment. Marconi sees this as an important inroad into the train radio market.

The system covers 250km of surface railways from Kirkuk to Haditha and

is being implemented by the new Railway Implementation Authority. When complete it will be handed over to the National Iraqi Railway Authority for operational control.

The contract includes a track-to-train u.h.f radio system to UIC (Union Internationale de Chemin de Fer) specifications, comprising a control system, 50 train radios and 13 wayside stations.

A v.h.f system including mobiles

and handportables is also being supplied for maintenance staff of trackside stations.

To complete the total package three railway shunting yard systems are also included comprising control stations, shunting-engine sets and handportable equipment.

The main control centre for the radio and railway system is based at Baiji about 20 miles north of Baghdad.

## Trinidad/Guyana Troposcatter update order

The Company has obtained an order from Trinidad and Tobago's External Telecommunication Co. and the Guyana Telecommunication Corporation to update the troposcatter link between Morne Bleu in Trinidad and Georgetown Guyana.

The present link has a capacity of 24

channels and this will now be upgraded to 132 channels. The existing antennas will be retained on both sites. At Morne Bleu the drive and receive equipment will be replaced by dual drives and a quadruple receiver fitted with pre-detection combiner and threshold extension demodulators. At

Georgetown the existing drives and receivers will be replaced by similar equipment to that at Morne Bleu but will have additional multiplex and power equipment. The current high-power amplifiers will be replaced by the 10kW H1230 operating in the 900 MHz band.

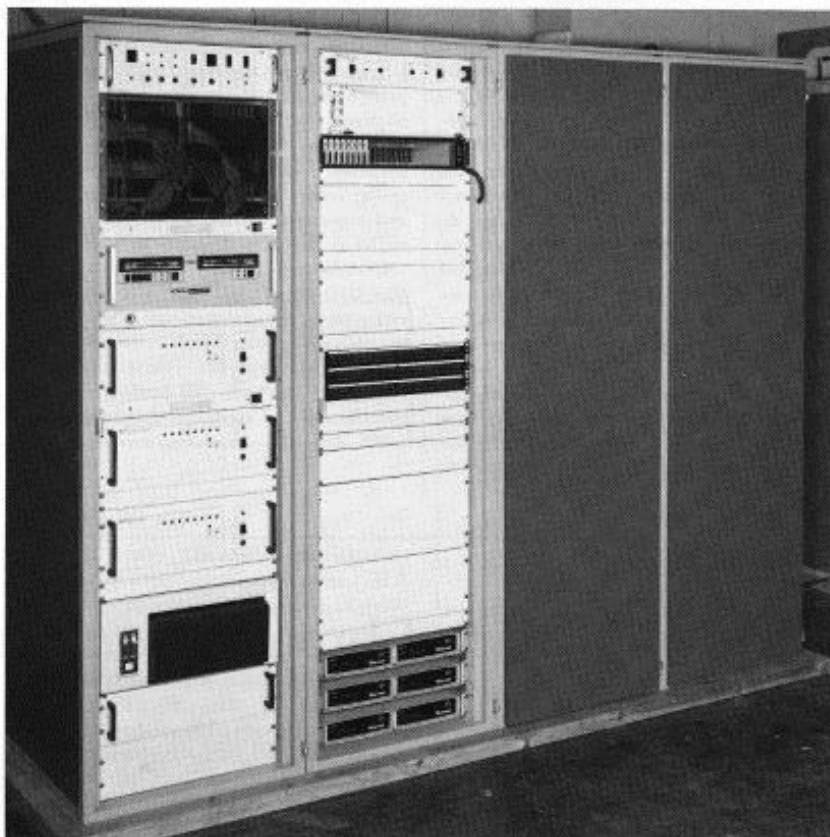
## Safer flying thanks to Marconi

Marconi Communication Systems has won another significant order for its Marshal store-and-forward message switching system for use in the Aeronautical Fixed Telecommunication Network (AFTN). AFTN is a unique world-wide communication network for the exchange of messages relating to the safe movement of air traffic. Marconi Marshal satisfies the requirements of AFTN for high reliability.

This order from Radio Suisse Limited (acting on behalf of the Federal Office of Civil Aviation) follows international tendering and the equipment will be installed in the new Automatic AFTN Centre, Geneva, Switzerland.

The system comprises a dual processor configuration with automatic changeover. It will provide communication links to international telex networks, the AFTN network, Meteor and Syco Systems, initially for up to 48 subscribers, with capability for future expansion.

Marconi Marshal is easily adaptable for interconnection with the forthcoming International Civil Aviation Organization Data Interchange Network (CIDIN).



*A Marshal 48-channel dual-mode AFTN message switching system*

## Marconi expands into cellular radio

Marconi Mobile Radio, a Division of Marconi Communication Systems Limited of Chelmsford, announces its entry into the Cellular Radiophone market with its range of 'Marconiphone' products following the recent announcement of its agreement as an accredited Cellnet retailer.

The new 'Marconiphone' Cellular products which are being introduced include a choice of two vehicle mounted sets and a modern, cordless, personal radiophone with battery charging facilities.

The new equipment meets all the demands of modern cellular

radiophones which include a wide range of standard telephone facilities for ease of operation. An electronic memory stores 30 most-often-called numbers, provides a hand-free dialling function, conferencing and a call re-direct facility, with further options to follow.

Marconi has already set a very high standard of quality and reliability with its current automatic radiophone systems together with a second-to-none installation and maintenance service, and intends to maintain this with cellular radio.

To meet the increasing cellular

radiophone market, Marconi is further expanding its national Radiophone Sales and Service Centres, particularly in London where the new Wembley centre will be able to handle over 100 car installations a week.

To maintain the same-day service that its System 4 Automatic Radiophone customers have come to expect, Marconi is installing at Wembley a sophisticated computer terminal which will enable a customer to be issued with his personal telephone number for immediate use, and which will also include direct billing and service records.

## Antigua/Ascension Is. earth station order

The Company has obtained an order from the BBC for two Standard B receive only earth stations, one sited on Ascension Island, the other in Antigua. The terminals are similar to that installed by Marconi on Masirah Island in 1983 (shown in picture) for the Foreign and Commonwealth Office. The stations will operate as relay stations for the BBC World Service.

The earth stations will use 10m antennas, while the low-noise amplifier, ground communication equipment, local control and supervisory equipment and uninterruptable power supplies will be housed in an air-conditioned container. The channelling equipment and remote supervisory will be housed in the customer's studio room.



## Community Radio Systems from Eddystone

Eddystone Radio has been preparing for the introduction of Community Radio licences in the United Kingdom.

Following a Government statement outlining the classes of licence and permitted modes of operation, it is now possible to announce the types of package that will be available from Eddystone.

### **VHF transmitter for 'Small neighbourhood stations'**

The authorized effective radiated power (e.r.p) for a 'small neighbourhood' station will be 10W and for this application Eddystone has a compact, synthesized f.m stereo transmitter, the Type XE-15/T. With a guaranteed output power of 15W, (typical 20W), there is sufficient power in reserve to achieve 10W into the antenna. Any subse-

quent change in operating frequency required in this synthesized transmitter is very easily accomplished. Pre-set internal switches are provided and no fine tuning is necessary.

### **VHF transmitter for 'Community of interest' stations**

An e.r.p of 100W has been specified for this application, for which the new Eddystone Type 2501 is available. This f.m stereo transmitter has the XE-15 stereo exciter as the primary drive source, in conjunction with a power amplifier module. Maximum output power is 125W, allowing coaxial feeder losses to be taken into account while still achieving maximum allowable input to the antenna. If an increase in maximum power is authorized at some future

date, a kit will be available at low cost from Eddystone to upgrade the power output to as much as 250W. This transmitter is compact, rugged and fully protected against adverse conditions. (e.g, antenna faults).

### **MF transmitter for 'Large neighbourhood stations'**

A power of 1kW has been authorized for the Shetland Isles. Eddystone is well placed to supply transmitters in this category using the well-proven solid-state 1kW Type B6038 transmitter.

Prospective Community Radio operators are invited to contact Eddystone Radio Ltd for assistance with their station plans. The address is Eddystone Radio Ltd, Alvechurch Road, Birmingham B31 3PP, Telephone 021-475 2231.

## Swordfish – a new transceiver

Marconi Communication Systems launched a new v.h.f./u.h.f transceiver at this year's Royal Navy Equipment Exhibition held at Portsmouth in September. Known as Swordfish, it is designed to meet the requirement in smaller naval and para-military vessels for fast, flexible and effective communications.

Swordfish operates in the frequency range 30MHz to 400MHz and data transmission is available on all frequencies and in all modes. The use of multicouplers allows common antenna working, with up to 12 transceivers working into a single antenna.

To allow its use in naval opera-

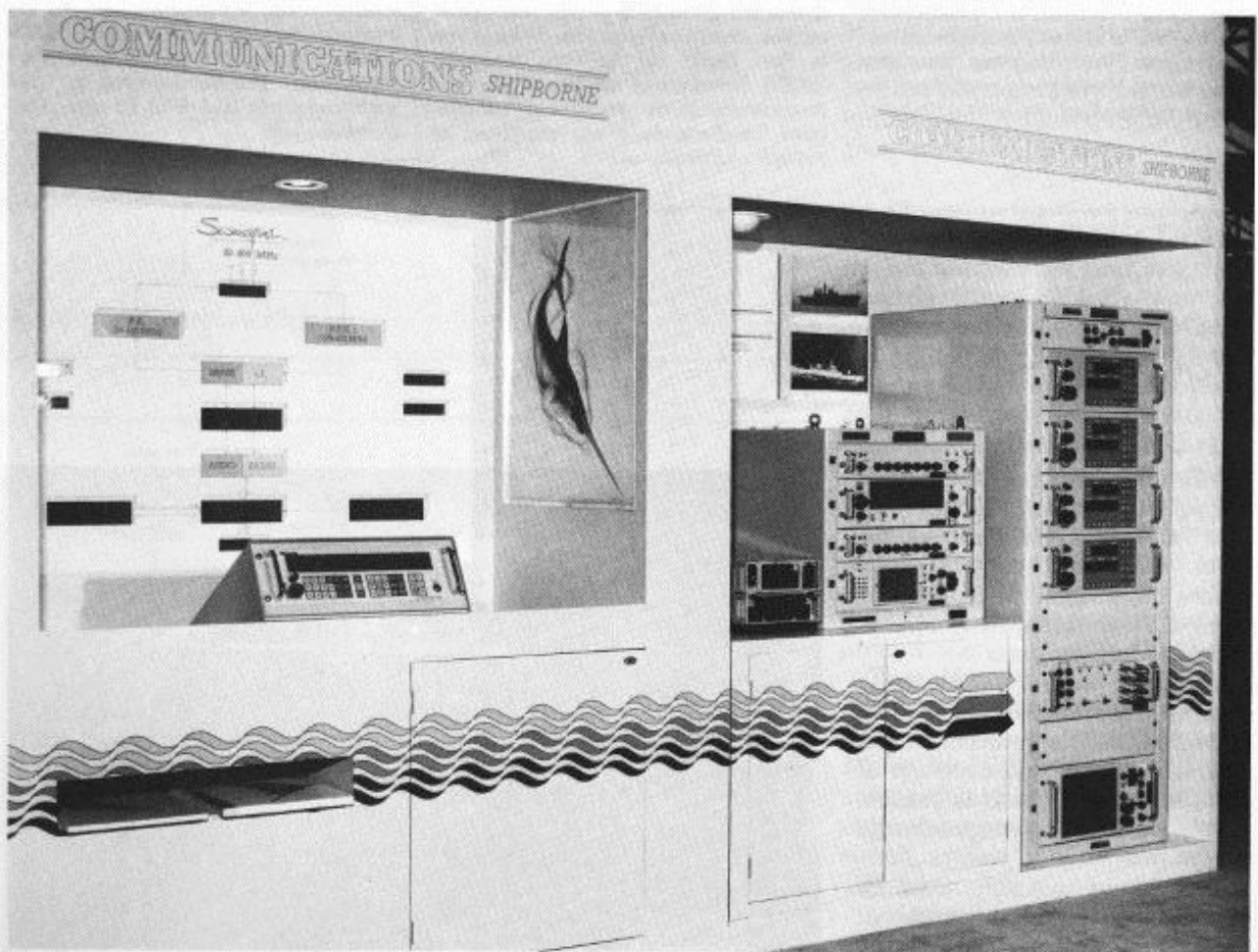
tions it is capable of continuous transmission at all available output-power levels. Local or remote control is available with user prompts to simplify operation.

The modular design fits standard 19in rack mounting. Built-in test equipment is incorporated for rapid and simple fault location down to individual modules.

Optional guard receiver modules exist for 121.5MHz and 243MHz, allowing these distress frequencies to be monitored continually irrespective of the operating frequency of the main receiver. Various optional frequency hopping modules are available to ensure effective communications in a hostile EW

environment. UHF satellite communication can be catered for by the addition of another plug-in module. Thus the transceiver can be built up from the simplest single-band unit to one which covers all the usable v.h.f./u.h.f bands and all modes of operation.

Despite its nautical origins, Swordfish is suitable for use in civil and military ground stations, both from a technical viewpoint and in terms of cost. In summary, Swordfish is a compact, rugged, state-of-the-art equipment, at a realistic price, which will meet a world-wide demand.



Swordfish at RNEE, shown alongside ICS3, Seafox and Makaira exhibits.

## Orion in Africa

Eddystone Radio Ltd, part of Marconi Communication Systems, has received an order from the Crown Agents for 60 of its Orion 5000 HF Transceivers complete with accessories. They will be used in Zimbabwe by the Tsetse Fly Control Department.

Introduced in February of this year, Orion has been sold into 24 countries and is in volume production.

Resulting from its success, two new versions will soon be launched; a transceiver with remote control unit and a ruggedized para-military version.

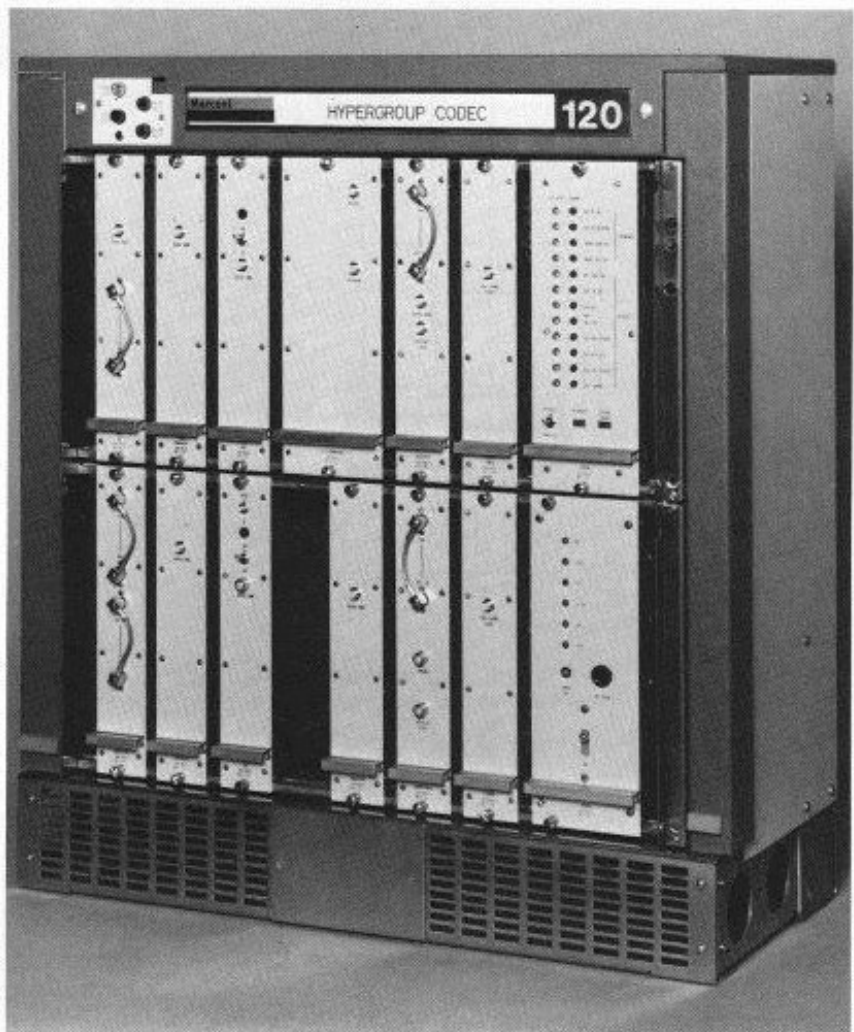


## Singapore Telecoms to buy British

An important order for telecommunications equipment for Singapore Telecoms has been received by Marconi Communication Systems via its agent, GEC (Singapore).

The equipment comprises hypergroup codec and digital multiplex systems which will permit up to 1800 speech conversations to be transmitted over a single 140Mbit fibre-optic channel. It will be a key system in Singapore Telecom's ambitious expansion plans.

Hypergroup codec facilitates the introduction of a digital transmission by providing a relatively simple and efficient means of carrying signals from existing analogue f.d.m equipment over a digital link.



## New Triffid orders

The British Ministry of Defence has placed a further two orders for Marconi Triffid u.h.f radio relay equipment. On completion of these orders, production of this equipment will have spanned a continuous period of ten years.

Triffid is at present in use with the British Army of the Rhine in the role of a field trunk communication system. It provides wide coverage of the u.h.f spectrum and is suitable for the transmission of speech and data.

Its inherent reliability, ease of maintenance and simplicity of operation make it a popular equipment.

