Marconi message switching at Geneva

Marconi Communication Systems has recently completed an order from Radio Suisse for its Marshal dual-mode AFTN Message Switching System, which has been installed at Geneva Airport in Switzerland.

The system has been accepted following a successful period of evaluation and testing at the airport. It will operate in the Aeronautical Fixed Telecommunication Network (AFTN), a unique worldwide communication system relating to the safe movement of air traffic.

The Marshal system comprises a dual processor configuration with automatic changeover providing communication links to international telex networks, AFTN, Meteor and Syco systems. Initially for up to 48 subscribers, but with capabilities for future expansion, the system is easily adaptable for interconnection with the forthcoming Common International Civil Aviation Organisation Data Interchange Network (CIDIN).

The Marconi AFTN equipment at Geneva airport

Marconi wins Canadian order for AVK antennas

Marconi Communication Systems has received an order from the Canadian company Paramax to supply 24 Active Receive Antennas (AVK) Type 5500.

Paramax Electronics Inc. is supplying electronic and combat systems for frigates, and the antennas will be used in null steering systems.

The Marconi AVK antenna comprises a 1·6m rod antenna and a linear low-noise amplifier designed to provide adequate sensitivity for wanted signals over frequencies ranging from 10kHz to 30MHz, whilst at the same time minimizing the levels of unwanted signals from nearby transmitters.

The antenna is designed to withstand the extremely adverse electrical, mechanical and environmental conditions experienced in warships. Being relatively small compared with the 10m whips and wire antennas previously used, the AVK can be sited in the best antenna positions aboard ship.

When used in conjunction with Marconi ICS3 antenna multicouplers, each AVK can feed at least 36 receivers.

AVK antennas have almost 10 years of proven service under all conditions. Sales, now approaching 400, have been made to customers which include the British, US, Netherlands, Greek, Portugese, Indian and Chinese navies.

An AVK antenna fitted aboard ship

A ruggedized h.f/s.s.b transceiver from Eddystone Radio

Eddystone Radio has added a new version to its successful Orion 5000 series of h.f/s.s.b transceivers.

Designated Orion 5500, this totally ruggedized transceiver is designed to fulfil the needs of police, security forces and paramilitary organizations which require a highly mobile h.f radio system.

The 5500 offers u.s.b/l.s.b capability on up to six channels in the frequency range 2MHz to 16MHz and has a transmitter output of 100/150W p.e.p.

Plug-in, printed-circuit board techniques are used for easy maintenance and maximum security against loss of service. The unit operates from a 13·6V d.c supply which permits direct connection to a vehicle battery.

This model is capable of operating in high ambient temperatures and humidity levels and is totally sealed against the ingress of moisture, dust, sand and insects.

A l.e.d display indicates output level or received signal level and can be switched off, or its intensity varied to suit prevailing conditions and security requirements. Front panel controls are designed for ease of operation in the field. The comprehensive range of accessories available includes mobile and base station antennas, matching units, microphones and handsets.

The Model 5500 complements the Orion 5000 Transceiver which has been so successful since its launch early in 1985.

Birmingham-based Eddystone Radio, a division of Marconi Communication Systems, has received major orders for large quantities of this model from Egypt, Tanzania and Saudi Arabia.

Model 5500 Transceiver

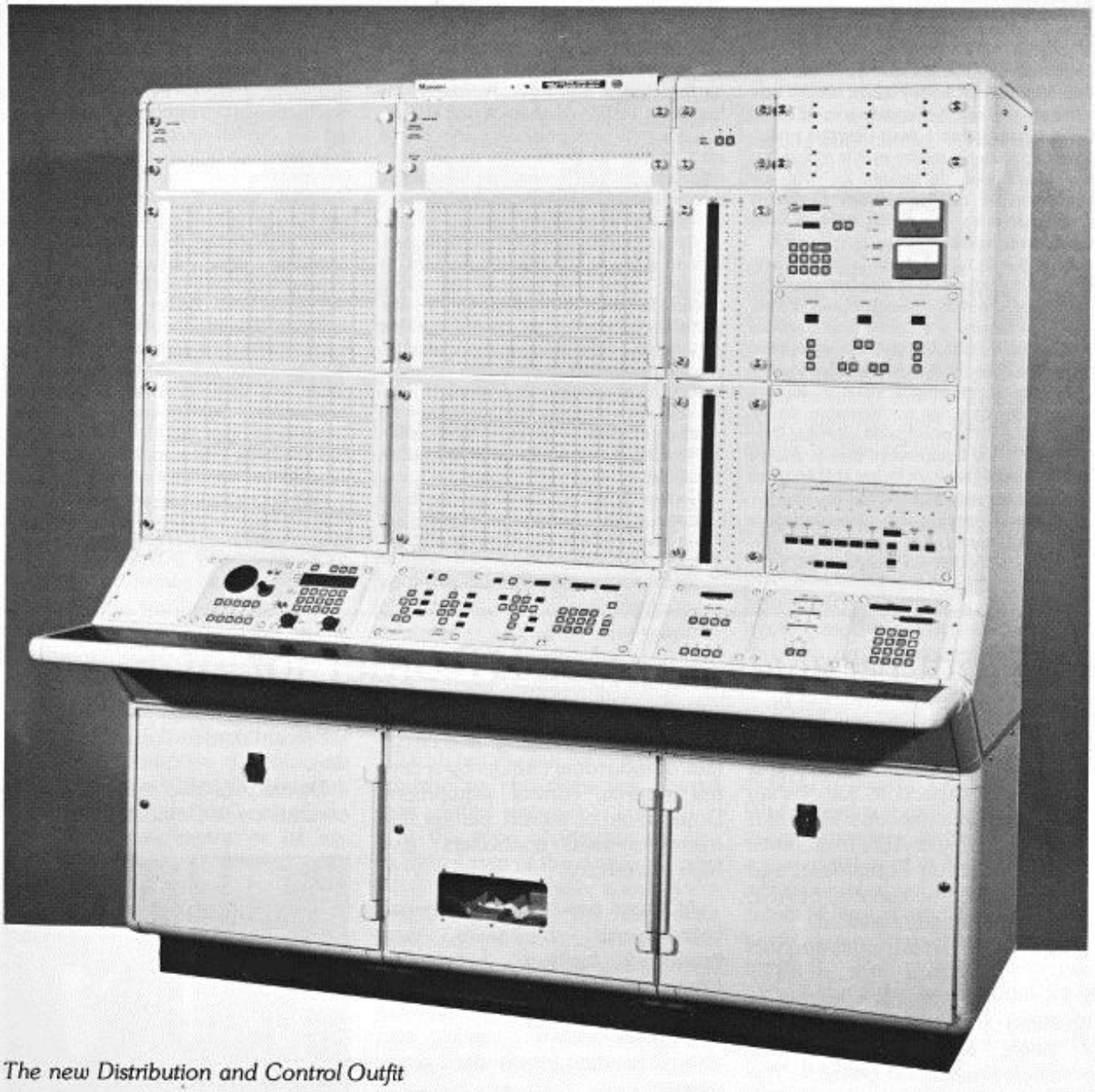
New ICS3 order from the Royal Navy

Marconi Communication Systems has secured an order to supply an advanced version of ICS3 (Integrated Communication System) to the Royal Navy for its new Type 23 Duke Class Frigate.

ICS3 was first introduced in the late '70s and is fitted on all the Royal Navy's latest major warships. The system has evolved in line with the continuous progress of technical advancement to achieve more and more sophisticated tasks. It incorporates a new distribution and control outfit which offers flexible and secure interconnection with all forms of external communications from underwater, through v.l.f, h.f and u.h.f to Satcoms.

The equipment to be supplied is similar to that delivered to the US Navy for fitting on USS Wasp, the first of a new LHD Class of amphibious assault ship. Both systems allow for the incorporation of the most advanced communication techniques needed in the next generation of equipment.

Outstanding reliability meant that ICS3 served with distinction in the Falklands with minimum maintenance. The Ministry of Defence's order underlines its faith in ICS3 to fulfil the needs of the Royal Navy into the 1990s.



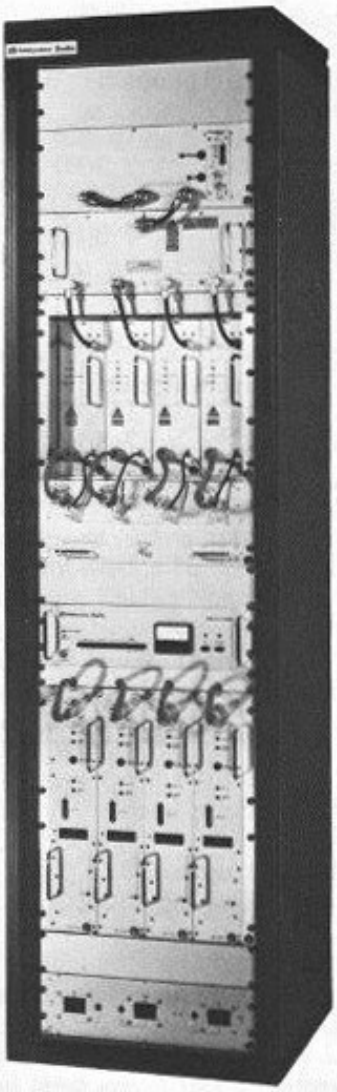
The new Distribution and Control Outfit

Eddystone to supply transmitters to France

Eddystone Radio has received an order for the supply of ten 2kW stereo broadcast transmitters to the largest commercial f.m radio network in France. The network will use these Type 1707/2 transmitters to create new radio services.

Completely self contained, this solid-state transmitter features broadband r.f power amplifiers and filters, and its paralleled modular system allows transmission to be maintained under fault conditions. Intelligent fan cooling results in quietness of operation.

The 1707 v.h.f/f.m series of transmitters extends the Eddystone range of Band II transmission equipment designed to provide a high standard of performance and reliability.

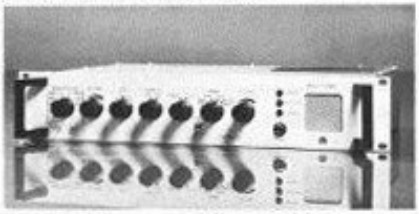


The Eddystone Type 1707/2 Transmitter

BTI contract for Eddystone Radio

Eddystone Radio is to supply 139 remotely controllable h.f receivers to British Telecom International. They will be used in a major programme to re-equip 12 coastal maritime-radio stations around the British Isles. A feature of the distributed operational control of the new system is that a receiver can be controlled from any visual display station in another station in the system.

Several types of receiver are to be supplied by Eddystone Radio, all fitted with remote interface adaptors to interface with the BTI remote control system. They include the 1650 tunable l.f/h.f and the 1680 single and multi-channel m.f and h.f channelized receivers.



The Eddystone Model 1685 multi-channel receiver

Communication and Broadcasting - September 1986

Marconi receives a major BT order for ACE

Marconi Communication Systems has received an order from British Telecom to expand its KiloStream leased-line data network. The order is for the supply of ACE (Automatic Cross-connection Equipment) and for expanding the capacity of ACE equipment already installed.

ACE is a digital cross-connect system designed for CCITT 2·048Mbit/s systems. Capable of handling up to 128 2Mbit/s ports in a single equipment, it cross-connects timeslots at 64kbit/s. The system provides responsive control and supervision of digital data networks and features rapid, automated set-up, routeing, and cessation of individual circuits by a central remote control equipment. Duplication of switch planes and microprocessor controllers give high availability.

ACE can provide unidirectional, bidirectional, multipoint and broadcast facilities. Low-speed teleconference can be switched using its inbuilt 'n×64k' facility, and channel-associated signalling can also be handled for standard p.c.m bearers.

ACE is simple and inexpensive to operate and its small size makes a minimum demand on accommodation.

Delivery of this order is due to commence in October 1986.

ACE on final test at Marconi's Chelmsford factory