

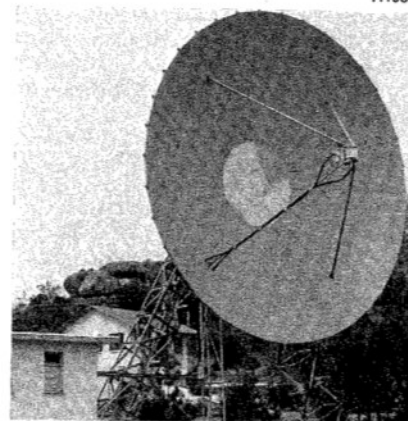
Marconi Thin Line Tropospheric Scatter Type H 3002

'Thin-line' tropospheric scatter equipment has been developed primarily to replace short range H.F. systems and to give improved reliability, performance and channel capacity at a realistic and economic cost per channel. The Type H 3002 terminal equipment provides a bearer circuit for up to eight 4 kHz telephone channels with overall reliabilities of the order of 90-95%.

The equipment is completely transistorized and the printed circuit modules are readily accessible through front opening drawers which act as heat sinks.

FEATURES

- All solid state.
- Float charged battery supply.
- Frequency diversity.
- Ratio squared combining.
- Frequency compression.
- Small size.
- Unattended operation.
- Remote alarm and 'loop round' if required.
- Designed for use with 30 ft. diameter aerials.



H1083

Thin Line Tropospheric Scatter aerial at Mwanza, on the shores of Lake Victoria

DATA SUMMARY

Power output (to aerial feeder): at least 5 W from each transmitter.

Frequency range: 790-960 MHz

Transmitter long-term frequency stability: 15 parts in 10^6 per annum.

Frequency plan: in one terminal, transmitter frequencies must be spaced between 10 and 20 MHz apart. Receiver frequencies must be spaced at least 28 MHz from transmitter frequencies.

Aerial impedance: 50 Ω coaxial v.s.w.r. 1.5 maximum.

Baseband impedance: 75, 150 or 600 Ω , balanced or unbalanced.

Power supply: -24 V d.c. nominal, -24/30 V acceptable.

Power consumption: 500 W.

Service:

Baseband, 300 Hz to 32 kHz.

May be used with customers own choice of multiplex equipment, 3 or 4 kHz channel spacing.

Signal to noise: 35 dB in worst channel at FM threshold.

Modulation: F.M, Deviation 100 kHz r.m.s. per channel.

Packaging: single weatherproof cabinet.

Height 5 ft 1 in. (155 cm)
(over lifting eyebolts)

Width 2 ft 5 in. (74 cm)

Depth 2 ft 1 in. (63.5 cm)

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