

RESEARCH DEPARTMENT

DOLGELLAU V.H.F. RELAY STATION: SUMMARY OF INSTALLATION

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for Head of Research and Development



Fig.1. General arrangement of aerials on tower

V.H.F. RELAY STATIONS : SUMMARY OF INSTALLATION
TELEVISION

NAME: DOLGELLAU

SERVICE TRANSMISSIONS COMMENCED: 18th December 1967

SITE DATA

LOCATION: Approximately 0.8 km (0.5 mile)
North of Dolgellau

GRID REFERENCE: SH 727 185

HEIGHT, A.O.D.: 99.1 m (325 ft)

SUPPORT STRUCTURE

TYPE: Self supporting Tower

OVERALL HEIGHT: 22 m (72 ft)

GENERAL ARRANGEMENT

FIGURE: 1

FREQUENCIES

BAND: I

CHANNEL: 5

VISION CARRIER OFFSET: - 16.875 kHz

SOUND CARRIER OFFSET: - 16.875 kHz

TRANSMITTER

POWER: 10 watts (Transmitter)

NOTES:

TRANSMITTING AERIAL

DESCRIPTION: Single vertical
 $\lambda/2$ dipole per tier

NUMBER OF TIERS: 2

MEAN HEIGHT: 18.9 m (62 ft) a.g.l.

FEEDERS

TRANSMITTING: RPC 2603

RADIATION CHARACTERISTICS

POLARIZATION: Vertical

MEAN E.R.P.: 14.1 W

MAXIMUM E.R.P.: 26 W

H.R.P.: Fig. 2

PROGRAMME SOURCE

PARENT: Blaen Plwyf
Obtained by direct reception
at the Barmouth Link site and
then by S.H.F. Link.

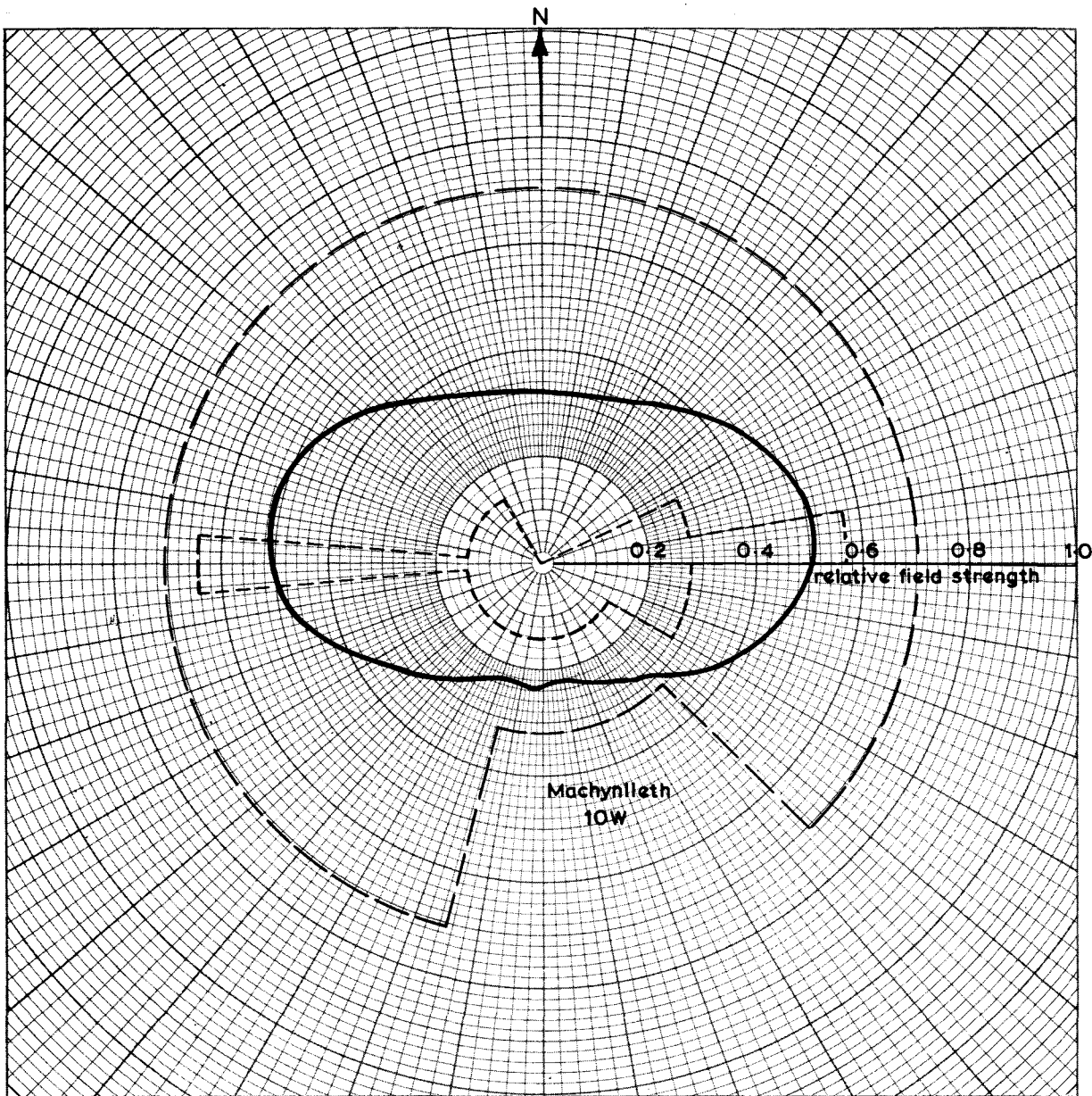


Fig.2. Band I templet and horizontal radiation pattern

————— Maximum permissible E.R.P.
 - - - - - Minimum desirable E.R.P.

Unit field corresponds to an E.R.P. of 100W

V.H.F. RELAY STATIONS : SUMMARY OF INSTALLATION
SOUND

NAME: DOLGELLAU

SERVICE TRANSMISSIONS COMMENCED: 18th December 1967

BAND II FREQUENCIES

RADIO 2: 90.1 MHz

RADIO 3: 92.3 MHz

RADIO 4: 94.5 MHz

RADIATION CHARACTERISTICS

POLARIZATION: Horizontal

MEAN E.R.P.: 9.3 W

MAXIMUM E.R.P.: 16 W

TRANSMITTER

POWER: 10 watts (Transmitter)

H.R.P.: Fig. 3

PROGRAMME SOURCE

TRANSMITTING AERIAL

DESCRIPTION: Two horizontal $\lambda/2$
dipoles per tier

PARENT: Blaen Plwyf
Obtained by direct reception

NUMBER OF TIERS: 2

MEAN HEIGHT: 18.9 m (62 ft) a.g.l.

FEEDERS

TRANSMITTING: RPC 2603

NOTES:

1. Detailed information is given on the following drawings held by BBC Transmitter Planning and Installation Department:

TP 6047.2.179A4 Masts General. Outline and Orientation of 72 ft Tower

PID 8732.2.3J Transmitting Dipoles, Type H.P.N.

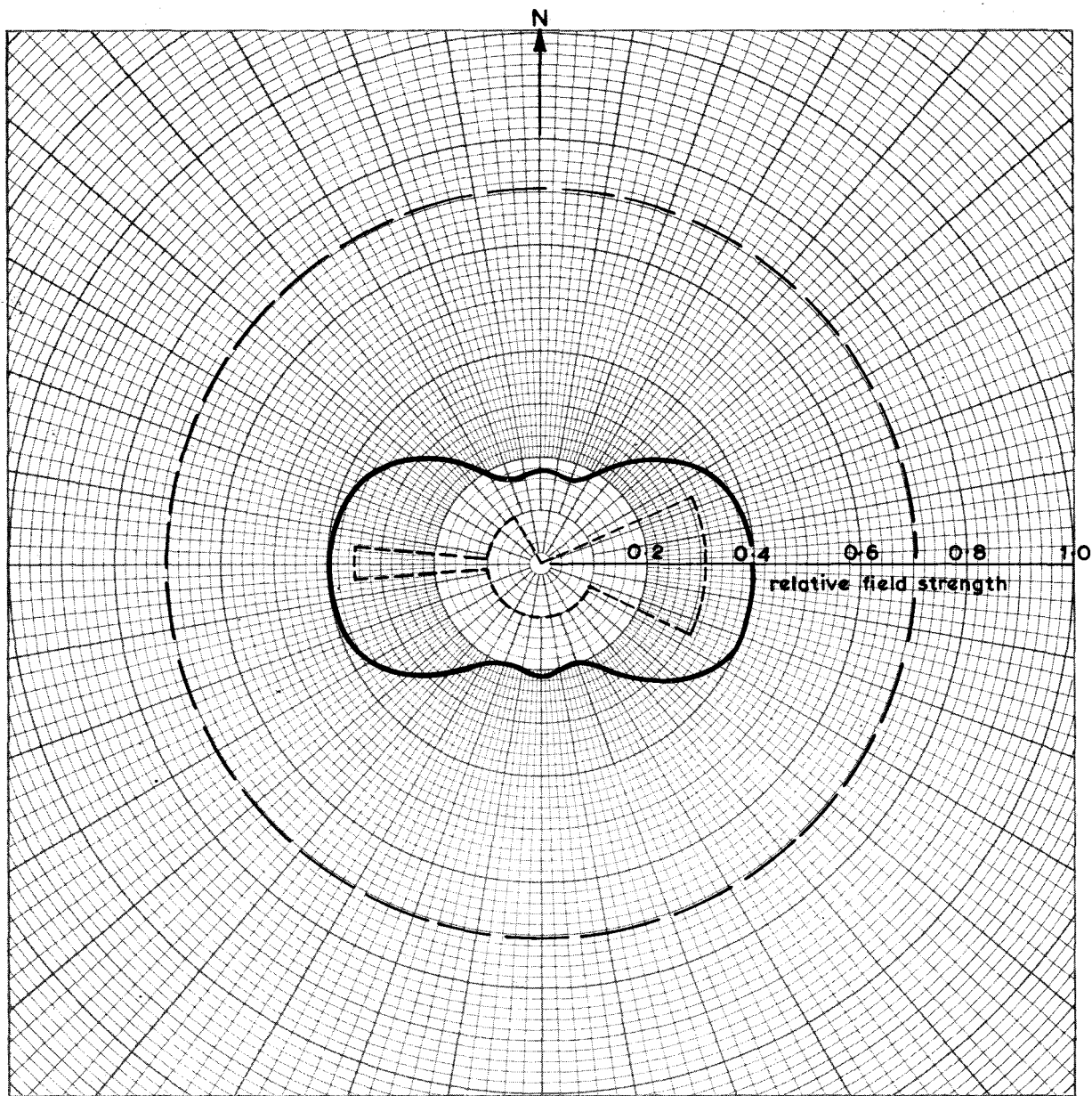


Fig. 3. Band II templet and horizontal radiation pattern

— — — — — Maximum permissible E.R.P.

- - - - - Minimum desirable E.R.P.

Unit field corresponds to an E.R.P. of 100W