

RESEARCH DEPARTMENT

KILVEY HILL V.H.F. RELAY STATION: SUMMARY OF INSTALLATION

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R.D.C. Thoday, M.I.E.R.E.


for Head of Research and Development

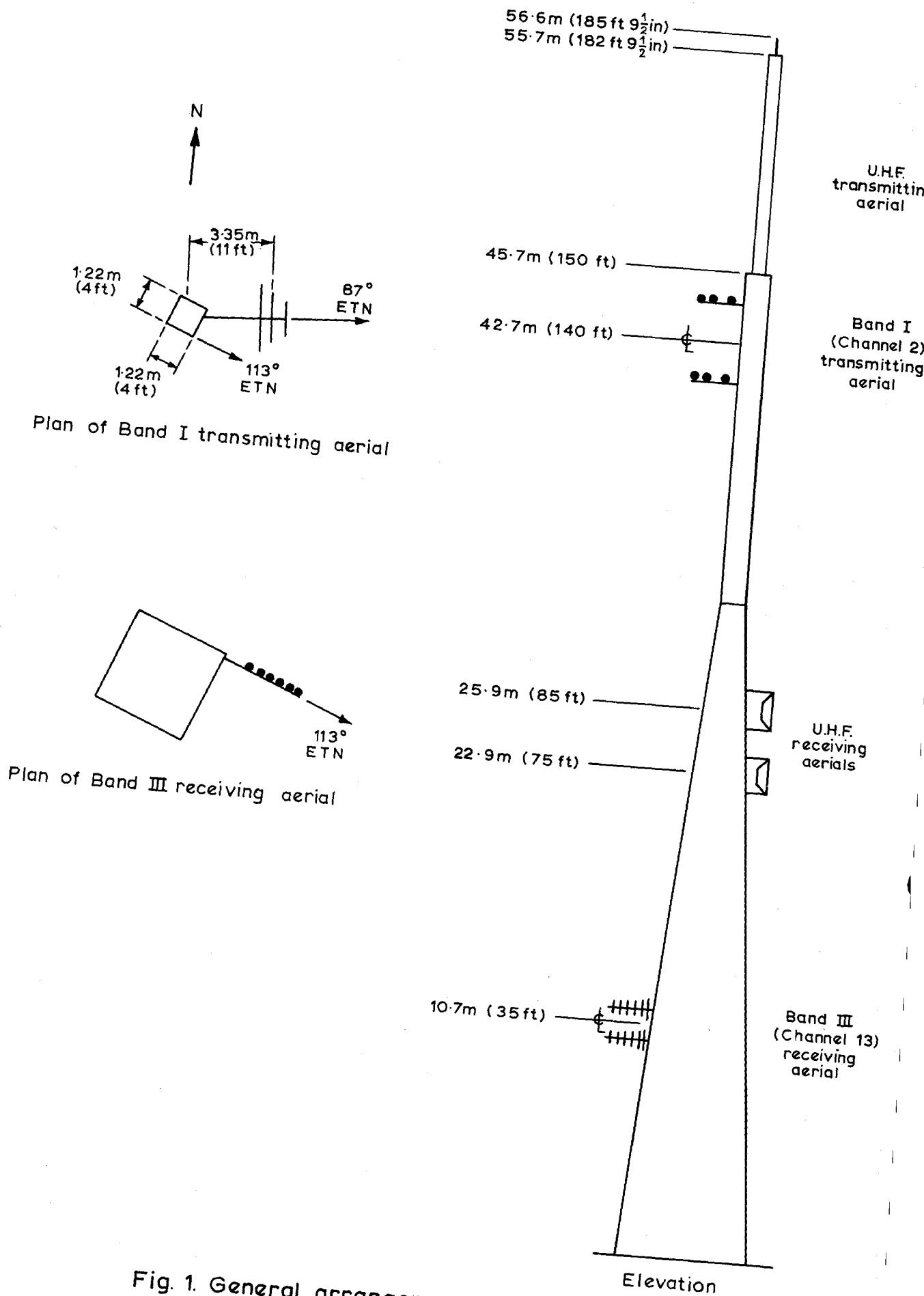


Fig. 1. General arrangement of aeriels on tower

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

NAME: KILVEY HILL

SERVICE TRANSMISSIONS COMMENCED: 23rd December 1967

SITE DATA

LOCATION: Swansea

GRID REFERENCE: SS 672940

HEIGHT, A.O.D.: 193 m (632 ft)

SUPPORT STRUCTURE

TYPE: Self supporting tower

OVERALL HEIGHT: 56.6 m (186 ft) including U.H.F.
Cantelever

GENERAL ARRANGEMENT

FIGURE: 1

FREQUENCIES

BAND: I

CHANNEL: 2

VISION CARRIER OFFSET: zero

SOUND CARRIER OFFSET: zero

TRANSMITTER

POWER: 100 watts (Translator with
Amplifier)

NOTES:

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

TP 100.2.1A4 Aerial Arrangements on 150 ft Tower

PID 8732.2.4A2 Band I Yagi, Type 353P

TRANSMITTING AERIAL

DESCRIPTION: Single horizontal
three-element Yagi
per tier

NUMBER OF TIERS: 2

MEAN HEIGHT: 42.7 m (140 ft) a.g.l.

FEEDERS

TRANSMITTING: RPC 2603

RADIATION CHARACTERISTICS

POLARIZATION: Horizontal

MEAN E.R.P.: 85 W

MAXIMUM E.R.P.: 460 W

H.R.P.: Fig. 2

PROGRAMME SOURCE

PARENT: Wenvoe
Band III Transmissions obtained
by direct reception

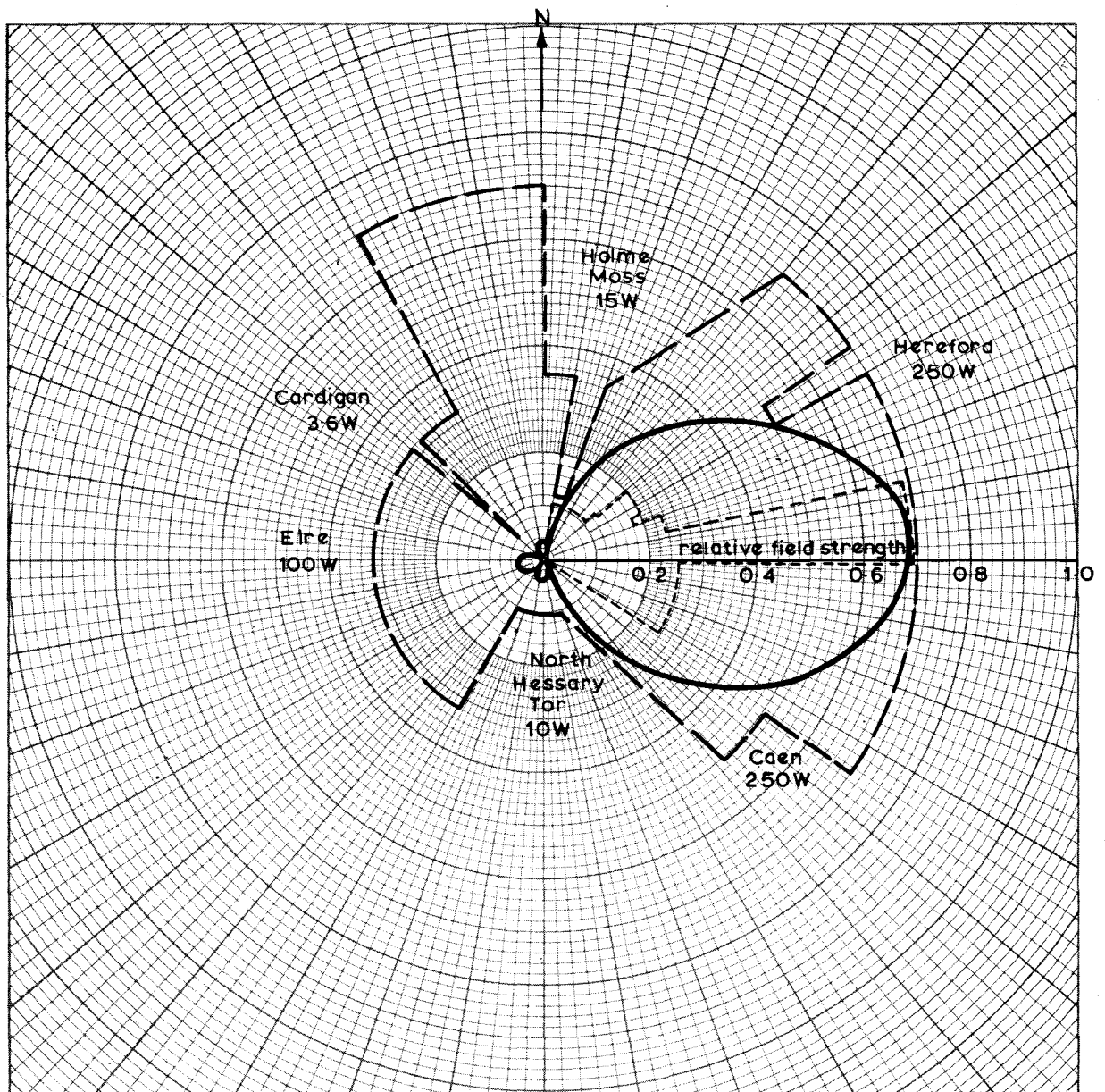


Fig. 2. Templet and horizontal radiation pattern

— — — — — Maximum permissible E.R.P.

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

Unit field corresponds to an E.R.P. of 1kW