

SIGNAL-TO-NOISE RATIOS REQUIRED

(Stable conditions)

(Note 6)

| Type of service | Receiver audio bandwidth kc/s | Audio signal-to-noise ratio db | Receiver bandwidth kc/s | Ratio of peak RF signal-noise in 6 kc/s band (Note 1) db |
|---|-------------------------------|--------------------------------|-------------------------|--|
| <i>A1 telegraphy</i> | | | | |
| 8 baud low grade | 1.5 | -4 | 3 | -7 |
| 24 baud | 1.5 | 11 | 3 | 8 |
| 120 baud recorder | 0.6 | 10 | 0.6 | 0 |
| 50 baud printer | 0.25 | 16 | 0.25 | 2 |
| <i>A2 telegraphy</i> | | | | |
| 8 baud low grade | 1.5 | -4 | 3 | -3 (Note 2) |
| 24 baud | 1.5 | 11 | 3 | 12 (Note 2) |
| <i>F1 frequency-shift telegraphy</i> | | | | |
| 120 baud recorder | 0.25 | 4 | 1.5 | 2 |
| 50 baud printer | 0.10 | 10 | 1.5 | -2 |
| <i>Phototelegraphy F4</i> | | | | |
| Sub-carrier frequency-modulation single side-band emission | 3 | 15 | 3 | 12 |
| <i>Hellschreiber</i> | | | | |
| Frequency-shift | 1.5 | 6 | 3 | 3 |
| <i>A3 telephony</i> | | | | |
| Double-sideband, just usable quality, operator to operator (Note 4) | 3 | (Note 3) 6 | 6 | 18 |
| Double-sideband, marginally commercial (Note 5) | 3 | 15 | 6 | 27 |
| Double-sideband, good commercial quality (Note 5) | 3 | 33 | 6 | 35 * |
| Single-sideband, 1 channel | 3 | 33 | 3 | 26 * |
| 2 channels | 3 | 33 | 3 ** | 28 * |
| 3 channels | 3 | 33 | 3 ** | 29 * |
| 4 channels | 3 | 33 | 3 ** | 30 * |
| <i>Broadcasting</i> | 5 | 33 | 10 | 47 |

* Assuming 10 db improvement due to the use of noise reducers.

** Per channel.

PROVISIONAL TOTAL FADING ALLOWANCES*

| Type of service ** | For the protection of a fading signal against: | |
|---|---|--|
| | atmospheric noise subject to day-to-day intensity fluctuation (subtract 4 db for protection against steady noise or steady interfering signal) (see Note 1) | interfering signal subject to fading and day-to-day intensity fluctuation (see Note 2) |
| | db relative to ratios of monthly median values of hourly median field strength | |
| A1 telegraphy | | |
| 8 baud, low grade (Note 3) | 21 | 17 |
| 24 baud (Note 4) | 25 | 20 |
| 120 baud recorder (Note 6) | 25 | 20 |
| 50 baud printer (Notes 5, 6) | 32 | 27 |
| A2 telegraphy | | |
| 8 baud, low grade (Notes 3, 7) | 17 | 13 |
| 24 baud (Notes 4, 7) | 20 | 17 |
| F1 telegraphy | | |
| 120 baud recorder (Note 6) | 25 | 20 |
| 50 baud printer (Notes 5, 6) | 32 | 27 |
| automatic repetition printer (ARQ) (Notes 6, 8) | 17 | 12 |
| Phototelegraphy F4 | | |
| sub-carrier frequency-modulation single-sideband emission | 23 | 20 |
| Hellschreiber | | |
| frequency-shift (Note 9) | 23 | 20 |
| A3 telephony | | |
| DSB just usable quality, operator to operator (Note 10) | 17 | 11 |
| DSB marginally commercial (Note 11) | 19 | 14 |
| DSB good commercial quality (Note 12) | 21 | 17 |
| SSB 1 channel | } (Note 12) | 17 |
| 2 channel | | |
| 3 channel | | |
| 4 channel | | |
| Broadcasting | 21 | 17 |

* Combined fading safety factor and intensity fluctuation allowances.

** From Annex I, Recommendation No. 99.