THE SCHEDULE

Important points to note from the schedule are:

Carrier power PEP to to antenna antenna

1.85-2 MHz 9dBW 15dBW No RTTY

70.025-70.5 16dBW 22dBW Only band in which a government

official may demand you to cease using immediately. Only available till

further notice.

NOTES

1.81-2MHz & Only shared bands; certain frequencies to be avoided by amateurs.

10.1-10.15

70.025-70.5
Used on a secondary basis on condition that they shall not cause interference to other

above 430 MHz services.

BANDS

3.5-29.7MHz 144-146 MHz 20dBW 26dBW 432-440 MHz

NOTES

430-432 MHz Power must not exceed 10dBW Effective Radiated Power (ERP) Not available

within area bounded by 53°NO2°E, 55°NO2°E, 53°NO3°W and 55°NO3°W.

432-440 MHz High definition TV allowed.

3.5, 7.0, 10.1, Facsimile allowed: bandwidth not greater than 6kHz. These bands may be used

14, 21, 144 MHz by non amateur stations in the event of natural disasters

to meet the needs of international emergency communication in the disaster area in

accordance with regulations of the Radio Regulatory Department.

7.0, 14.0, 21, 28, 144 Amateur satellite may be used in these bands limited on

1260-1270 MHz Earth to Space 5650-5670 MHz Earth to Space 5830-5850 MHz Space to Earth

Data transmissions allowed from 144 MHz.

Class B licence starts at 144 MHz. RTTY is allowed.

Knowledge of power limitations on 1000 MHz for RAE has been discontinued.

POWER The dBW is a ratio expressed logarithmically, with 0 dBW set as 1W. The power doubles for every increase of 3 dBW, so 3 dBW = 2W, 6 dBW = 4W, etc. An increase of 1 dBW is equivalent to multiplying by 1.26. Multiplying 1.26 by itself repeatedly, as many 1.26s as there are dBW, will give the power in watts; eg 20 dBW = $1.26 \times 1.26 \times ... \times 1.26$ (20 1.26s) = 10.1W (100W is the correct answer).

NOTE 20 dBW = 100W

9 dBW = 8W15 dBW = 32W The Decibel is not a measure of anything, it is a ratio of one power (or voltage, or current) to

another. The formulae are:-

 $10 \log \frac{P2}{P1}$ = For a positive dB 20 Log $\frac{V2}{V1}$ or $\frac{I2}{I1}$ = For a positive dB

For a negative dB change the 1 & 2 around.

Another way to work out what the actual power out, is to enter the dBW on top of the line and divide it by the number at the front of the equation. This will give you the ''power'' of ten:-

 $26 \text{ dBW} = \frac{26}{10} = 2.6 \text{ this is the power of } 10 = 10^{2.6} = 398.107 \text{ Watts. Try working out } 9 \text{ dBW (ans} = 7.943W)$