

CELLHOW.TXT

Here is a method of determining which freqs are used in a cellular system, and which ones are in what cells. If the system uses OMNICELLS, as most do, you can readily find all the channels in a cell if you know just one of them, using tables constructed with the instructions below.

Cellular frequencies are assigned by channel number, and for all channel numbers, in both wireline and non-wireline systems, the formula is:

$$\begin{aligned}\text{Transmit Freq} &= (\text{channel number} \times .030 \text{ MHz}) + 870 \text{ MHz} \\ \text{Receive Freq} &= (\text{channel number} \times .030 \text{ Mhz}) + 825 \text{ Mhz}\end{aligned}$$

"Band A" (one of the two blocks) uses channels 1 - 333. To construct a table showing frequency by cells, use ch 333 as the top left corner of a table. The next entry to the right of ch 333 is 332, the next is 331, etc., down to ch 313. Enter ch 312 underneath 333, 311 under 332, etc. Each channel across the top row is the 1st chan in each CELL of the system; each channel DOWN from the column from the the first channel is the next freq assigned to that Cell. You may have noted that each channel down is 21 channels lower in number. Usually the data channel used is the highest numbered channel in a cell.

"Band B" uses channels from 334 to 666. Construct your table in a similar way, with ch 334 in the upper left corner, 335 the next entry to the right. The data channel should be the lowest numbered channel in each cell this time.

The tables generated by these instructions are found in the file named "CELLPLAN.TXT"

Channel 3 (394) Tx 881.820 Rx 836.820

Channel 4 (415) Tx 882.450 Rx 837.

End of list.