Most of us, as broadcast band DXers, look for challenges in our hobby. This often takes the form of trying to hear all the stations in a particular area, or as many states, provinces, and countries as possible. One of the more common goals is to hear all of the stations in a particular state or province. Usually this is our home state. Sometimes this goal is extended to a neighboring one as well. (Canadian members note that, row the balance of this article, "state" actually means "state or province" for the sake of brevity).

Depending on the particular state, this goal can either be relatively easy or extremely difficult to accomplish. When I was in Honolulu a few years ago, I heard all but three of the Hawaiian stations in my hotel room. Hearing the rest required driving to the east end of Oahu and logging them on the car radio. The lack of ourside interference and the paths over salt water made it easy to hear them all in a couple of hours. At the other extreme, Texas has over 200 stations, many of them low-powered. The state covers a large area, and the listener must contend with interference from stations in neighboring states and Mexico. Hearing all of Texas from anywhere is quite likely impossible. However, you can have fun trying.

Succeeding at anything usually requires a strategy of some sort. DXing is no exception. Here are a few suggestions for approaching the situation.

- 1. Find our as much as you can about the stations you're trying to hear. Pore through back issues of DX Monitor (expecially DX Roundup and Broadcasting Information), the NRC Log, the IRCA Almanac, and other sources, and make notes of what you find. Compile it into a list of all the stations you need to hear, noting things like signoff and signon times, program details, antenna batterns (the stations' nulls and main lobes), slogans, and networks. Keep it up to date. You may want to use a computer data base, if you have access to a PC. This will give you a working knowledge of the stations you're trying to receive, and A list of ready targets. It will also give you some ideas on when to listen for a station; for example, if it operates with 10,000 watts during the say and 3 watts at night, the best time to hear them would probably be when they change power.
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  2. Take advantage of sunrise and sunset periods. This is when stations change power and antenna patterns --- they may come barrelling in until the prescribed time, and then vanish. A few stations still sign off at local sunset, you may be able to catch their signoff announcement. Keep a set of sunrise/sunset maps handy, and study them carefully. During the winter, the more northerly stations sign off earlier than the southern stations (for a given longitude). During the summer, it's the other way around. This means that your target may be easier to hear during some months than others. It might fade in sooner than the interference during the summer. Or it might signoff after your co channel pest lowers power only during December.
- December.
  3. Find ways to sneak around the interference. Most of us have a much wanted station which operates on the same channel as an obnoxious NSP local, or at least a strong skywave station. If you study the habits of the interfering station, you may be able to hear the station you want. For example, many stations cut their carrier for a second or less when they change antenna pattern. Or they have a second or so of dead air between the ID and the news at the top of the hour. There have been a couple of times when an ID from another station popped out of my receiver during that one second, or less, period. Another possibility is listening at signoff time. Lets say your target and your main source of interference sign off at the same time. You may be able to hear the target because the other station signed off two minutes earlier than normal (or vice versa).
- 4. Make the most of your equipment. Use a loop or phased longwires to null out the co-channel interference. Experiment with different settings, loop locations, tilt angles, etc. It's possible to get

very deep nulls on your locals if you work at it. If you have a communications receiver, experiment with the selectivity controls, notch filter, passband tuning, and other controls to optimize r ception of the station you're trying to hear. These controls are especially useful if you're trying to DX next to an unmercifully splashy local.

- 5. Take advantage of unusual openings and band conditions. If one or two stations from a particular area are unusually strong, try for thers in the same area. If the band seems extremely dead, try for needed stations within within groundwave range (about 50 to 100 miles. depending on frequency and power). The dial may sound almost like it doer during the day, if things are strongly affected by auroral or sporadic-E activity. But everyone will be using their night pattern and power. There are a couple of station near here which I can hear at night only when the aurora wipes out everything else.
- 6. Persevere. Conditions can change by the hour, day, or time of year. You may have to try over and over and over again to hear the station you want. Sometimes it's a matter of conditions being just right. Sometimes it's because your cochannel pest is taking a rare silent period. Sometimes it's because someone forgot to change power or antenna pattern at the normal time. The more you listen, the more likel you are to hear what you're looking for.

These are a few ideas which may help you in reaching your goal. Actually, most of the above tips are applicable to the hobby in general, but the goal of hearing every station in our home state is a fairly common one. It can take a long time (or so it seems) to log an entire state. Based on past experience, I would estimate it would take about 5 years to hear all of Washington --- which is in the middle of the range in terms of number of stations, size of the state, etc. Some states will take longer and some will take less, depending on the number of stations you need to hear, and where your are located. It helps to be near the geographic senter of the state and outside of major metropolitan areas. It definitely requires lots of patience and clever thinking.

Hearing the whole state by Bruce Portzer

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