TAPPING FOR NEWS BROADCASTS

Broadly speaking, almost any tape, regardless of quality of sound, is fit for airing if the news it contains is of "beat" importance. However, since genuine news beats are infrequent, tapes should not even be considered for broadcast unless they can be clearly understood, without straining, by an elderly citizen with a considerable accumulation of wax in his ears! In terms more clearly comprehensible to youth brimming with health, if the news is understandable to you with a gaggle of students shouting in the same room you may safely put it on the air. Don't air the following unless the news it contains is of primary import:

1. pieces with very heavy background noise, i.e. a tape recorded 20 feet away from the jets or propellers of an airplane, unless just used to establish "place where" and the information it contains can be thrown away.
2. Telephone recordings of local news. These should be proscribed by law. If it is news, go out and get it!
3. Highly distorted recordings. Get a test before you begin to record. Listen to the recorded test. Monitor while you are recording!

Your tape recorder is a tool. Tools should be kept ready for use at all times. Every time you use a recorder it should be cleaned and loaded with fresh tape, ready for the next recording. Tape heads should be cleaned with a swab moistened in alcohol. Grain alcohol is best, rubbing alcohol an emergency second choice. Wood alcohol is alright: label it so no misguided soul will be tempted to drink it! There are also a number of head-cleaning preparations on the market which you may use with safety. Don't forget that tape guides must also be kept clean, also with alcohol or other preparation. Anything the tape contacts in its flow should be clean. A dirty guide, for instance, can provoke a vibration of the tape which sounds like very heavy distortion.

Test the recorder before use to make certain the drive speed is constant. A good tool for this purpose is a pitchpipe, an "A" or "C", depending upon your musical tastes. Practice blowing the pipe so that you can sustain an unquavering tone for 5 to 10 seconds. Then record pitchpipe tone for a few seconds. Reel this back to its beginning, then play back the recorded tone while simultaneously blowing the pitchpipe. You should hear a fuller tone but no variation if the tape drive is constant. If you hear a rhythmic variation the drive is varying in speed and that must be corrected. It may be caused, in a cassette recorder, by a bad cassette that either has too much interior friction or has an out of round component. Or the condition might be caused by a slipping or out-of-round drive component. In other words, if you hear combination of beat tones, check out the trouble and fix it or get it fixed by an expert.

Learn how to listen to the world around you. It is possible to spend a lifetime studying hearing and still know next to nothing about this (so far) occult process. Just how we receive audible impressions is not of extreme importance to you at this stage; what is imparted is that you find out how well you hear and, most important, that you learn to listen. I don't mean to concentrate on listening too much. If you try too hard to hear the net result is that you actually hear less. You must learn to be receptive to sound without concentrating your will upon hearing. I know that sounds self-defeating but it actually is not. Human hearing can be directed to hear a particular tone or band of sounds, almost to the exclusion of all other sound. We can do this although we can not do it quite as well as a number of other mammals and insects. I don't want you to concentrate unless you do so to listen for noise! And try to remember at all times that the microphone does not hear what you hear! The microphone does not discriminate, as you do whether you want to or not, between sound it wants to hear and sound it does not want to hear. It receives what is there to get indiscriminately, depending upon its receiving pattern. A high sensitivity mike
tends to "hear" sounds your own ears would neglect to hear. The safest way to proceed is to listen through the microphone, by monitoring the incoming mike sound on the headphones. Thus you hear what will be recorded.

A few facts about hearing may be of use to you. We tend to let unusual sounds go their way without notice. Thus you may not even hear the hum of an air conditioner or other mechanism. Learn to hear every sound before recording and listen to the tape input to hear whether your recording will be spoiled by sounds that did not disturb you but were picked up by the mike. Another tidbit of information you may use some time or other—doddering old citizens like me seem to become annoyed when listening to high frequency sounds and are soothed by low freq. sound. There are reasons for this apparent madness to those of you who relish hi-fi, and the higher the fi the better. And all animals are lightened by unusual sounds, including us.

Find out how well you hear, either by an audiometer checkup or by testing you hearing response to a tone record or tape. Any radio station should have one of these. At your age you should be able to hear accurately from 50 cps to at least 15,000. Some, who possibly resemble crickets, may be able to hear 22,000 cps. At long as there are no "holes" in your hearing range you should be able to get along well in radio. Another thing you might do to prepare yourselves for radio production is to find out your reaction time. That is the elapsed time between the instant you decide to do something and the time you actually do it. The normal time for a good tape editor is one-twentieth of a second. You can measure this time on tape.

There used to be something called "broadcast quality" back in the 1940's when I started to work at CBS NY. Every line from any remote spot was checked for frequency range and noise. And if it did not measure up it was not used. There was no such thing then as recording from a noisy telephone line and assaulting the public ear with audible garbage in more ways than one. Today we have graduated. We are at the point, and shortly may pass it, where there are very few radio stations with high quality sound and content. What is cheap to produce goes on the air, and if you have to buy listeners with cash, what of it? As long as the advertiser is shown a multitude of listeners! I hope, when you get out into that cold world of dollar-chasers, that you will be able to find that one honest man in Sodom!

Proceed with some examples of mike use, avoidance of noise, monitoring etc.