**The Basics of Radio Recording**

**The Point**

The public broadcasting system exists to serve the public. The equipment required to get broadcast quality is inexpensive and readily available, and basic recording and interviewing skills are easily mastered. If you are unsatisfied with the way your public radio system portrays life as you know it, consider doing the portraying yourself. What is going on where you live? What are the important stories? Whose voices should be heard? Consider taking on the role of Citizen Storyteller, and working on a grassroots level to make public radio more truly “public.”

The following notes describe techniques for gathering raw material. The editorial process comes next. When your interviews have been made, you can take them to your local station, or send them to the networks and national programs, and if the material has strength, it will (one hopes) be recognized. In the final stage, you would probably work with an editor to create a piece for broadcast.

**The Tips**

One advantage to working in radio is that you are low-impact. When setting up interviews by phone, remind your interviewees you are not a film/TV crew. It’s just you and a tape recorder — non-intimidating. (They’ll still ask you what channel it’ll be on.)

**Become comfortable with your equipment.** If you are, everyone else will be. Check, clean and test all your equipment before you go out. Put in fresh batteries. Make test recordings. Be over-prepared. Be a Boy Scout. Have everything set up before you walk in. Sit in the car (or the subway station, or the bushes) to load and label your first tape, prepare your next tapes for fast changes, set your levels, etc.

**For Vox Pop, go where people are waiting.** If it seems appropriate, walk right up with your sentence about what you’re doing and attach the first question to it. I’ve heard it suggested that the best tape comes from people in funny hats.

**Remember eye contact.** Don’t let the mic be the focus — occupying the space between you and the person you’re talking to so you have to stare through it. I usually begin by holding the mic casually, as though it’s unimportant. Sometimes I’ll rest it against my cheek to show it has no evil powers. I might start off with an innocuous question (“Geez, is this as bad as the smog ever gets out here?”), then slowly move the mic, from below, into position at the side of the person’s mouth, but not blocking eye contact. You’ll find your own way of being natural with the mic, but it is important.

**Don’t be afraid to ask the same thing in different ways until you get an answer you like.** Remember you can edit the beginning and ending of two answers together, but be sure to get the ingredients. If a noise interferes with a good bit of tape, try to get it again. You can blame it on the machine, but it might be better just to wrap the conversation back to the same place so you don’t get the quality of someone repeating himself.

**For repeat answers or more enthusiasm, try: “What?!” or “You’re kidding!” or “Really??”** Remember the question: “Why?” especially following a yes or no response. Don’t forget the preface: “Tell me about…” Let people talk. Allow silence. Don’t always jump in with questions. Often, some truth will follow a silence. Let people know they can repeat things — that you’re not on the air — it’s okay to screw up. And remember to offer something of yourself. Don’t just take. Think of the listener’s innocence; ask the obvious, along with the subtle.

**If you’re recording more than one person at a time, get them to gather around you and follow the conversation with your microphone.** In general, it’s risky to let the interviewee hold the microphone. Sometimes lavaliere mics can be helpful, but they attract noise and eliminate your control. Try to interview away from hard surfaces — walls etc. For example, don’t record across a desk because you can get [phase cancellation](https://transom.org/2001/stereo-types/) from the reflected sound.

**If you want a quiet interview, try to get on a couch in a room with curtains and a rug.** Set everything up the way you like it before you start. Be sure to check for interfering noise, like air conditioners, florescent lights, refrigerators, traffic, radios, noisy crumpling of candy wrappers in front of the microphone, etc. Get away from noise or have it turned off. A musical background is very difficult to edit. Loud hums are annoying, because they add nothing and don’t make sense. Often a noisy environment is exactly what you want. And be sure also to get the noise by itself without any talking over it.

**Get people up and walking — “Show me”.** I often like to move around during interviews. Have the person describe where you are and what you’re doing. Refer to objects and sights around you. This can relax people and take their minds off the recording. But try to keep the mic close to them. All this will reinforce a sense of place, action and immediacy for the listener. Moving around also gives you a variety of acoustical environments as structuring options in your final piece… possibilities for movement in time and space.

**If you interrupt or overlap your voice with your interviewee’s, you won’t be able to edit yourself out.** This will eliminate that sense of the interviewee communicating directly with the listener; instead the listener will be an eavesdropper on your conversation. It commits you to a production decision. If you want to leave your production options open, don’t laugh out loud, or stick in “uh-huh” or other vocal affirmations. You must let your subjects know you’re with them, but use head nods, eye contact and develop a silent knee-slap and guffaw.

**If you do want your presence in the interview, think about perspective.** Do you want your voice to be very on-mic? If so, then you should move the mic up to your own mouth for your questions. Do you want to defer the primary focus to the interviewee, but have your questions legible? Then, pull the mic back half-way to yourself or speak up loudly.

**Close-mic… about six inches from the speaker’s mouth and a bit off to one side to avoid P-pops.** Go closer if they speak very quietly, or further away if they are loud. This is just about the most important note of the bunch. You MUST CLOSE-MIC. You will try to cheat and get further away, but we’ll know.



“The Award Winning Radio Productions of Jay Allison,” Illustration by David Greenberger

**Use micing distance as a volume control, i.e. move in for whispering and out for loud laughter.** Don’t change the volume at the machine for this kind of quick change. You can use the built-in limiter or automatic gain control (AGC or ARL) in very changeable level situations. If you are in a very noisy background that you want to reduce, mic your subject even more closely (2-4 inches) and re-set your record levels.

**Wind, handling, and cable noise are some of the most common recording problems.** Use windscreens/pop-filters and try to get out of the wind. With the body of the microphone, as with so many things, learn to have a light touch. Don’t let the mic cable bang around or rustle on your clothes. Check that all your cables have good, noise-free connections at both ends. Monitor with headphones to check for these problems.

**For recording most sounds or voices you generally don’t want to light up the peak meter much, or have your meters staying in the red.** In general, shoot for a record level between 5 and 8 on the mic input knob. Recording levels are critical. You are trying to keep your levels as high as possible without distortion — by recording at a nice hot level you rise above electronic noise. Setting levels is a balancing act between distortion at the top and noise at the bottom.

**Don’t use the pause button.** It uses up the batteries, and if you’re listening through headphones, it can fool you into thinking you’re recording when the tape isn’t moving. Once in a while, during recording, look to see that the timer is counting seconds, so you know you’re recording and not in record-pause.

**Omnidirectional, dynamic mics are a good choice for all-purpose interviewing and basic sound-gathering.** Unidirectionals are good for noise rejection from the sides and rear and for stereo in pairs, but they are sensitive to wind and handling. Powered mics (electrets and condensers) have good response and high output, and match well with many modern recorders, but can be more sensitive to wind, handling, humidity and dead batteries.

**Record with headphones.** They are almost essential for stereo recording. And they’re always helpful for catching wind noise, handling noise, cable rustle, RF interference, P-pops, hums you didn’t notice, nervous scratching, and other hazards like forgetting to turn on the recorder. If for some reason you must conserve batteries, unplug the headphones.

**Make idle conversation when you must change memory cards or batteries, so you don’t break your flow or re-attract attention to the recording gear.** But don’t take that moment to inspire a wonderful response. Sometimes I make a list of questions before an interview and half-memorize it. I don’t follow it during the interview, but keep it handy to check before the end to pick up anything I forgot.

**Get all the sundry sounds, like phones ringing, dogs barking, clocks ticking, etc. — they can be useful for editing.** Leave the machine running for stuff that seems irrelevant… it might not be. Yes, leave the recorder running. If you turn it off, they’ll say the most perfect thing you ever heard. Don’t pack up your stuff until you are gone. Allow people the chance to say things in conclusion. Ask them who else you should talk to. You might want to record them saying their names and what they do. Record sounds from various distances and perspectives. Experiment. For example, a toilet flush is very different recorded from five feet away than it is with the mic resting on the plumbing.

**You can’t record too much.** Memory cards are cheap. Collect and catalog sound effects and ambiences. Save everything, including your notes. Don’t erase. Take plenty of extras — spares of everything, depending on how long you’ll be on location — recorders, assorted microphones, cables, recorder batteries, microphone batteries, memory cards, AC cord/adaptors, extension cords, windscreens, headphones, lots of plug/jack adaptors, patch cords, mic stands, shock mounts, Rowi mic clamp, gooseneck, duct tape, electrical tape, pens, paper, labels… Label everything. Slide out the safety tabs of your memory cards after you’ve recorded, so you can’t accidentally erase them. Transfer the sound-files to your computer and keep that as a master copy. Make safety copies of precious stuff.

**Keep data and recorders away from metal and magnets (this includes speakers, amplifiers, electrical equipment, power cords, etc.)** Keep them out of the heat, humidity and direct sun. Protect them in a clean, dry, dust-free place. Be good to them.

**Remember you can always use your recorder like a dictating machine, either for on-location narration or for note-taking.** Don’t forget to look as well as listen. Note specifics about what you see and feel. Immediately after an interview, make some notes about what you remember… what mattered.