

Lectures for QSFT Semester 2 - 2005

- 1 Introduction and overview of LOCATION SOUND RECORDING - hand out assignment 1
- 2 Microphones and Placement on set
1 week off
- 3 Maintenance and repair in the field - Equipment care, soldering, etc...
1 week off
- 4 Setting up the location for sound (general wariness of noisy locations) - assignment 1 due
- 5 Overview of high level Recording Equipment and Techniques (bring in my kit) - review of Assignment 1

1 - INTRODUCTION to, and OVERVIEW of LOCATION SOUND RECORDING

My expectations - Students are going to be focused on Visuals.

Start with a diatribe on the lack of understanding of location Audio.

Jokes - why do you see the lightning before hearing the thunder?
Because even God favours pictures over sound.

- > Q Why do you hear the thunder after you see the lightning?
- > A Even God prioritizes picture over sound.

Well no. Most sound people know the difference between the speed of sound and the speed of light.

Good retort to “waiting on sound”!”

Main points

Objectives - Clean dialogue (or a useful Guide-track), then location specific effects (ATMOS , fx that are difficult to recreate)

Execution - It's all about the microphone placement and location noises. Very little to do with the type of equipment, of course you need the best you can get your hands on - recording will only sound as good as the WORST part of the audio chain, but MORE important is WHAT you are trying to record.

COOL FORMULA

Good

Fast

Cheap

Pick 2 of the above,

- Can be good and fast = not cheap
- Could be fast and cheap = not a high quality
- Sometimes it can be good and cheap = not fast... there are base equipment levels though

Gear used in location sound.

Directional microphones

Boom/fish pole

Portable field mixers

Radio Microphones

Handheld mics (cabled and wireless) for news/etc

Sound Recorders

Video cameras

People and their jobs

Sound recordist

Boom Operator

Sound Utility/2nd Boom/cable person

Mixer/camera assistants

Explain differences between types of productions

ENG/EFP

Drama - Film/video

Music

Post production

SFX collection

Realistic flow path for a career in Location Sound

Including short-cuts and problems

Gear/Equipment Used

2 schools of thought on **Microphone** selection

Shotgun	PRO = isolate wanted sound from the background noise, extra distance from source CON = need accurate cueing or it's REALLY bad, colours the sound a little, don't really hear what the location sounds like
Hyper-cardioid	PRO = excellent sound reproduction (no colouring), help sell the perspective of shot, can be used to minimise background noises by cueing, easier to operate, smaller/lighter CON = need to work closer to the source, less narrow in pick-up.

In Australia (and England) most common mic used - shotgun, as we tend to shoot more location work. Those in the US tend to use (on major features) Hypercardioid mics = more sound studio work.

Of course this depends on the constantly changing situations and location specifics (beach/bathrooms/halls, etc)

Boom

A Boom used to refer to the fisher-style Boom (wheeled tripod with telescoping arm that could be swung, cued and adjusted during the shot) mainly used in sound stages and TV stations (now only used on Home and away/neighbours/sitcom style shoots) due to their size and abilities. I've been working since '98 and I've never actually used one.

Boom-pole (fish pole)

Extendable lightweight pole that the operator uses to position the microphone during the take, very compact, compared to the alternate (see above) made from Aluminium, carbon-fibre, costs are Massive considering what people would expect them to be
Around \$800 - \$1500 for a good one, sizes small to 5+m, last a long time though.
Generally a sound recordist will have 2 or more, depending on their work. Boom Operators should have one but it's a major investment.

Portable field mixers

Desk style not able to be used for anything that requires walk and talk (mention assignment 1)

ENG - They are anywhere from 2 - 5 channel and use POT faders, costs \$1000 - \$5000 again it's the sound recordist/mixer that will own - boomies not really (but we do to earn a living doing ENG mixing, so it's a toss-up between equipment purchase vs need)

Of course there ARE desk-style mixers - usually used on a larger budget production, with a necessity for more tracks/options, higher quality components etc.

Radio Microphones

Standard in Newsgathering and interviews now - reality shows are almost exclusively on radios (except survivor - see locations)

Typically use an omni-type lavalier microphone fed into a belt-pack transmitter, compact receivers into the mixer, and then into a transmitter for recording on a video camera (reality shows)

PRO = Good cause they give a CLOSE sound - audiences are becoming more used to the sound - some US drama shows now working off radios more and more than boom.

CON = clothing noises, mounting difficult on some kinds of wardrobe (no shirt?) not an accurate representation of the location, lesser quality (due to capsule size)

Mixers are expected to own at least 2 radios (costs \$5000 + per system)

Handheld Microphones

Tend to be more of a news thing, where it's accepted that the audience are aware of the nature of recording, also musicians...

Can be omni, sometimes cardioid - dynamic or condenser

Cheaper, and very reliable

Recording machines

Used to be Nagra style reel-to-reel mono/stereo analogue

Last 20 yrs though (in oz) it's been DAT (stereo, digital recording = more headroom) unfortunately it's less robust and more prone to drop-outs (digital linear recording on magnetic tape)

Upcoming is non-linear (DVD/HDD/Flash)

I've never used analogue

Minidisk compression, also MP3 recorders - not too good for Dialog - explain why

Video cameras

I like to think of them as expensive audio recorders - with pictures

Need to set levels correctly - account for how to connect to them, be aware you are not in control of the REC start/stop - very conducive to team building

PEOPLE IN SOUND

Location Sound recordist/mixer

Mixer = sends signals to video camera - ENG etc

Recordist = records the audio (well duh!) onto a audio-only recorder (dual system)

- Most of the equipment is the same - exception is on large budget feature style where the recordist (sometimes mixer) will use a portable desk-style mixer
- Sound Mixers may work alone using both radio mics and boom over their head, all while setting levels and keeping up with the camera... Docos and ENG/reality
- Sound Recordists split responsibilities with Boom Operator on Microphone placement (as boomie is in control during the take) typically though it's the recordists' word that is king (they tend to be more experienced and will usually be the one who was hired - is responsible for the quality of outcome)

Boom Operators

They are there for highly skilled microphone placement - During the shot, as well as assisting the recordist in planting microphones on the set, setting and maintaining radio microphones.

- Once the microphone is on the boom pole and in the air - the quality of the sound being recorded is almost ENTIRELY UP TO THE BOOM OP the sound recordist can't do anything to make it better once it's at their mixer.
- Consequently Boomies have a fair amount of responsibility and are paid pretty well.
- Minimal gear required
- Booming can be a pathway into sound mixing.

Sound Assistants (2nd Boom Op/cable/etc)

Used to be that features would employ 3 people in a location sound team recordist/boom/cable

- Basically to assist the mixer and boom - run cables around the set, swing a 2nd boom where needed, might be in charge of the radios, makes coffee, can fill in for the mixer where needed
- It's truly what it says it is - an assistant position.
- Good pathway to booming or recording.

Mixer/camera assistants

Becoming more common for a person to be a pack-horse in smaller crews

- Shit pay
- Carry both sound and some of the camera gear
- Generally are there to make sure the sound isn't horrid, help out the camera guy.
- Not as focussed on sound
- Good way to get into news camera (example Ch.10 bris)
- The style of shooting excludes any sound treatment of locations and therefore need more thinking, often with less equipment - it's tough but can be rewarding.

Differences in production style

ENG/EFP/news/TV Infotainment/lifestyle shows

Most likely that you'll get work here 1st as the position of a sound mixer can be treated as an un-skilled pack-horse

Typically recorded as single system (straight into a video camera), using radio microphones (handheld and bodypacks).

The style allows for Radios over boom because the presenter is engaging the audience directly (much like a narrator), also it's cheaper and easier for the production to just wire up the talent and set the levels on auto, and hire a cheaper person to do the job of mixer/cam assist.

News - single camera/audio person - Wireless receiver direct to camera - Auto levels

Sit down Interviews - Sound and camera persons - 2 x wireless receivers to a mixer hard cabled to the camera - manual levels set by sound mixer on camera, monitored at the mixer during recording.

TV/Info-tainment (*getaway, et al) - Camera, sound, producer, talent. - Combination of Radios or Boom running through the sound mixer either hard cabled or wireless to the camera, Soundo monitors audio during the recording.

Drama (film or video)

Again, wide variety of set-ups and styles - could be single camera feature film style, where it's possible to boom and you get re-takes if there's a technical issue. Right down to Doco-style, where the soundo is more like a TV Infotainment guy - multiple radios feeding a video camera.

Feature - single camera - Sound recordist, and Boom operator (sometimes a 2nd boom/cable) - running multiple microphones (boom and radios) into a desk-style mixer, recording on a sound-only device (DAT/HDD/etc) - also known as Dual system recording. A clapper board (with or without Timecode) is used to synchronise the film with the audio recording in post.

Feature - Multicam - just like a single cam shoot - with more cameras, difficult to boom, more reliance on Radio mics. Particularly if they insist on shooting a WIDE and TIGHT angle at the same time.

TV - Interior Multi cam - Sound Director, multiple boom operators on actual BOOMS. (Think the interiors of either neighbours or home and away) - here there will usually be 3 pedestal mounted cameras situated behind the 4th wall of a set on a sound stage. The tripod booms run over the top and collect the dialog from their side. Sound director sits behind a massive mixing desk and manages the audio from the booms and plant mics. This is really OLD - SCHOOL these days, even Multi cam TV can be shot with a film-style crew.

MUSIC - sometimes the location recordist is expected to record music. Not often, but it's nice to have knowledge of how to mic up instruments and record in stereo.

POST-PRODUCTION - pretty much what your other lecturer is all about, it's important to discuss the shoot with post-production to sort out any technical issues there may be. Having said that, sometimes production may not know who's doing Post when you're shooting, good luck.

A healthy knowledge of what post production can do with location audio tracks will assist your location recording - "Is that back-ground noise ok? - YES!

SOUND FX recordings - specialized field multiple microphones, never concerned with what it looks like (true sound recording)

Realistic Flow path of a career in Location Sound recording

Boom on no-budget Short films

Perhaps mix/cam assist on EFP

Boom with an experienced Recordist on TV commercials

2nd Boom/cable on a Film style TV series

Main Boom - can do this successfully as a career overseas

More Mixing on EFP, and short films, where you may pick up a Boomie - and you'll buy lots of equipment

Congratulations you are now a Highly Respected member of the On-set crew....NOT!

Alternatively you could

Be a great studio based recordist, (music or post production film)

Find an awesome Boomie

Jump right into recording TV/Features (this usually doesn't happen, as there are many others that have been location recording, and it IS a skill you can only learn with years of experience, but don't rule it out)