An Open Letter from your Sound Department (V1.4)

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This paper was written to assist directors and producers to have a real understanding about how they can get good sound recorded on their set. We, the sound community, have a common bond to help you make the best project possible.

We will not discuss the topic of how to mix, as this is the part of the process that you already trust us to do to the best of our abilities and experience levels.

We want you to have this information to enable you to make informed decisions that will affect the recording of your sound. This information could keep you from making decisions that are harmful to the quality of your film. We would like to educate you about some of the obstacles that we face in recording audio. This is a prerequisite to getting usable production sound for your show.

We are in the new age of digital sound. Theaters have wonderful SDDS, DTS, Dolby, THX and 5.1 surround. Home audio systems can often be better than many theaters. Sophisticated audiences now demand their DVDs have high quality digital sound, yet today's production sound departments face more problems and greater apathy from production than ever before.

THE ISSUE:

Gathering your audio tracks as you shoot is a continuing process than requires at least minimal cooperation from production. This is not about a simple decision to loop or not loop. We, the sound crew, are the ones that you depend on to create and protect YOUR original sound tracks during production.

Unlike the majority of the people who are working for your on-camera results, the mixer's efforts can not be "seen" in the picture frame. Almost no one else really hears everything that our microphones pick up. Too few are even sure just what it is that sound crews do and only the obviously bad sound problems get brought up for discussion.

Our job includes monitoring the sets for unnecessary, accidental, ignorant, and sometimes even malicious actions (through lack of action) that may compromise your soundtrack. We are too often frustrated by the state of conditions that now exist on most sets. Many times we are expected to solve all the sound problems alone, when that should always be a collaborative effort with the assistant directors and other set crafts. Some of whom can even inadvertently create these problems for us.

At times, sound mixers can be made to feel like a pest or even a hinderance to the film's progress. We don't like being put in that untenable position because it is unnecessary and possibly humiliating. Our job is not adversarial to the rest of the production and we certainly don't want to be the set "sound police" just to do the best job we can.

A mixer on a tough show, trying to get quality sound, stands a good chance of burning out from combating all the excuses and defenses put up by others because they can't see audio in the picture, that everyone else works for. It's hard to record audio without getting the above-the-line support. The temptation is to cave into the pressure and just go with the flow. That's not going to be good for your film.

The problems that we face may lead you to believe that good sound cannot be achieved without some set disruption and additional costs. Nothing could be farther from the truth if reasonable measures are anticipated and endorsed by you in advance, both in pre-production and production. Then, the rest of your crew will follow your mandate and consider your sound too.

We know the limitations of our equipment. For example, microphones are only tools. They don't make miracles happen. If on-set audio problems are not dealt with immediately, they will come back to haunt you again in post production. Good sound can usually be achieved simply by using reasonable preparation to avoid pitfalls. For us to do a better job for you, we need your understanding and backing.

THEN AND NOW:

To understand the sorry state of audio affairs today, we must go back in time. There once existed a major studio system where an assembly line of crafts worked together to churn out film products. No matter which studio at which we worked, all crafts understood that they were expected to take

reasonable measures within their ability to help sound recording. It was instilled as part of their general job description and passed on to the young apprentices. Without asking, a seasoned Grip would sharply cut microphone shadows with flags. The Electric department would change out a noisy light that buzzed. Camera assistants would try everything possible to quiet camera noise (there were many times that an operator would literally put blankets and pillows over a noisy camera and even themselves, no matter how silly it looked). All that mattered was getting the shot right for everyone.

Every other craft would do whatever was deemed reasonable to help get good sound, because it was considered to be part of their job. No one had to try to persuade them to do it. It was an era where reasonable co-operation with the Sound Department was the normal way to make films and television shows.

Today's crafts still have pride in their work but it seems they no longer consider helping out the sound department to be a part of their job description. There is no longer an apprenticeship system to pass along. Newcomers to the technical crafts now learn on the job, under fire, through osmosis. The problems began when the studio training system broke down and non-union independent films proliferated. Along the way, the process of passing down “rules” for film jobs changed the way they perceived production sound. It’s now sometimes us and them, not we.

Today, those same crafts must now be requested in some instances to do reasonable things necessary to protect your sound tracks, because they just don't consider it to be a part of their job any more.

The Sound Department would gladly cut the shadow on the back wall of the set or cover the noisy camera ourselves, but that's not how the game is played. Instead, in varying degrees, we have to convince, cajole, coerce, plead, and use every other psychological persuasion technique to get the other crafts to help us prevent sound problems.

Last-second scrambling time on set should only be used to fix the unexpected problems which will inevitably occur. Instead, that last second is too often the first time that the sound mixer finds out about changes in dialogue or staging or discovers unwanted noises from on or off of the set.

All of the other departments now work only for picture. Every single person on the production, from make-up and wardrobe to grip and props, concentrates only on what's seen in the viewfinder.

Because of this new tunnel vision, other production crafts concentrate only on your picture and rarely know or care what's happening to your audio. You are the only person on set with the power to allow us to consistently get you good sound. It is always tempting for sound to give in and not go against the grain whenever any circumstances impose impossible barriers and unappreciated efforts. If the apathy keeps up, film schools are going to need to add child psychology courses to their sound mixing curriculum to teach them how to sway others to help them out.

We want you to know as much as possible about the audio minefield lurking on every set. Each show is different. Your last mixer may have had no problems. That same mixer on your next show may be perceived by you to be “complaining” too much, when they are simply being prudent, by communicating information about what you are now getting on your sound tracks and what sound problems can be fixed. The bottom line is that these are your choices. When we hear a destructive noise, it’s your problem too. In the end, you don’t want it on the tracks we will turn over to you.

After reading this, we hope it will be easier for you to make more informed decisions about when it's really the time to loop a scene. It's far too late to reverse a sound problem later in post. Even though this topic is last in the chain of events, we should start first by talking about why ADR is not a fix:

LOOPING:

It is important to consider the gravity and dramatic consequences caused when the words "Don’t worry, we'll loop it" are uttered. You are obviously aware that extra ADR adds a financial burden to your budget, but the consequences are much greater than it appears. Looping is only an answer for situations where all else fails. It's not just a quick fix later if the original on-set problems could have easily have been rectified with just a little extra knowledge or communication.

Looping means that you are also making a huge artistic compromise. Actor's performances are often far better in production than in an ADR

booth. Many actors don't want to be in looping later. Making a film is an artistic endeavor that lives forever. You cast great actors to bring their collaborative efforts together in the making of your show. The essence of the scene can sometimes be lost by looping. The voice of a great actor, totally in character, moving and interacting with other actors in three dimensional space, is a treasure. Their art breathes real life into the film. That is a long stretch from the true creative process on set. Sure, ADR will be less noisy than even the best production recording, but it lacks some of the spontaneity and emotional truth of what's captured when you use your artists' talents on the set. That's hard to duplicate. The post budget could be better utilized by not going backwards to fix sound tracks that were already recorded. It should be spent enriching your show.

There are some much respected post sound professionals who think you should loop immediately, on or very close to the original set, and as soon as possible after the scene is shot. The performance will be a better match and the sound will be more natural this way. If not on set, there are also companies that specialize in on-location looping, using video assist for picture in portable studios, but at that point you may want to use the post houses later.

At best, looping, because a fixable set background was not dealt with early, is often fiscally irresponsible. Be sure that the audio problem really can't be fixed before you make a decision that you may regret later. Never allow the simple impatience of the moment on set to be your reason to loop. Be sure you have first covered all your reasonable alternatives.

FIXING SOUND PROBLEMS ON THE SET:

Do it before they happen. Most events that ruin sound tracks are totally predictable and repeatable, show after show, year after year. It would be hard to come up with a sound problem we have not seen before. These are obstacles that are clearly identifiable and quantifiable. The difference between getting good sound or bad sound is usually determined by how many of these predictable negative factors take place on your particular show and how they are handled. There are few problems that don't have quick solutions, if proper diligence can be taken in advance. The sound mixer is your advocate here. Let them try to identify the external detrimental audio problems and those from each craft which can cause or fix audio problems on your film.

PRE-PRODUCTION:

Good sound begins by anticipating the outcome well in advance. Communicate early and often with your mixer in pre-production. Pay the mixer to go out and listen for potential poor audio on sets ahead of time. The mixer might even make a test ambient recording to see what noises can be removed in post, just as the DP does with camera tests for best picture. Do this before the locations are locked in and before the scouts with your key department heads. If the mixer is unavailable, have your mixer designate a trusted associate to go for them. In the end, it's cost effective.

LOCATION SCOUTING DEPARTMENT:

More can be done here to save a film's audio than any other department! Set selection should consider sound too. At least try to weigh the environmental noise factors. A minimal amount of consideration should be given to potential audio problems in advance.

- Change to another location when “the look” is not a big issue. Often, we shoot in a place which could have easily been substituted for another location or the day moved to a weekend, where the environment might be better controlled. Many times we film at a location which has construction, traffic, schools, aircraft flying patterns, and other obvious background noises. Only shoot in those kinds of locations when it's absolutely necessary and essential to the film.

Lock down all the noise problems- before we get to the set. Examples:

- ·Always consider gaining full control of the air conditioning. This is a must. Without a/c control, the audio background will change from shot to shot as the air goes on and off. If it is in a large building, have a PA standing by with a walkie-talkie to turn the air back on after each shot. When filming in exterior locations, it can be just as important to kill the big a/c units for other buildings that are near the set.
- Have control over all noise makers at typical locations such as restaurants, bars, offices, houses and hospitals. All refrigerators, computers, ice makers and other machines must be able to be turned off. Computers spinning hard drives and fans are particularly important to kill. Request fake prop computers where you anticipate a problem. Pay off gardeners for a one hundred yard perimeter around houses.

- Try to schedule filming after or before hours in locations such as bars and restaurants.
- Avoid certain kinds of roofs during predicable rain days, especially tin warehouses.
- Make sure the Electric department can send in cables to the set and still keep the windows, doors and openings closed up to the outside.
- Avoid creaky old wood floors. They are a recipe for disaster.

ART DEPARTMENT:

- Confer with the sound department when adding noisy set furniture, computers and machinery. Order noiseless prop computers.
- Try to consider overhead mics before building low covered ceilings, hanging lamps and cross beams.
- Inject foam into set constructed stairs and steps to get rid of fake hollow footsteps over dialog.
- Whenever feasible, carpet the sets to deaden the echo of live rooms where the majority of dialog takes place.

ASSISTANT DIRECTORS:

None of these implementation plans will succeed if the 1st ADs don't support your sound on your show. Believe us when we say that many times they don't! Most 1st ADs are excellent, but some become a nemesis to sound. The crew will take their cue to stop co-operating if it's clear the ADs react at the expense of getting good sound. Derogatory statements like "waiting on sound" or "we'll loop it" are unproductive and sap our energy. Those kind of ADs may need a nudge from you to convince them to consider the audio on your film.

- If you are paying for police, have them lock down traffic whenever possible. It's becoming harder to get done, but professional Set Cops can be quite a major asset when properly utilized.
- Get quiet lock ups on set. Do not allow any walking or talking. Station your PAs at key locations outside, and most especially under windows. (the trick is to keep your PAs from bunching up and talking too.) "Lock It Up" means that we should not hear any work noise from our crew. No engines, moving gear, chatter, etc. With so many crafts on different walkie channels, they often don't hear a roll, so it should be loudly announced by PAs too.

- Please allow the sound department to make quick corrections that are reasonable, without announcing that we are “Waiting On Sound”. Do they also yell out “Waiting On Camera” when a D.P. adds a light? No. Do they yell out when waiting on a Camera Operator or Gaffer when they make adjustments? No. We do not want to intentionally hold up production when factors out of our control necessitate fast action. If we need another take, don’t announce “going again for sound” unless you also yell out “going again for focus or Dolly Grip” when they need another take.
- Enforce silent pantomiming from the background extras. Ask them to show up in rubber soled shoes when possible.
- Allocate a reasonable time and place for an actor to get wired. It won't help us to go quicker if you push the sound crew to wire faster when the actor insists on getting wired at the last second on the set. Conversely, don't make a sound person sit outside a star's dressing room just wasting valuable time that could be used to prepare for the scene on set. Have the PAs tell the actors to stop by the sound cart offstage.
- When there are closed rehearsals, make sure the boom operator gets to see at least one rehearsal before the actors leave the set.
- Honor our wild line and wallah requests before releasing the actors and extras. Waiting to do them later often means they won’t match the shot and possibly be enough reason alone to loop a scene.
- Honor room tone requests before breaking the set up, and stop all talk and movement. Room tones are very important to do immediately, before the ambient sound changes.
- In plane or traffic infested locations, roll as soon as the engine noise is tailing off, otherwise another plane or bus comes in range and the window of opportunity is lost. Too often, we are not ready to roll as the outbound noise abates and the purpose of waiting was defeated.
- Keep the set quiet enough before we roll to hear the status of the incoming and outgoing planes.
- Be sure to inform the Sound crew at least two days ahead of any scheduled playback days, so the proper equipment can be ordered. Give us post approved audio tracks at right rates with sync. Don't expect that just any DVD, CD or cassette will suffice.
- Don’t allow transmissions of walkie-talkies, cell phones and pagers turned on during takes and final rehearsals. They can wreak havoc on wireless microphones.

- Every time there is a new set-up, announce out loud what kind of general shot is taking place and the direction you are looking. It is a common mistake to keep the crew in the dark about the next shot. Those sorts of secrets only add chaos. The crew might guess wrong and set up in the wrong places and then have to move again. Please take the guesswork out of it by loudly announcing to the whole crew what's happening next.

PRODUCTION MANAGERS:

- Budget in a third sound person and the proper amount of audio equipment. A third person provides invaluable support so that the other two can keep preparing, rehearsing and shooting. Their impact is penny-wise and pound foolish not to have them all the time. Time saved on set, at the moment when every department is ready to shoot, is money well spent. When blocking changes necessitate adding a second moving microphone operator, it can be done in a jiffy, without stopping production to show someone else how to perform this skilled job. Would you ask a PA to focus a second camera? Lots of other problems can be solved more quickly, from killing an errant fan to fixing a director's headset on the fly. In a pinch, the third person can even keep production shooting in the event of a sudden emergency or sickness befalling a sound person on distant location.
- Consider the post budget later when making financial decisions on set production.
- When booking studios, check that your stages are quiet. Even the newest and most modern stages often have fans and dimmer banks located on or so close to the stage that they are a terrible problem for the entire shooting process.
- When you must book a warehouse stage, please sound proof it enough so we can record clean sound. Also, rent a red light system for it.

CAMERA DEPARTMENT:

Camera assistants:

- When there is bad camera noise, make all reasonable efforts to contain it by using barneys, glass, blankets, tweaking, etc.
- Don't turn the slate on and off as it will change the time code. Let the mixer know as soon as a slate shows any possible time-code issues.

- Let the sound mixer know what frequencies are being transmitted in case it steps on wireless mics or comteks. Test and be prepared to kill Panatape type devices if it causes microphone interference.

Operators:

- Hold only the frame size to be used and no more.
- Communicate and work out any problems with the boom operator, long before the first team is called in.
- Trust your boom operator to give them a true line.
- Be willing to put a cover or blanket over a particularly noisy camera.

Directors of Photography:

- There is almost never a good reason to light a boom operator off the set. An overhead mike, in capable hands, should be able to dodge your lights with a little collaboration working out the boom shadows during the lighting set up. It is important to give the boom operator the space above the frame.
- Remember the sound is never as good with wireless as it is with an open boom mic. Pretty pictures should always be able to happen while an overhead mic is operating. If not, something is wrong with your lighting.
- If you change some lights at last second or between takes, be sure to work it out with boom operator before shooting again.
- Don't use noisy lights like Xenons close to the set, unless the director agrees, long ahead of time, that the whole scene will be looped.
- Don't ever say "loop it"! It's not the DP's prerogative. If the DP conveys to the crew (who all work for picture) that sound matters to the film, they will follow that lead and be more attentive to potential sound problems.
- When shooting insert vehicle scenes, try to consider sound problems like lighting so that windows can be closed.

SPECIAL EFFECTS DEPARTMENT:

- Make a reasonable effort to keep the offstage noise-making devices away from the set. Baffle them when dialogue is in the same scene.
- When making rain, put the rain machines and water truck as far away as possible.
- Use hogs hair to muffle raindrops on roofs and under windows.

- When a fan is used to blow a curtain or plant, work it out with the sound mixer before the noise problem is heard on the first take. Foliage can still be made to look natural with forethought of using strings and wires to move the vegetation when fans are too noisy.
- Give warning of Ritter Fan noise when creating dust and leaves blowing.
- When using fireplaces, try to limit the hissing gas sound.
- Heaters on cold sets need to be shut off well before rolling to eliminate the crackle and pops from shutdown.

WARDROBE DEPARTMENT:

- When requested, the wardrobe department can help by creatively placing the wireless in the best possible position on the actor's body. We need your support and thank you in advance for helping us.
- Be sensitive about making negative comments about bulges because the actors can be overly self-conscious about wearing a body mic, even if we can guarantee it won't be seen in the picture. Realize that a tiny lavalier mic can almost never be seen, especially on most wide shots, even when placed on the outside of wardrobe. If your eyes can not see it at a shorter distance than the lens size of that shot, it won't be seen.
- Avoid noisy clothing, especially when the principal actors will wear the same clothing throughout much of the film.
    - Cotton is our friend. Silk is our enemy. Cotton tank top t-shirts placed underneath actors shirts when possible, will often fix the bad sound of the dreaded clothes rustle.
    - Silk ties should be avoided. At least modify the inside with cotton, especially for primary actors wearing the same wardrobe in several scenes.
    - Consider the impact on sound when choosing chains, necklaces and other jewelry.

PROPS DEPARTMENT:

Make an effort to keep noisy props as quiet as possible, especially in the following common problem areas:

- With guns, always let the mixer know if you are using full, 1/2 or ¼ loads, how many shots are planned to be fired, and sequence they will happen.
- Help us generally with all your professional muffling tricks such as fake ice cubes in drink glasses, spraying shopping bags with a water mister,

keeping dishes quiet generally in the sink and on the tables, padding to avoid clinks, etc..

GRIP DEPARTMENT:

- Use cutters to kill boom shadows.
- Use all reasonable measures to reduce dolly squeaks, including putting a dance floor down if floors creak.
- Put talcum powder around the rubber wheels when needed.
- Use grip blankets to deaden outside sounds from open doors and windows.
- Make baffle covers for the loud set machines, fans and ballasts.
- Fasten down all scrims and gels that rattle in the wind.
- On insert vehicles, keep stands attached to speed rails from clanging and baffle open windows not seen in picture.
- Silicon spray noisy hinges of all kinds.

ELECTRICAL DEPARTMENT:

- Keep the generator as far away as is reasonably possible. Always use a minimum of 3 banded lengths (150 feet) to the first box, and go back from there as needed.
- Supply base camp power to avoid using loud putt-putt generators.
- Use all reasonable measures to keep lights and ballasts from making any humming or squealing noise on set, and use extension cabling to keep the major noisemakers off the immediate set.
- Run cables so that windows and doors can close to the outside sounds.
- Put variacs for dimming on problem light bulbs.
- On insert cars, clip and wedge funnels to reduce the rattling sound.
- Keep certain lights in silent (non flicker free) when shooting at 24 fps to get rid of the unnecessary high pitched whine.

CRAFT SERVICE DEPARTMENT:

- Set up far away from sets so that the coffee makers and other devices can't be heard, especially on stage….and please keep the chatter down.

TRANSPORTATION DEPARTMENT:

- When possible, plan to manpower to push or pull a particularly loud vehicle out of the scene when possible during tight shots.

- Deactivate the dinging noise when door is opened on picture cars, even if it's just taping down the switch.
- Put base camp at least 1000 feet from set in quiet locations such as deserts and mountains, and 500 feet away in city locations. Keep the individual generators off during the shot.
- Hire quiet insert cars with reasonably quiet mufflers and generators.
- Instead of running car engines, use any alternate quiet power for picture vehicles that must run flashing light effects during the coverage.
- Convertible picture cars are fine, but never allow an opened up sedan process car to be used exterior without informing production that the scene might be looped if scene calls for a closed car interior.
- Aim a generator's noisiest exhaust opening away from set and be prepared to park a big truck in front of a loud generator.
- Use only a single key in the ignition to eliminate clanging keys.
- Don't Armor-All or Simple Green a dashboard if mikes need to be taped on it.
- Keep insert trailers and car interior floor area free of all the noisemakers such as the chains, removed side mirrors, nuts and bolts.

ACTORS:

A good actor is a loud actor. Of course that is an exaggeration, but whenever sound people get together to discuss our jobs, we often talk about an actor's voice timber. Old time actors who have done a lot of stage work, tend to have learned the art of projecting their voice, but that is a lost art now, especially with the age of wireless mics. Sometimes we can barely hear an actor when a mic is merely inches away. You will need to consider asking them to speak a bit louder, especially if you want to add a loud fx tracks later.

- Don't refuse to wear a wireless mic when it is necessary.
- Don't ask a boom operator to get out of their eye line. (Acting has been done with the boom for decades. This is a dangerous precedent we have recently started seeing.)
- Tell the sound department when you will do a much louder or quieter take than was rehearsed.
- Do not try to remove or disconnect your wireless mic by yourself because they are fragile and expensive. Find your sound crew and have them do it.
- Please project louder when sound really needs it.

- Understand that we hate to bother you to make adjustments.

DIRECTORS:
Collaborate with your sound mixer as you would an editor, composer, DP or writer. We can also enrich your "vision" through sound images.

Find out what problems and solutions exist. Don't fall for the trap where you cringe when you see your mixer coming towards you because you it's usually bad news. Your mixer will get that vibe and start telling you less and less until sound is no longer a vital part of collaboration on your film.

A good rapport with your mixer will allow you to know information about what was bad, borderline or what you can get away with. If you simply trust that the mixer is getting good sound, you may be mistaken. It is always possible that your mixer is doing the best they can, but it's easy to succumb to not taking the extra step, due to negative responses to their unappreciated efforts.

Many sound problems cannot even be heard until the last moment. That is after all the other departments have done their job and the set is finally quiet for a rehearsal. Just as with camera, the shot sometimes evolves into a problem that was unanticipated. So we may need a moment or two to make adjustments when something unforeseen arises or creative changes have been made.

Sound is a part of your entire film making process, from pre-production through post production. It needs to be done right the first time. If you convey this message to your whole crew ahead of time, you will be freed up to spend more quality time with the other pressing areas of film making.

Remember that the priorities of a UPM and AD's schedules compel them to focus their attention on the production budget. They are not always as concerned about the other costs of a film as set problems add to post production budgets.

The difference between good sound and bad sound on many shows can be only about 5 minutes a day of doing a tweak here, a wireless change there, adding another mic, quieting footsteps, siliconing a door

squeak, room tone, a well placed carpet, killing a machine that came on during a take, powder on a dolly wheel, etc. Usually by the time you print a take, the problems have been solved. If not, do another take. ADs or other crafts that stifle this process will cost you dearly later in post.

- OVERLAPS - Of course there are times that overlaps must happen for artistic reasons. However, when possible, it's always better not to have overlaps at all during coverage unless absolutely necessary, because you can only be in one cut or the other. It may cause terrible editing problems with that scene if you later decide you want to see both sides of the actor's dialogue. It's always easy to create an off camera overlap later when you want it. Usually, the overlaps on set come from a belief that the performance will be hindered without them. That argument pales because it hinders you not seeing the face of one of the overlapping performers saying his lines. You can only pick one or the other actor for picture when tied to an overlap, or else loop it.
- USING MULTIPLE CAMERAS – THE SINGLE BIGGEST PROBLEM THAT AFFECTS YOUR SOUND. If considering your audio tracks, there is a proper way to use 2 or more cameras, and an improper way. It is perfectly acceptable to use 2 or 3 cameras, of the same approximate frame size, at the same time. The Sound Mixer's nightmare is when you shoot one camera wide and another tight…. at the same time. This means that sound will be compromised by losing 'perspective'. All the actors must then be wired because the wide camera will not allow a better sounding overhead mic to get close enough to the tightest camera size. That overhead mic may be replaced by an inferior sounding lavalier mic and then they can create various problems such as clothes rustle and muffling. This can be resolved by the other cameras only filming non-speaking actor reactions, or just not rolling at all during the wide master shot. Then, you can go to multiple cameras for all your coverage. The bigger problems crop up when lavs can not be used at all, due to a bathing suit, certain actions or extreme clothes rustle that ruins the sound. Then, it’s always going to sound better if wide camera angles do not happen at the same time as a tight shot. There is no way around this dilemma except to bring your actors in to loop later.
- REHEARSALS - These are very important to the whole crew. It's fine to have closed rehearsals for actors only, but give one to the crew or at least let the boom operator see one. Otherwise, we can only guess

where and how the sound will be delivered. The words we dread the most are "let's shoot the rehearsal". You might get lucky, but your sound will probably suffer and you should expect to do extra takes as unknown problems surface.

- AD LIBBING - Again, it's impossible to mic lines that no one knows will happen. If you want to keep an ad-lib, do another take for sound if they didn't get lucky by recording the surprise line the first time.
- AIR TRAFFIC - Probably the single most frustrating audio problem on all sets is being in an airplane traffic pattern. Avoid those really bad locations if possible. You know it's no good, the actors know it; the whole crew knows the sound is no good. Yet, after awhile, you have no choice but to plow through and start printing those takes anyway. In that case, rather than looping, it's much better to get through the scene with shorter clean pick up shots that can be cut together later, than to expect an entire clean take.
- LOUDER ACTORS - Sometimes we really do need you to get the actors to project in order to save a scene. We need extra volume when we ask for it. Also, in loud scenes (such as a crowded bar or stock exchange) it's best to make the actors to speak a bit unnaturally loud. If not, your post background sound will have to be thin because your post won't be able to add the rich background tracks as easily.
- MOS & Q-TRACKS - There is a misconception that recording sound on non-dialogue scenes slows you down. That's really not the case. It is best to record sound all of the time because it will make looping much easier when you have a sync reference track to work with. Do not talk over FX shots with no dialogue (such as car drive-bys) because the scene will then have to be foleyed. It’s more prudent to keep sets quiet during all scenes in order to keep rich sound tracks from being destroyed for no good reason.
- Demand a three person sound crew. The quality of your sound will be better for it. Its cost efficient to spend a bit more money to get a good boom operator who will get you better production sound when doing shows with miserly post budgets. Mixers can’t always make good tracks without a good boom operator at the front end.
- Always try to allow for just one printed take, in each angle, where you allow 5 or 10 seconds to record silence before calling for a cut. These kinds of sound hooks will often help save some dialogue scenes by getting some camera noise or back ground in the actual set environment that can be laid over the scene.

- Set a policy that the sound mixer receives any script changes along with the actors and the script supervisor. Otherwise, your mixer is flying blind and will not be as prepared to mix the scene.
- Locations – locations – locations!!! We emphasize this topic again. It is important to you to have quiet locations picked out to show to you, before you scout them. If you don't ask in pre-pro, it won't happen. Make the locations department work hard to find quieter locations whenever possible. When you must use a sound unfriendly location, think about having a good reason to incorporate the offending background noise into your movie. If a highway or factory is next to it, perhaps you can establish it's proximity in order to justify some of the background noise.

Some examples:

Shooting near traffic: Whenever you have paid law enforcement to be "set cops", use them to do traffic control. Make them work. Have the AD communicate with them on walkies to halt traffic just before rolling. This is quickly becoming another lost art and there is no reason not to safely stop traffic briefly, whenever it's possible. It's not that difficult. At the very least, have someone communicate to the AD to roll between red lights.

Shooting around water sets (The beach, lakes, pools etc.):
The wave noise changes with the tides. We can deal with that if we get more room tones. The audio problems come into play when actors are wearing bathing suits or wet suits that won't allow for hiding wireless mics on their bodies. We have bulky water bags to put wireless mics on actors for water shots, but none of them are foolproof to leaking saltwater onto $5K wireless units. We'll take that chance on expensive features, but we don't recommend it on TV budgets.

In situations of water and wearing little clothing, sound is restricted to using an overhead boom. In that particular case, we simply can't record the tight shot, if it's filmed at the same time as the wide camera on those occasions where we can't get a wireless mic on the actor. This can easily be solved by simply using the wide camera alone for the master shot, then, in the coverage, go back to using multiple cameras. Again, without a wide angle shot at the same time, we can drop a boom easily down over the actors in the tight coverage. Also, in wide shots, if the sun is behind camera...we literally can not move an overhead boom without creating shadows. Of

course, we all know that certain scenes in the water will absolutely need to be looped, no matter how we cover them, but usually there is no reason to loop anything.

The same goes for the dreaded jacuzzi, where tight cameras can save the sound. The water can then be hand swirled with judicious use of a little foam in water and some offstage bubble release. Scenes with low dialogue will certainly be looped in wide shots.

In kitchen locations, there is cooking noise, lots of actors talking at once, while walking on hardwood floors or clanging of the silverware and dishes during food scenes...all things we can deal with if we have time and co-operation.

You get the idea. Trains, planes, automobiles, prisons, airports….you name it. Locations affect sound. There are no problems…just solutions. Discuss and work them out ahead of time.

SUMMARY:

Looping - The dubbing sessions should not be an afterthought when your film's photography is over. Know it upfront and be sure you want to be looping later. Looping is not a panacea as it only puts more problems on the back-end. Avoid blasé performances later. More importantly, it's often more difficult to bring an actor in to loop than just shooting that wide camera by itself in the first place and shooting the tight angles with multiple cameras. Many directors just shoot one camera rather than discuss a problem. Usually, the mere discussion about it takes more set time than just shooting the wide shot alone and then going in for the coverage.

At least there should be a clear policy to not loop the star or stars whenever possible. We could almost always save our star from looping by giving them clean singles without a second wide camera shooting at the same time. Of course, that would take a mandate from you.

Directors made aware in pre-prep of these kinds of audio issues, could take it into consideration on their shot list to avoid wide and tights whenever the result would be looping. That would avoid frustrations later. On the set and in pre-pro, let your crew know you need their co-operation to get good sound.

We want to be a low-key sound crew who can accommodate every shot. All sets are understandably geared toward picture and performance. Sound is only heard from when there is something wrong with audio. We hate bringing up the negatives. We just want you to know we are powerless to prevent looping unless these solutions are allowed.

This document can serve as a vehicle to open an awareness and understanding of the process of recording audio on set.

The entire set is geared towards picture. We are the only one's doing sound for you. We may feel the pain if our remedies are not endorsed, but we will go along with your every decision. Sound issues can often be corrected quickly and maybe you can't afford not to. The consequences will cost too much in time, effort and money later.

As we move towards **Hi Def** tape, it brings a whole new set of problems to sound. These include the fact that younger generations of film-makers are shooting in different ways. The concept of “rolling” and cut has changed since the cost of tape is so inexpensive that changes sometimes are made on the fly during the scene, without cutting. Its one thing to say “keep rolling” while make-up does a quick pat down, and quite another to say “now say your line while coming in the door”, because sound might have had it miked for another part of the set. Then, there should be an understanding that sound adjustments may have to be made. Also, although there is a growing reliance on wireless to be used as iso tracks on each actor, they are not always reliable. We are also entering a new age where wireless spectrum is being overcrowded by new broadband devices and spectrum sales by the FCC. Sometimes it’s possible that your mixer’s wireless won’t even work at all that day, in certain parts of a city. It may soon be necessary to send out professional frequency co-coordinators to pre-scan a location where wireless must be used. Then wireless in their recommended ranges could be rented ahead of that shoot day.

*A very important point with HD is that your boom operator will not physically be able to hold a boom for continuous takes without cutting. In those cases, a Fisher Boom would be necessary to keep an overhead microphone.

We already established that using multiple cameras simultaneously may mean the specific lighting and sound is often compromised. Not all change is for the better. It is time to elaborate on the fact that the art of film making is rapidly disappearing. For instance, video assist has led to fewer wild walls being pulled on studio stages. The camera shots are often compromising the best possible shot when they adjust for lack of set space. There is no way a camera, crammed up against the wall, can always be as good as the shot with the wall pulled out. The crew has less access to fight their way in or be able see the external factors that help make a better product. The actors are now entombed in the sets and now expect to be able to act without anyone in their eye lines (which has included the whole set). Even boom operators are sometimes being told to stay out of their eye lines. This makes it very difficult to do their jobs. Ideally, a wall is pulled out and then whole crew can watch the set for any problems that might affect their craft that monitors don't show. Lighting would be better, cameras can then do wonderful dolly shots and a Fisher boom can even work overhead again. It may be time for a return to some tried and true ways of film-making….

FINAL NOTES:

The words, "We'll fix it in post", should be replaced by "Let's fix it on the set". Reasonable efforts can always be made to accommodate these problems on set. Then your soundtracks will be as good as you want them to be. It bothers us to sit quietly in a corner while your sound tracks are being butchered. We are only asking that we go back to a recent time of common set practice that makes sense. There is no denying that an anti-sound attitude now prevails on certain shows. Being a set politician is always an important attribute, but your tracks should not ride on the outcome of who has the best verbal skill to persuade people to do the right thing.

Don't even bother to tell your sound mixer that you hate looping unless you are willing to back them up with your on-set support. It is up to you to demand better sound for your show. This can easily be instilled on the first day of pre-production. Make them accountable to use intelligent foresight that includes all departments on a high quality show.

We are not asking for special powers on set, just a little respect for our craft. With your support, we promise to act discreetly at all times and not

expect that the sound will be any more important than any other parts of your show. We know there will be times that sound must be looped after it was given due consideration. The word "reasonable" applies at all times.

Most importantly, find the time to communicate with your sound mixer. You need to know if you are getting the best sound tracks possible. Sound and camera should complement your film. The audience is watching and listening. Post production will take over at the end of principal photography, but we always want to hand over tracks that don't need to be "fixed". That allows them to spend their efforts on other post components that give added value to your wonderful project.

Sincerely,
Your Sound Department