



Inside American Jail



Pro Tools Playback



Emmy Winner Spotlight



The Marc Pease Experience

THE COFFEY AUDIO FILES

VOLUME 20 | ISSUE 1 | 2008

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L.A. Ink

John Austin goes in depth on mixing sound for TLC's hit show.



Video Game Audio

Dave Fisk discusses recording sound for the popular XBOX 360 title "Gears of War" and more.



Sitcom Sound

An Exclusive Interview with Sitcom Sound Mixer Michael Clark.

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**The Coffey Audio Files
2008
Volume 20, Issue 1**

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are always looking for content
from professionals in the film and
television industries.

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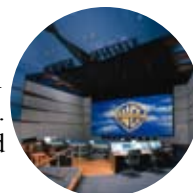
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THE COFFEY AUDIO FILES

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I started this business in 1988 and I can't believe 20 years have passed! We'll be having a thank you party soon and you'll be invited.

We look forward to producing these magazines for you. It takes a tremendous amount of effort, but we are proud that our

content is second to none. I particularly enjoy my column because it allows me to speak with you directly without the usual sales spiel.

Today, I want to address the huge problem of falling rental rates. It affects us all. The rental rates today are typically lower than those I received as a production sound mixer over 20 years ago! Even if your rental rates just stayed the same, that would still represent a major decline as your rates need to grow with inflation. Otherwise, owning your own gear becomes fruitless after factoring the higher cost of gear, cost of money itself, time spent, storage, insurance and the constant upgrading. Creeping lower offers from UPMs and bloody competition between mixers for these shows are the main reasons. You work hard to stay educated and keep current with technological change and your packages reflect a significant investment in time and money. You can justify increasing your rates, especially in this day and age. This problem can't be resolved without you sound mixers expecting fair rental rates... while there's still something there worth fighting for.

Coffey Sound does its part because we won't compete with our customers. We have never rented full audio channels directly to features or TV series without the production sound mixer's personal request. Please call me if you ever hear otherwise! Those shows often call Coffey Sound (and all of the other audio rental companies) to try to get a lowball quote, just so they can use it to lower the rate that they will pay a sound mixer. We won't play their game and simply refer them to get our printed quotes on the rental section of our website (where, by the way, we quote a healthy \$5,000 per week for a full channel of production audio equipment for a series or film. It goes without saying that you professional sound mixers would get a preferred professional rate.)

Coffey Sound had an incredibly wonderful 2007, but as I write this, we are all in throes of a strike-ravaged 2008. The strike has ended, but the effects of all this will be felt for some time, but we must focus on the fact that normal times will soon be back and the business will return for all of us. Currently though, it is as difficult for us as it is for you. We feel your pain and suffer together.

This leads me to the gloom and doom I hear about the future health of the entertainment industry. There is a climate of fear that the expected loss of network TV viewer-ship to internet content will somehow permanently damage our industry. I don't agree and actually predict just the opposite will be true. It should not matter to you audio pros if network viewer-ship is lost to the internet or directly streamed through various devices because in the end, that's where it's all heading towards anyway. As a company who has embraced change, we don't see this being a negative. In fact, there will then be more entertainment industry related avenues opening as more show products

are made for more specialized viewers. For example, there won't just be some sports channel shows, but many more narrowly focused shows just for skateboarders, swimmers, flyers, runners, chess players, boaters, sewing, horses, all kinds of collectors and for every other type of show for every culture and interest you can dream of. You name it and there will be a show made for it...all of which will need audio professionals to help create their product.

Beyond topic shows, more importantly, the need will continue to exist for the very best general entertainment content possible. The studios will still handle that area better than anyone. Viewers will always be willing to pay to see the best sports, the best music, the best theatre and they will certainly continue to pay for the best films and reality and scripted series shows to be shown through pay-per-view downloads or for free with normal or embedded advertising. It's inevitable. I don't see any problem with speeding up the move to that direction. In fact, it's a good thing for all of us in the industry, as it will create more jobs for those employed in high end visual entertainment, as well as specialized content. More viewers will be added from around the entire world as the instant access to visual entertainment expands. Naturally, new viewing customers will gravitate to the best produced entertainment, as always. There will only be so many "amateur" free internet shows and You Tube skits that one can watch before viewers long to see a well produced new episode of 24, Grey's Anatomy or LOST. The best shows and talent discovered on the open internet will surely be bought by the same studio corporations who now make the highest quality produced shows today. As always, if there's a popular show, even if it's only found on the internet, studios will bid the highest dollars to own it. They are already doing it now. In effect, these will eventually just serve to be another new form of a pilot for studios. The studio corporations in the business of entertainment will always have the most bucks available to pay for owning the viewer eyes and they will certainly make juicy dollar bids to purchase the best internet shows being watched by the most viewers there. The growth of world-wide internet "programming" will ultimately create a voracious need for total content growth in the entertainment industry.

While the strike effects linger, the new ownership of Coffey Sound has committed a course to forge ahead as we wait out the hard times. There is a silver lining. Coffey Sound will emerge stronger than ever before. With our wonderful key staff intact, our business plans include the current implementation of a brand new point of sale accounting and management system that is directly connected to our web site. This will allow you more ease of ordering while ensuring that we stay well stocked with all the kinds of inventory you instantly need. For those who must sell off their gear as times are hard, remember we have a full complement of rental equipment gear and can configure any audio channel for you. We are almost never out of gear because we always have instant access to millions of dollars in audio gear from our sister Telecorps companies. So when you need a sales or rental item, we will have it in stock.

Before ending, I want to bring up the most important topic to me...GOLF! I took it up a year ago. I suck, but I'm hooked on it. I really enjoy playing with you sound pros as often as possible. It's a fun way to get to meet each other socially. A Coffey Sound 20th Anniversary Golf Tournament will be in the works soon! So to any golfers out there, drop me a line to coffey_sound@hotmail.com and I'll put you on my golf contact list.

Sincerely,

John Coffey, President

Coffey Sound opens Offices in North and South Carolina

Telecorps, Wexler Video, and Coffey Sound Meet Carolinas' Demand for High-End Equipment Rental for Film and Television Production and Post

Telecorps Communications, along with its subsidiaries Wexler Video and Coffey Sound, recently announced the opening of new offices in North Carolina and South Carolina. The two offices provide rental of premium video equipment to the states' booming film and television production industries. Telecorps, Wexler Video, and Coffey Sound will be represented in North Carolina by Jim Holladay and in South Carolina by Gary Ballard, both of whom have provided video sales and systems integration services to the region for nearly 35 years.

"Incentives for the film and television industry have brought a great deal of business to the Carolinas, and our new offices will make high-end gear readily available for the many productions taking advantage of the states' friendly business climate," said Dave Carfolite, Executive Vice President at Telecorps Communications and resident of the Carolinas since 1996. "In opening our new offices, we've partnered with two of the region's most respected authorities on video solutions. Jim and Gary are very experienced within the television and production space, and we look forward to growing our business together in this exciting new venture."

"More and more production projects that were traditionally shot on film are migrating to video at a steadily increasing pace. Telecorps is the leader in providing high-end production equipment services to the creative community," said Bill Vassar, executive vice president of EUE Screen Gems Studios. "We are pleased to add Wexler and Coffey Sound to the world-class production services companies located on our studio lot, including Fincannon and Company Casting, Carolina Effects, Northstar Sound, Cinema Catering, and Axium Media."

Jim Holladay will be overseeing the new office in North Carolina within the EUE/Screen Gems Studios in Wilmington. As the center of much of the state's film and episodic television production, this location provides Telecorps and its affiliates with maximum exposure and the ability to provide equipment rental and setup services very quickly and conveniently. Holladay's experience in creating innovative solutions for the Weather Channel; WRAL, the first commercial broadcaster to broadcast an HD signal; and for a number of HD university studios will complement Telecorps' expertise in providing quality rental services to the North Carolina market.

"In today's production and post market, high-end equipment rental provides users with the quality and flexibility they need, without a long-term financial or technical commitment," said Holladay. "With Telecorps and Wexler's success in equipment rental and our close relationship



Screengems Studios in Wilmington, North Carolina

with manufacturers and the local production market, we're well positioned to capitalize on this area's rapidly rising demand for rental services."

Gary Ballard will manage the South Carolina office, located in Fort Mill and serving clients working in Charleston and Columbia. Like Holladay, Ballard has been a vital contributor to the area's film and television industry for the past three decades, building relationships with both new and longtime clients working in the Carolinas. "Telecorps, Wexler, and Coffey bring a new dimension to this market and provide us with an unprecedented level of support," said Ballard. "We are very excited about working with the top-notch people at these companies, and I'm certain our new offices will be well received."

In North Carolina:	In South Carolina:
Jim Holladay (910) 343-3575	Gary Ballard (843) 628-0459
EUE/Screen Gems Studios 1223 N. 23rd St. Wilmington, NC 28405	3525 Centre Circle Fort Mill, SC 29715

“Telecorps is the leader in providing high-end production equipment services to the creative community.”

Continued on page 5

What's in a name? At the Cucalorus Film Festival, apparently not much. "We just think it sounds cool," says festival director Dan Brawley. But it's this laidback vibe that makes Cucalorus a true festival gem for indies. Over 6,000 people come to see over 200 films and an exhibition of equipment all tailored to inspire the independent filmmaker. Coffey Sound was there along Countryman and DPA microphones, and the entire Zaxcom line. Jim Holladay, a long time fixture at Cucalorus, demonstrated gear along with Avid Meridian and cameras from Coffey sister company Wexler Video.



Jim Holladay working with Carl Rudisill as they explore Zaxcom's line.

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Robert Kennedy
Sales Manager

Thank you for your business again this year. We've been doing our best to stay current and often think of ourselves as a clearing house of information. We talk with numerous mixers every day and listen to their suggestions. This has helped us learn about products

like I-power 9V rechargeable lithium batteries, Joe's Sticky Stuff (great for mounting lavaliers), G-drive mini portable hard drive, the Zoom H4 handheld recorder and the Neopax miniskirt SM strap. Hopefully we've told you about a small item or two that can make a long day of mixing a little bit better. If we haven't yet, give us a call or stop by. There are some big items on the horizon too. We've been anticipating some excellent new products on the market. There have been many new products introduced recently including the DPA 4017, the new Sennheiser modular microphone system, the MKH8000 series, Holophone H3-D, Neumann's new TLM series large diaphragm mic, and the high-SPL tolerant dynamic mics from Heil Sound.

We are also excited about some equipment, especially the Fostex PD204, PD606, the FR2-LE, Zaxcom's Fusion, Deva 5.8 and ZFR100, Lectrosonic's dual receiver and Ambient's LancLogger. Fostex has updated the PD6 with the introduction of the PD606 which offers full-size DVD-RAM with the promise of Fostex's expertise at a very attractive price point. Fostex has also introduced a wonder-

ful handheld recorder with XLR inputs and a great feature set called the FR2-LE. Zaxcom did some updating of their flagship DEVA by introducing the DEVA 5.8 with eight mixer knobs and mirroring to compact flash and DVD-RAM.

Zaxcom has also managed to make the smallest timecode recorder on the market and has piqued the interest of many mixers facing demanding shoots. Lectrosonics has announced a stereo wireless digital hybrid receiver which has evolved from the secret in Gordon's pocket at the last NAB to a proper intriguing announcement. Finally, Ambient has delivered an incredibly small unit with many novel functions called the LancLogger. This handy device brings more professional workflow to prosumer HD camcorders by logging start and stop times from the lanc port or from a midi or LTC timecode for later syncing.

Being a vendor for so many manufacturers has some wonderful advantages. We are in a unique position to determine how units work with one another. Interconnectivity and interoperability are primary concerns for our customers so we spend our days putting combinations through the works. If you are considering using items from different manufacturers together, stop by and see us. We boot up just about every machine you might consider to see if it suits our fancy. Feel free to call us and discuss the best recording options to suit your needs. We enjoy your company and hope you enjoy ours!



Sherrie Gal
Sales Associate

Greetings to all my old and new customers. My first year at Coffey Sound has been a joy and life in general is wonderful.

The everyday hustle and bustle here, combined with the bright atmosphere impresses upon me how exciting working in this industry really is. I'm centered

at the heartbeat of our store and it's such a fun, fast paced environment. Every employee wears several hats, but we're all here to help you!

**Coffey Sound is proud to name
Sherry Gal as our:**



Sherrie's Picks:

I think every sound mixer should have a Zaxcom ZFR100 pocket timecode recorder in their bag of tricks. Have it for the one time your wireless doesn't work and you'll save the day. Recording 10 hours to a mini SD card will make you the hero to the post production department as well. Ask your Coffey Sound representative for a demo.

Another hot product is the DPA 4080 cardioid lavalier. If you've been looking for the perfect lav for live sound reinforcement or just a loud location, consider this one.

Finally, with the buzzword "green" attached to everything, Coffey Sound would like to be a leader in the green community. I've been reminding all of my customers to consider the I Power rechargeable 9 volt batteries. Look for new upgrades to the product line in early 2008. Sennheiser also provides rechargeable battery systems for the Evolution wireless line.

See our website for future updates on recycling batteries and use it as your hub for audio information!

Coffey Sound Consignments: Others charge 20%, but it's your gear, so we only take 15% for the privilege of advertising and handling everything for you.



*Frank Scibella
Rental Manager*

As the rental manager at Coffey Sound, I've been at the forefront of a very exciting time in our company's history. With the shift toward HD video in full swing and after continued requests from you, we've recognized how important it is to make small HDV camcorders available

to independent filmmakers. But that's not all! We're also carrying ARRI light kits, color reference monitors, Manfrotto tripods, Firestore hard disk on-camera recorders and Chrosziel matte boxes. Additionally, we've configured an independent film maker's rental kit to keep you streamlined, equipped and under budget.

At Coffey Sound we have earned a reputation for being a one-stop-shop for all of your production sound needs. From standard boom mic kits to HD multitrack recorders and state of the art wireless systems, we've got it all. But remember, we are educators too. Whenever you rent gear from us, we make sure that you leave fully understanding how it works and how to utilize it for your respected application. We love our craft and always have the time to share our knowledge with you. Stop in for a personal tour and free training session today!

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SALES / RENTAL / SERVICE

Check out our website specials:
www.CoffeySound.com
Phone: (323) 876-7525
Contact: Frank Scibella

Independent Film Rental Specials



**Sound Equipment Specials:
Daily Special Pricing**

Boom Mic Kit (416, pole & softie)	\$40
Sound Devices 744T	\$75
Sound Devices 702T CF Recorder	\$50
Sound Devices 302 Mixer	\$25
Sound Devices 442 Mixer	\$30
Lectrosonics 411 Wireless System	\$60
Comtek M-216	\$15
Comtek PR-216 Receiver	\$10
Denecke TS-3 Slate	\$30
Denecke TS-C Compact Slate	\$30
Motorola CP 200 Walkie	\$10

** For Independent Film makers only **

Production Kit: \$495/day

- Sony V1U Camera
- Matte Box w/ Filter Kit
- Arri Kit: (2) 650, (1) 300, (1) 1K
- Smart Batteries w/ Charger
- Fluid Head Tripod
- (2) Wireless Lavalier Systems
- Boom Mic w/ Pole and Softie
- Sony 7506 Headphones
- Production Clapboard



Note: all items can be rented or purchased separately.

*Not Sure What Equipment to Buy?
Ask About our Rental Purchase Program*



*Dan Garza
Communications*

Communication is crucial in the production world. Whether you're on a large set or working with a small crew, properly relaying information is a key ingredient to a successful shoot. We're proud to announce that we've once again greatly increased our number of communications inventory. With our expansion into North Carolina, production booming in Louisiana and the addition of several new high profile shows, 2007 was a tremendous year for us.

By providing custom and affordable communications packages for every customer; including accessories such as surveillance kits, headsets, and hand mics, we've once again proven why Coffey Sound is the #1 source for communication rentals.





Ask about special student packages
for our up and coming filmmakers.





Forrest Forbes
Service Manager

We are excited about the new era of service at Coffey Sound. We have added in-house RF service and additional staffing to ensure complete, dependable repairs and maintenance. I'm looking forward to providing you with what you need in repairs. From the mic to the recorder and everything in between, our service department is the most comprehensive and fastest available. Additionally, we can now offer expanded equipment modification and custom devices in addition to our well-known custom cable manufacturing. We are an authorized repair center for many products including your Cooper mixers and Zaxcom recorders. Please remember that while your gear is in our service department, you get half off regular rental rates!

See you soon!

LABOR RATE: \$85/hr
CUSTOM CABLE: \$75/HR
RUSH FEE: \$30

To request a service order, please visit us online at www.coffeysound.com



Carla Kent
Accounting Manager

Apply for Credit at
www.coffeysound.com

I was asked to write an article about what exciting things are happening in the Accounting Department at Coffey Sound. Hey, is that an oxymoron, or what?

Actually, there have been some recent changes within the company that have made our jobs in the accounting department more exciting. We've seen a lot of growth at Coffey Sound in the past year and have high expectations for even more growth in the coming year. And growth brings new customers, more vendors and many new interesting products all of which provide new opportunities to learn. It also means more paperwork, more filing cabinets, more phone calls, more deadlines, more reports, but am I complaining? No, not in the least! I've enjoyed every minute of it.....hmm, well almost every minute.

In the very near future, we'll be installing a long overdue upgrade to our point of sale system to assist us with orders, rental processing, billing, inventory management, purchasing, etc. Our current program has served us well for many years but, as our business grows, so do our needs. It's time to move on to bigger and better! Our IT department is already working long hours to prepare for the conversion, so watch for a new look with customer invoices.

Speaking of customer invoices, we in the accounting department have been working hard to greatly improve the customer billing experience. With the implementation of this new software we will further our progress by leaps and bounds. In setting up the new software we are going to need current billing information for all of our customers. We ask that each of you take the time to review your past invoices and/or statements and let us know if you need us to change an address, contact person, phone number or whatever.

So, it turns out that this accounting department has had some exciting elements after all. We look forward to a new and prosperous year for 2008 and hope for the same for all of our customers and vendors.



Fabiola Allen
General Manager

2008 is here and in the spirit of the new year, we've collectively resolved to provide even better support for our customers. This year kicks off a lot of growth for us as a company. As Carla mentioned above, we're rolling out a brand new point of sale system which will provide a more accurate and streamlined experience for everyone. We realize how valuable your time is and one of the major advantages to this new system will be how much more quickly we can serve you.

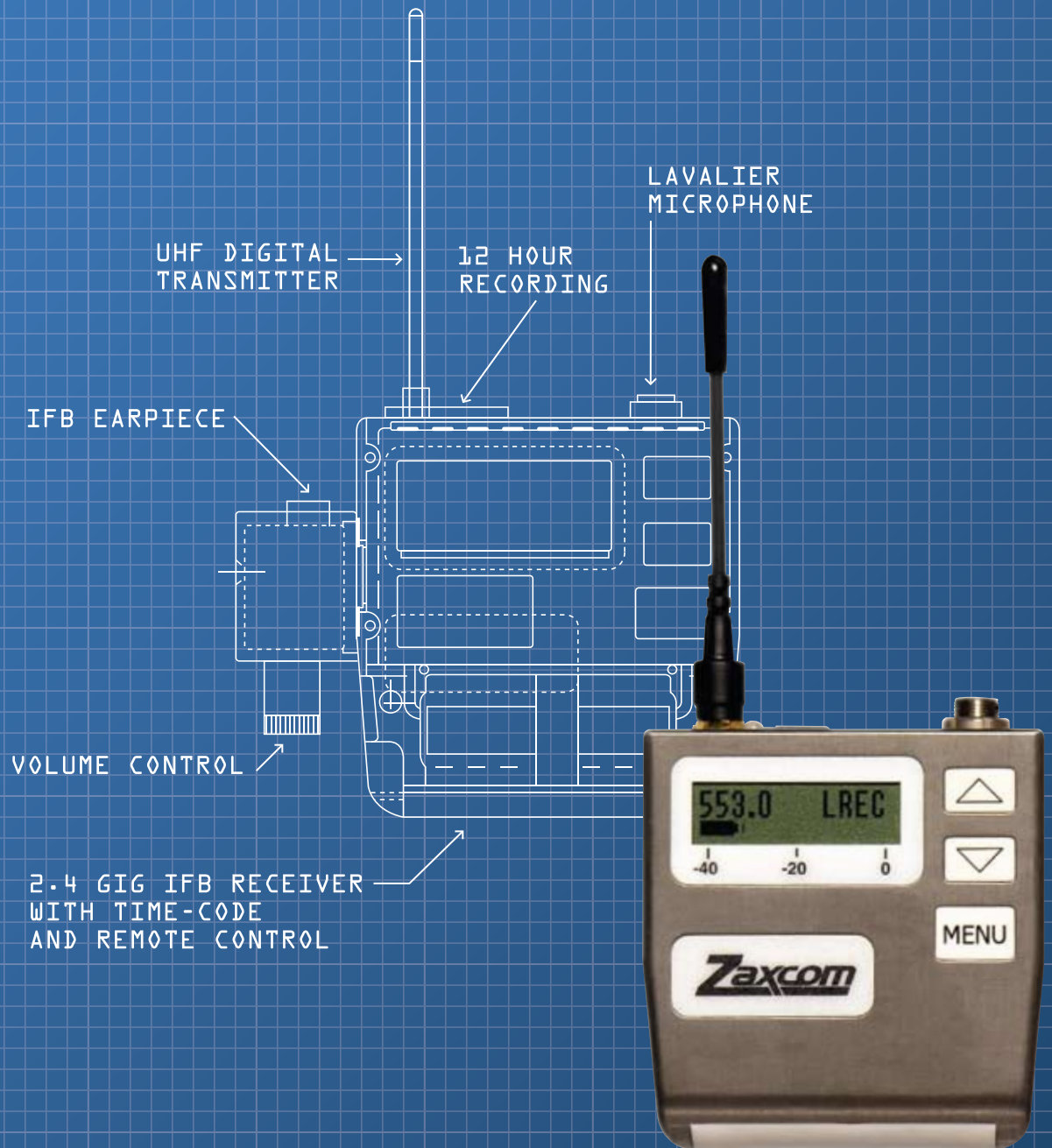
As always, I'm never more than a phone call away. Being available to you is something on which I pride myself greatly. When you call me, you don't get thrown into a company voice-mail, you reach the real live Fabi.

Important Coffey Sound contact information:

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Warner Bros. Post Production Services

A Tour of Warner's state of the art new facility that sets the standard in post production sound.

By Robert Kennedy with Kim Waugh





Recently, John Coffey and I spent an afternoon with Kim Waugh, Senior Vice President of Post Production Services at Warner Bros. Studio Facilities.

On a rare, rainy day in Burbank, we were treated to a warm and comfortable atmosphere as we approached the entryway of WBPPS's newest post production facility, a 55,000-square-foot building which is not only the premiere feature re-recording, ADR, sound editorial and DVD audio mastering facility in the industry, but was also designed with client comfort in mind. With Academy Award-winning talent calling WBPPS home, it is no wonder such care and attention are spent on the details of the overall design.

Overall, the campus spans 10 buildings on the Warner lot. Since WBPPS serves the many disciplines of the entire post production workflow, its rooms and equipment must be up to the task of handling several features, television series, interactive entertainment and special projects in-house at the same time. WBPPS not only makes sure the equipment is up to task but has also implemented a gigabit network architecture to increase team collaboration. This network connects sound editors with the re-recording stages through a central server as well as with the sound library and Foley stages to ensure original material and fixes are delivered at the speed necessary in today's digital environment.

Having the flexibility to work creatively plays an important role at WBPPS. While having the resources of an entire sound campus at one's fingertips may seem daunting to a supervising sound editor, there are quite a few who prefer to have a hand in, literally, the entire process. Kim sees strength in allowing supervisors to carry a show over onto the mix stage--and what a stage it is! Re-Recording Stage 6 at WBPPS houses the largest Digidesign ICON installation to date. This unique environment allows a supervisor to take a show from sound editorial to mixing in a large theater without leaving the ProTools environment.

Focusing on creative talent and the latest in tech-

nology has been a boon for WBPPS. Not only does the digital workflow allow for increased possibilities for sound design, but it significantly decreases the space needed for equipment. Recently, Re-Recording Stage 5 benefited from this when WBPPS built a client lounge in the space formerly part of a traditional machine room with racks of mag gear. Now, clients have a space to call their own, complete with a new kitchen and conference area.

Re-Recording Stage 5 itself was also reconfigured to more closely emulate the feel of WBPPS's flagship re-recording environments found on Re-Recording Stages 9 and 10. Now, all three stages are designed in a way that has become very popular with the directors, producers and post supervisors who call these stages home. WBPPS has removed the credenzas behind the console in favor of an open area which encourages dialogue between the sound team and clients. Instead of working from small rooms behind the stages, sound editors have workstations flanking

Continued on Next Page



Post Production Services, Warner Bros. Studio Facilities

“Since WBPPS serves the many disciplines of the entire post production workflow, its rooms and equipment must be up to the task of handling several features, television series, interactive entertainment and special projects in-house at the same time.”

At Left: Kim Waugh, Senior Vice President of Post Production Services Warner Studio Facilities

Above: John Coffey in the lobby of Warner Feature Post Production



From Left: Chris Aud, Terry Rodman, Greg Rudloff & Kim Waugh

the mix console that are directly connected to workstations off stage. If isolation is necessary, the editors can work in editorial suites behind the stage.

Kim is eager to point out that none of this would be possible without the tireless efforts of the WBPPS engineering staff. Operating a facility of this size takes an exceptional level of technical savvy. From engineers dedicated to server architecture and networking, to the recordists on the stages who handle console setups and file management, the entire team focuses on innovation and standards to make the facility run right. Recently, the engineers designed and implemented a mobile ADR solution which breaks down into a couple of road cases for delivery. That mobile ADR system can be quickly set up and broken down and was designed to be used all over the world.

Being an industry leader means staying true to time-honored parts of the post production sound business while taking on new challenges. Nowhere is this more apparent than with Foley and scoring. The Eastwood Scoring Stage has hosted some of the most accomplished composers in the world. With a selection of microphones that would make a museum curator blush, the scoring stage is a venue where the beauty of music for film and television is brought to life.

WBPPS has, some would say, the best Foley team working today, and it shows in their dedication to every detail. Creating the sounds for recent films such as “I Am Legend” and “Transformers,” these artists use every diverse tool in their arsenal to create nearly everything, including intergalactic robots and a pack of rabid dogs.

Warner Bros. was the first studio to bring sound to picture and continually aims to set the bar ever higher



The Eastwood Scoring Stage



With a selection of microphones that would make a museum curator blush, the Eastwood Scoring Stage is a venue where the beauty of music for film and television is brought to life.

than the one the company set 80 years ago. With a rich film history incorporating sound, it is no wonder WBPPS has implemented a state-of-the-art audio restoration, archival and mastering operation. They are able to restore films using archival technique and even sound from old mag stock that has clearly seen better days. The material is cleaned, inspected and recorded into the digital system. From there, they can use leading noise reduction software to analyze and create a thorough reproduction of the original. Having so many classic titles which benefit from picture restoration, WBPPS also matches fully restored and re-mastered sound tracks to the new picture. Turning mono tracks into vibrant 5.1 mixes for DVD release is the specialty of the audio mastering department.

From the highly advanced re-recording stages to its award winning talent, Warner Bros. Post Production Services proves that a highly technical facility can also feel like home.

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The Foley Control Room



John Coffey with Greg Rudloff



***Kim with Eric Flickinger & Chad Algarin
in the dub machine room***

INSIDE AMERICAN JAIL

BY THOMAS POPP

I NEVER THOUGHT THAT JUST A YEAR AND A HALF AFTER LEAVING COFFEY SOUND I'D BE DOING TIME IN ORANGE COUNTY JAIL...



Thomas Popp - ENG Sound Mixer - Joe Jerman - Camera Operator - Ken Kristensen - Director/Producer - Theresa Bard - Deputy

Luckily, I am on the “good side of the glass”, working on the new show for Court TV, entitled “Inside American Jail.” My Network TV’s Jail (check your local listings).

Orange County Jail is a minimum to maximum security correctional facility located in Santa Ana, California. It can host more than 6,000 inmates at any given time and will pull in around 150 to 200 arrested individuals on average per day. Inmates range from first-time DUI offenders, angry homeless people, and the outright insane.

A lot of precautionary measures were taken to allow me to be at the jail. After an extensive background check that ensured I had no prior offenses and the removal of all sharp objects from my bag (including my trusty Lectrosonics™ screwdriver), I was granted access. This is a show where at any given time I am walking amongst inmates who have yet to be processed or placed in a cell; and while the deputies on staff are vigilantly watching our backs, they can’t catch everything! I have had my microphone kicked quite a few times, but luckily for me, I get to hide behind the camera

guy most of the time.

When it comes to my kit, because there is no time to run back to “base camp” and switch out a battery or a lavalier damaged when an inmate kicked a deputy, I have to make sure that I have everything with me at all times. Like its preceding hit show “Cops”, “Jail” is extremely fast paced. One has to be ready for anything and everything or else you’ll miss the important stories that come out of the blue. We have to be ready to run from one end of the jail to another at a moment’s notice to get the story that literally erupts out of the blue. I have learned to never take the bag off of my person, and to always leave the power on.

The production company supplies gear to all of their crews around the country (since there are multiple crews out all over the place); however, I am incorporating most of my own kit because of extra features I have to offer. For power, I am using an IDX Lithium battery kit and Remote Audio BDS system to supply power to my whole bag. Having centralized power is a great way to work efficiently in a reality style shoot. One battery can power everything well over 8 hours, which gives me the chance to safely switch batteries halfway through the day, giving me peace of mind that I can make it through the day

AMERICAN JAIL

without any more issues.

At the center of my system, I am using a 442 mixer and 744T digital recorder. For wireless, I am using their Sony wireless systems because they allow me to receive 2 wireless signals into one receiver. The wireless are not my first choice, but they are doing the job quite well, and the batteries in the transmitter last well over 8 hours, meaning I can put new batteries in the unit at the beginning of the shoot and never worry about changing them throughout the night.

For a camera send, I am using the TRX900 w/ STA100 adapter. It has been working flawlessly as a stereo hop, and also gives me another digital backup of everything throughout the day. This has been an invaluable tool because most people change their mood and get nervous when a camera is rolling and pointing at them (we are working with real people, not actors) – so even when the camera is not rolling, I am pointing my boom in the direction of deputies that are talking. This can in turn help to pick up key “sound bytes” which our director documents to help mold a story out of the experiences not caught when the camera is up and running. Real emotions and the best one-liners come out the first time someone says something, especially when the camera is not rolling.

We have one deputy that we follow around, so they are wired up all the time. I use the boom to grab everything else. The MKH416 is very durable, which comes in handy since drunken people try to kick it from time to time! For “protection” I use a K-Tek fuzzy, which has pawned many new names recently. “Rat on a Stick” and “Evil Hamster” are the best nicknames so far.

Another helpful feature I have implemented into our system is a time code transmission back to my bag. I am using a Sennheiser G2 system to wirelessly transmit time code information back to my 744T recorder. The camera is set up for record run, so my backup recorder starts up instantly and stops when he presses stop. This allows me to stop focusing on his “little red light” on the back of the camera to know when he is in and out of record. I can hear the 744T beep, which tells me I am in record, and beep once again when it stops. Work smarter, not harder! Sporadically the recorder will sense a time code pulse when our cameraman is changing a battery or playing something back, which can confuse the recorder, but these files are easy to locate and remove later. These are easy to remove after wrap using a computer and looking at the really small files.

The biggest problem I had in the beginning of the shoot was finding a place to put my stereo transmitter where it was safe (due to the fact of the connections coming out of the back

of the unit). Also, I am a firm believer that there are meters on the unit for a reason, so I want to see them at all times – and this means that putting the device on the side of the bag in a petrol pouch or receiver holder really isn’t an option for me. It took me a few weeks to get the time to have it built, but I have designed what I call the Zaxcom StereoBar – a lightweight accessory that elevates my transmitter off of the bag, eliminates cable strain (from having it just flopping around inside a pouch), and also allows me to view the meters directly since it is face up in my bag.

Spending six weeks in Jail at a time in different venues has been a real eye opener. It is a completely different shooting environment that has given me the confidence to know I can shoot anywhere!

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VIDEO GAME SOUND

BY DAVE FISK

As a child of the video game generation, I've never known life without video games. When I started gaming in the mid 1980's, video game sound was extremely limited. Very often, it was written by the programmers themselves and the quality reflected it. Thankfully, times have changed. There are now teams of sound editors and sound designers working on projects that rival motion pictures in their size and complexity.

One huge element of modern video games is dialogue. Just a few years ago, the average dialogue line count for a game was approximately 2,500 lines. Now the average is closer to 10,000, with larger games clocking in between 40,000 and 80,000 lines. At Technicolor Interactive, we have 3 ADR stages specifically for recording game dialogue. This dialogue is recorded a bit differently than ADR for movies or TV. Typically, the voice talent will

do several passes at one line. So, if you have a game with 80,000 lines of scripted dialogue, there will actually be 240,000 lines recorded!

For the popular Xbox 360 game "Gears of War" we had roughly 20,000 lines of dialogue, which is pretty standard. However, the developer wanted every single take with every single pass at a line. In the end, I had over 80,000 files exported, each requiring a specific name. Each developer does their filenames differently, but it's important to be as descriptive as possible throughout. For example, in "Gears of War," a file name would be *FENIX_HOS_020.wav*. This provides a short description of what this file is. The character is Marcus Fenix, the level is House of Sovereigns, the line number is 20. Pretty simple stuff. But, some developers will have the actual dialogue as the file name, along with other info. An example being

NecrisMale_botstatus_AttackingHillsideNode_a.wav. Here we have the character, his status, the line, and a letter designation for which take of that specific line it is. This all gets typed into each file as we are editing so, with a game that has tens of thousands of lines, this is a lot to keep track of. Game dialogue editing really becomes intense file management.

In-game sounds are any non-dialogue audio that occur during gameplay. Typically these sounds are created in Pro Tools and then delivered to the client for implementation. This means that the recorded in-game sounds are correctly inserted into the playable game so, that when an action is performed, the correct sound comes out. A common example would be making sure that the gun sound is played when the player pulls the trigger on his/her controller, rather than a cow moo or something.

“Game dialogue editing really becomes intense file management.”

Cinematic cut-scenes are an interesting part of the overall process. Usually these scenes happen at the beginning or end of a game level to further the storyline. We approach these just like we would a movie, only instead of 2 hours, it amounts to only few minutes. For the Playstation 3 title, “Uncharted: Drake’s Fortune,” there is over an hour of combined cinematics. The foley is recorded on a foley stage, the dialogue is recorded and edited just like film ADR, and we do full-on sound effects and sound design. Once all that has been done, it moves on to the mix stage, where it gets mixed and encoded in both stereo and surround. It’s not uncommon to have mix sessions up to 100 tracks wide for an effects heavy scene.

But that’s just the post production side of games.

Much like in the TV and Film world, video games have actual production as well. For “Uncharted: Drake’s Fortune,” all the cinematics were done on a mocap stage (*Editor’s note: mocap stands for Motion Capture*). This is when actors wear a mocap suit with reflective balls, or markers, at specific points on the body. The mocap stage has over one hundred infrared cameras that capture the reflections from the markers on the actor’s suit. The cameras surround the actor in 360 degrees, which allows the editors to “shoot” the scene later and put the camera angle wherever they want. We record audio on these shoots just like we would for film or television production. I use wireless mics on the talent, but I also boom the scene if the scene permits. Depending on the game’s budget, this audio is often used only for reference and gets looped later. For the mocap shoots, I’ll use either a Sound Devices 744T, or a Zaxcom Deva V, depending on the number of talent in the scene. The nice thing about audio for mocap is that I just mirror the files to an external hard drive, and deliver those to the client via an FTP. They are then able to pull the selects into whatever they’re editing with. Everything drops in and syncs up perfectly.

Video game console hardware has become extremely powerful and can deliver an amazing audio/visual experience. With just as much time put into the audio for a large game as a feature film, game sound has approached the level of television and film in terms of what’s expected and what gets delivered. With games like “Halo 3” breaking the weekend release records of feature films, the future of this multi billion dollar a year industry is extremely bright. Now, go out there, pick up the console of your choice (if you don’t already have one), and start gaming!



PCM-D1 SURVIVES A BITE FROM THE STRONGEST JAWS ON EARTH

Hyena Finds Sony Digital Field Recorder Too Tough To Swallow

TANZANIA: Globe-trotting DP Jim Kinsey took a Sony PCM-D1 digital field recorder on a recent 21 day African safari. The game plan was to capture high-quality animal sound effects along with footage he was shooting for a stock library.

One evening Kinsey left the unit in an enclosed leopard blind they'd built to surreptitiously film the animals. When he returned the next morning, the PCM-D1 was gone. At first he thought it had been stolen by poachers, but the ground around the blind was peppered with distinctive hyena tracks. A careful search of the area turned the unit up. "It was covered with mud, and the furry windscreen had been chewed up and spat out," Kinsey reports. "But the stainless steel roll bar protected the twin electret condenser mics. There were two serious canine bite dents on the front, the glass covering the VU meters was scratched, but not broken, and the rear battery compartment lid was cracked. Considering the fact that hyenas have the strongest bone crushing jaws in the jungle, the PCM-D1 came through remarkably unscathed. "Hopefully," he adds, "a taste of battery acid has taught that scavenger a lesson he won't forget. Don't mess with Sony."

The value of the rugged titanium case was driven home when Kinsey secured a spare battery pack in the unit with black electrical tape and powered it on. "It worked flawlessly throughout the two week shoot," he says. "We captured elephant trumpets, leopard roars, monkey cries and wild bird calls. The sound quality is impeccable. I purchased the unit because of its reputation for extremely high quality audio and because I'm generally working in rugged wilderness locations. I need a lightweight, hand-held recorder that will hold up under severe conditions. The titanium body is clearly worth the investment. With 96 kHz-24 bit, noise-free recording, a 4GB Internal Flash Memory and built-in X-Y configured mics, I've been able to capture extraordinary stereo sound in some seriously extreme locations. It's like taking a full-blown recording studio along in your knapsack."

Jim Kinsey is co-owner of Shoshone Wilderness Productions, Hamilton, MT., and a partner in Wildfire-stockfootage.com. He has shot for National Geographic's Ultimate Explorer, Women Smoke Jumpers and many outdoor video productions including the 2007 Silver Telly Award-winning "The Nosler Story" for the Nosler Bullet Company.



DP Jim Kinsey on location in Tanzania



DP Jim Kinsey's Sony PCM-D1 following a run in with a wild hyena in Tanzania

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Sitcom Sound

An Exclusive Interview with Michael L. Clark



John Coffey: So how's things for you these days?

Michael Clark: Well, because of the strike we're down. But otherwise, doing just fine.

John Coffey: What show were you last on?

Michael Clark: "How I Met Your Mother" for CBS...we're into our 3rd season and have completed about half of the 24 episodes ordered. If we don't get back by soon that's a scrub on the season more than likely. What's really surprising is, they didn't have very many scripts in the hopper, but looking around, a number of the other multi camera shows didn't either.

John Coffey: Do you think that was a conscious network decision?

Michael Clark: I don't think it was. My guess is that it had to do with our co-executives/writers. On most of the multi camera shows, the executives are also the writers.

John Coffey: So, I looked up your listing on IMDB. Is there any accuracy to that thing?

Michael Clark: Actually, I'm Mike Clark(I). There are 24 or 27 Michael Clarks. (laughter)

John Coffey: Let's go back to your first job in sound, tell me about that.

Michael Clark: I first came back into town in '81 or so. Out of the military.

John Coffey: Which branch of the military?

Michael Clark: I was in the Navy for 5 years. Vietnam was still going...it was that long ago (laughs). I joined in '75. I was a radioman, because of my interest in sound...I should go back and preface this as to why I have the interest in what I do. It's because family was involved. Though I was apart from that side of the family, the interest in doing this was always in me.

John Coffey: How many family members were involved?

Michael Clark: Well, my father and my grandfather were... both were founding members of Local Union 695. My dad knew your dad. (Editor's Note: John Coffey's father was 695 president Jack Coffey)

John Coffey: That probably wasn't good! (laughs)

Michael Clark: (laughs)...I had a grandmother that was an actress and then she went into wardrobe. She was with Edith Head for a number of years. I had a great grandfather who was a film distributor for Metro Pictures before it became MGM. So, it's supposedly fourth generation. And then I had a step grandfather who was also a sound mixer, John Chandler. As well as a couple of uncles, one of which is retired, Don Charples.

John Coffey: That's right, I forgot you were related to Don. I worked with him.

Michael Clark: Don was very helpful in giving me an idea of the lay of the land. When I came in back in '82-'83... when I first started doing non-union stuff, it was at a small video tape house over in Van Nuys called "Valley Production Center." I think the regular show that they had there that was their claim to fame was "America's Top 10 with Casey Kasem" We'd do that once a week over there. We'd also get a number of film shows that would come in just to do a broadcast house point of view in a movie...like a news desk. Stuff of that nature. I was there for a couple years and then in 1984, I got ahold of Lou Wolfe, over at Universal Studios who was heading up a new division on the lot over there. They landed Embassy Television, which they brought over from KTTV. I came in at that point to do boom utility, whereas I'd been mixing at the tape house. In fact, I got my union card in an attempt to unionize the tape house...which was unsuccessful. Nonetheless, they offered me my card to come into the local. Anyway, as I said, I got ahold of Lou Wolfe. He was very understanding and I was

versal at that time. We literally, had 11 multi-camera sitcom shows being shot. I have not seen that condition since then. And it was so big that there would be 6 or 7 shows shooting on the same schedule. Even though we were only occupying 5 or 6 stages. Each of these stages would have 2 shows and at one end of the stage, they would set up the sets for the show they were doing. For example "Silver Spoons" and "Family Ties" were on the same stage. The show that was not shooting would have all its sets scooted up against the end of the stage and in the middle they would have audience stands on pneumatics. They would pump up the pneumatics, swing them around, move them back towards the side of the stage where the stage was collapsed and then they would set up the stage for the show that they were doing. We would then fly in our audience mics down into the audience area and shoot that for 2 days. Then they'd reverse everything and collapse the stage and set up the other one. Then we'd have trucks that would come in, which we'd set up in the morning by plugging all the cabling out from the stage to the truck, we'd do our scratch check and we'd be ready in an hour and half or maybe 2 hours.

“Even though you're not in front of the camera, you're performing.”

impressed by him. He talked to me for a good 45 minutes on the phone...asking me about stuff, like what I'd been doing and overall really giving me the time of day. He brought me in as a boom utility. I did 3rd boom in booth A2 and it's where I got my grounding with a lot of the mainstay mixers at that point. Klaus Landsberg, Larry Stephens, Pete Damski was in A2 along with me at that point.

John Coffey: Tell me more about what it was like at Universal at that time.

Michael Clark: It was very unusual circumstances at Uni-

John Coffey: It sounds like it was hectic...exciting, but hectic.

Michael Clark: When we all first got in...I mean the excitement of it all, the literally buzzing of your fingertips. The analogy I always loved using was Roy Scheider from "All That Jazz". Remember how he'd sit in front of that make-up mirror and he'd look at himself and he goes "Showtime!" And he would just turn it on. It's that way as an engineer...especially when you have an audience. You feel that energy, you feel that buzz in your fingertips as you're ready to go on. Even though you're not in front of the camera, you're performing.

John Coffey: Absolutely, you've got to get it right. There are a lot of people you have to perform in front of.

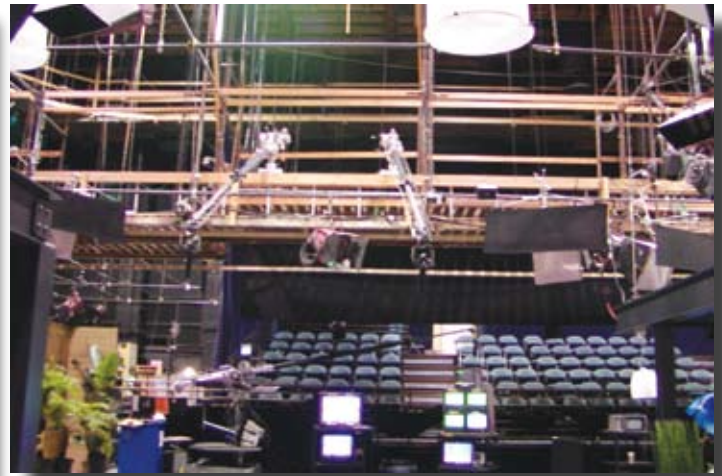
Michael Clark: A lot of times your directors can be very intimidating individuals. I've worked with a lot of old timers that stick to the 'direct at the top of your lungs' mentality.

John Coffey: Direct at the top of your lungs (laughs) I love that!

Michael Clark: Oh some of them were screamers, absolute screamers. And they would curse you until the end if you



Mike Clark hard at work



did anything wrong. So obviously that added to the knowledge that you had to perform. And that means getting that mix right. That means making sure everything is ready when it's supposed to be ready. Because when you have an audience, all that timing gets tightened up. And for some of the guys that went on live TV to do our particular format on a live broadcast i.e. Larry Stephens or Pete Damski and the like. They'd be doing it in front of millions of people literally!

John Coffey: Does "How I Met Your Mother" have an audience?

Michael Clark: No, it doesn't. Because of the editing style. It's what's called...if you will...MTV editing style. Everything is very quick and rapid fire. But that means a lot more sets, so we're spread over a couple of stages and doing locations. For a 22 1/2 minutes show, we'll have upwards of 60 scenes.

John Coffey: How long does it take to shoot? Do you do it in 2 days?

Michael Clark: No, we go 3 days.

John Coffey: How many cameras are you using?

Michael Clark: We're running 4 cameras on all the shows.

John Coffey: Are you shooting in high definition?

Michael Clark: Yes, it's a 24p show. I think there's still some film shows out there...and then there's still some video tape shows out there...the smaller Disney stuff, which is done in a more traditional fashion.

John Coffey: Like what? The Hannah Montana stuff?

Michael Clark: Yes. Hannah Montana and the like. In that

style we'd come in on the first day and rehearse that whole day. We'd go through and work out the technical end of things...for camera, for light, for sound. The second day, we'd have a little later call time and do a quick run through on their marks and who was covering who etc. Then we'd bring in a first audience and we'd do a performance to time. Then we'd normally break for a meal and come back to film a second show. So the first one we'd refer to as a rehearsal show, even though we shot it and the second show is referred to as an air show.

John Coffey: Without an audience do you use canned laughter all the time?

Michael Clark: Yes, what we did initially on "How I Met Your Mother" we'd shoot it, they would edit it and bring it back to us. We'd play it for an audience and I'd record the audience reactions. We did that for the first couple years. Now they've taken to using the laughter boxes and the like. It's all done in post.

John Coffey: They do such a good job you can't tell?

Michael Clark: Yeah...uh...we all have different opinions about laugh tracks on sitcoms or any show for that matter. Anyhow, when I started in the early 80's, we also foot pedaled our audience. You would have gauge where the laughs were coming in. Now I know the writers would structure the jokes with a punchline. There were the big laughs, the subtle ones and the delayed ones. You learn the subtleties of listening to the writers and their jokes and trying to delve into what the audience was perceiving in these jokes. A lot of times with a foot pedal, I would gun for the laugh and it would be there, but then you'd have the second audience and they were a totally different animal. I'd gun for the pedal and it'd be totally dead, because for whatever reason the audience just didn't get it. Sitcoms are interesting in the various parts of production that they draw from. Multi camera sitcoms draw from the film world and the

video tape world/broadcast. Whether it's game shows or talk shows, a lot of the infrastructure we have in sitcoms we took from those worlds and implemented into the format we have. The film world is having more and more influence on multi-camera sitcoms. When sitcoms first started, they were either Kinescope or film. Kinescope was better, but things for whatever reason went to film. And then sometime in the late 60's or early 70's it went to video tape. Out of video tape it went back to film because of the need for high def material. That was always the Holy Grail for those in video tape, was to find a high def format in video tape. But, they never could at that point so, they went back to film. As soon as they got into 24p, it was a seismic changeover. But it was as seismic as video to film as it was from film over to 24p. Now there are those that operate at the end of the scale, like the Disney kids shows that still maintain their usage of video because it's a lower cost for them.

John Coffey: When you switched over to high def did you have syncing issues?

Michael Clark: A lot of those issues were already because of the other formats like video tape and film. There were always sync issues there. So for the most part, syncing was pretty much resolved already.

John Coffey: Tell me how your workflow has changed over the years.

Michael Clark: When I came in it was multi-camera video tape. The way sound was constructed was when we would ship our sound to the video tape machines. We would have various mixes. We'd have an overall composite mix, which was composite dialogue and audience, and music and effects. From there, we'd multitrack it and break it out. We'd have dialogue only on one track, music, effects, doorbells, phone rings and the like on a second track. Initially, we had our audience on a mono feed, but then we started splitting it out and making stereo audience to feed for stereo TV's which were out then. What was always surprising to me, that the people in post would really never take our stereo audience mix, but they would take a mono feed, which they would put out of phase with itself to achieve a pseudo stereo.

John Coffey: When did you first take the plunge into mixing?

Michael Clark: Embassy Television went away from Universal in 1986 or so. When it went away, I went to a production outfit called "The Arthur Company" which was doing sitcoms on the low end of the budget. We were doing that on video tape, I started mixing "Safe at Home", "Rocky Road" and "Down to Earth." I did that for a couple years and that was the big breakthrough for me as far as producers recognizing me as somebody to have mix for them. Then I came back to Universal and started doing "Charles in Charge" and "Harry and the Hendersons." It took off from there and I've been very

fortunate.

John Coffey: Now typically, if you get one show, do you get 3 days paid for 2 days work?

Michael Clark: It used to be that you could get some of the shows paying 3/2, meaning you'd work 2 days and get paid for 3. But I don't believe that's happening much anymore. That idea came out of the film world. When they first started doing multi-camera TV shows, they would only need 2 days for the most part, so they'd look to the film community for crew. With the film crew working 5 days, they offered the 3/2 as incentive to come over to the television format. Those were the days...

John Coffey: Would you have gotten the equipment rental?

Michael Clark: No...the equipment systems were just too extensive for an individual back then. Along with that you needed to have the maintenance and support. There were very few people that managed this.

The rest of this interview can be read on www.coffeysound.com

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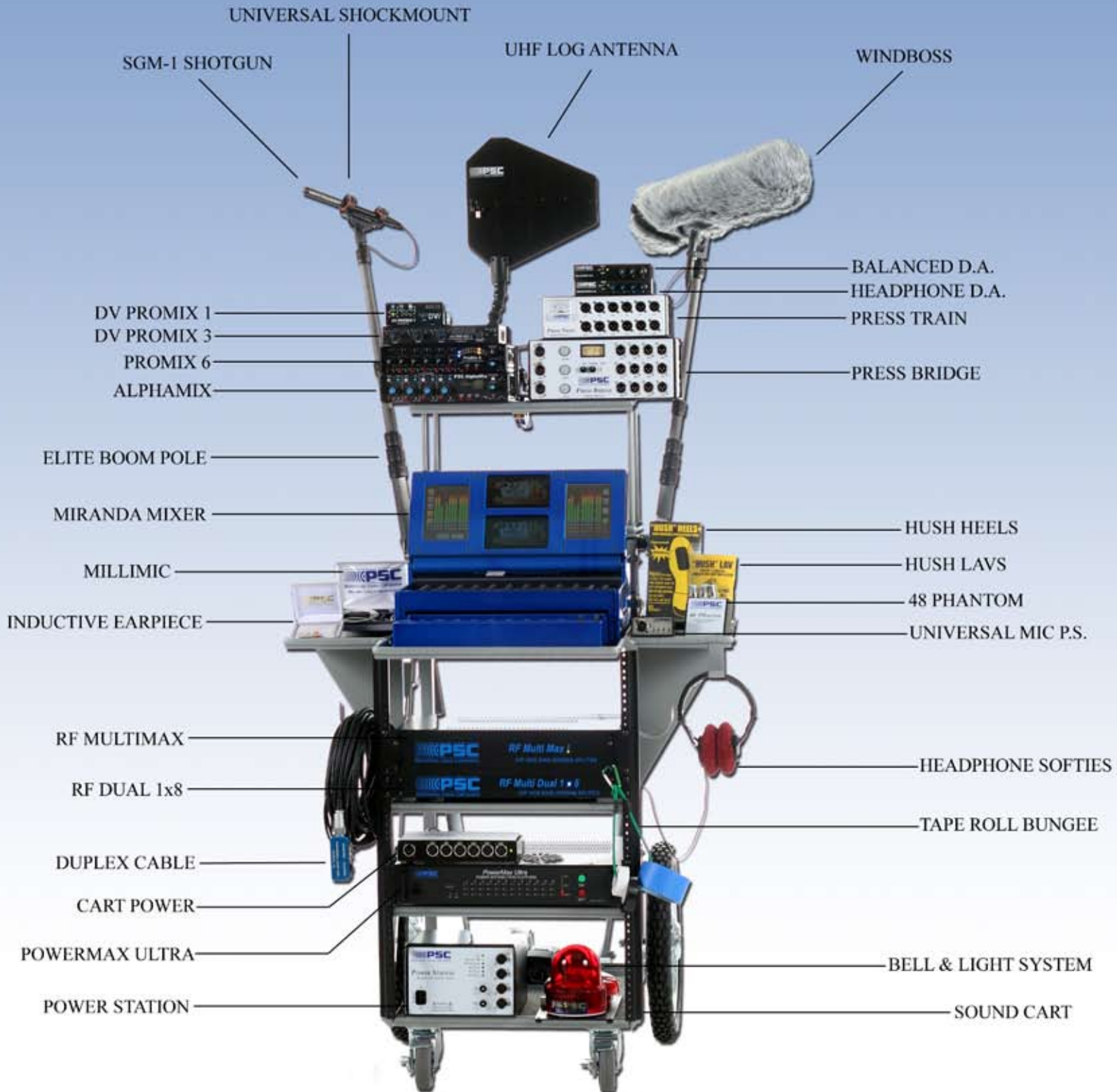
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SOUND AND SKIN

By John Austin

LA Ink

TLC



Does the noise in my head bother you? I've been asking that question since the beginning of Miami Ink and it continues now into LA Ink. How do you record dialogue when the tattoo machine and the voice are about the same distance from the mic? The Tattoo machine is creating strong electromagnetic energy and sound pressure levels from the machine to mic can reach up to 94 DB. The electromagnetic energy can distort and even drop the audio out completely. The companders in the wireless mic system react more to the loud small bandwidth buzz and seriously over compress the lower sounding voice. Along with a myriad of tattoo shop related audio problems this is the big one. Welcome to my world!

To deal with the electromagnetic energy from the tattoo machines added insulation works quite well but it does make it a little harder to hide the wire. It is the weird world of reality TV where the mic must be hidden but you can see a mic pack once in a while. Lectrosonic SM's come in handy when hiding packs. There's nothing like a beautiful girl with a big lump on her back.

When micing we also have to consider how that particular artist works and what they are doing on that day. Will the artist be leaning over someone or sitting up straight, the best mic placement is critical when dealing with machine buzz.

Since the worst machine sounds come during the outline of the tattoo and drop off a bit when the shading or color begin we try to do serious story dialogue when in the shading mode of the tattoo. Most of the artists prefer to not talk during the intensive work of outlining so it works out in sounds favor. But, its reality TV and anything can happen at any time.

Each tattoo artist uses different voltage setting for their machines that can change as they move from outlining to shading or color. They each have a touch that varies the sound intensity and oscillation of the buzz. Corey Miller, the lone male artist, has helped us quite a bit by tweaking each tattoo machine to limit its intensity. But ultimately it's what the artist wants to do with their machine to create the tattoo that takes precedence. We have also gathered wild sounds of each machine during different

phases of the tattoo and sent them to post to create a catalog of machine sounds for editing and the final mix.

How do you record dialogue when the tattoo machine and the voice are about the same distance from the mic?

Some tattoos require clothing to come off so we get creative with plant mics. Out come the Countryman V6's and trams, as many as needed. We put them in hats, on a necklace, on the chair, up the side of a pair of glasses, in pillows; anywhere we can get the mic in away from the buzz of the tattoo machine. In a noisy shop booms are used as little as possible, but the inevitable lav crushing hug from a satisfied customer is boomed as normal procedure. I love to hear the unmuffled, "Thank you".

The show shoots on three DVC pro HD cameras with three audio bags on the floor of the shop. A fourth camera and bag are used on remotes to pick up story beats and OTF's. The bags consist of 4 to 5 Lectrosonic 411A's using group settings with a Sound Devices 442 and a 301 linked as mixers. I tried to use other mixers with more channels but the tattoo machines reeked havoc on them... small capacitors and thin shielding I guess. 401 and 411 Hops to camera and Neumann 82i shotguns on the poles





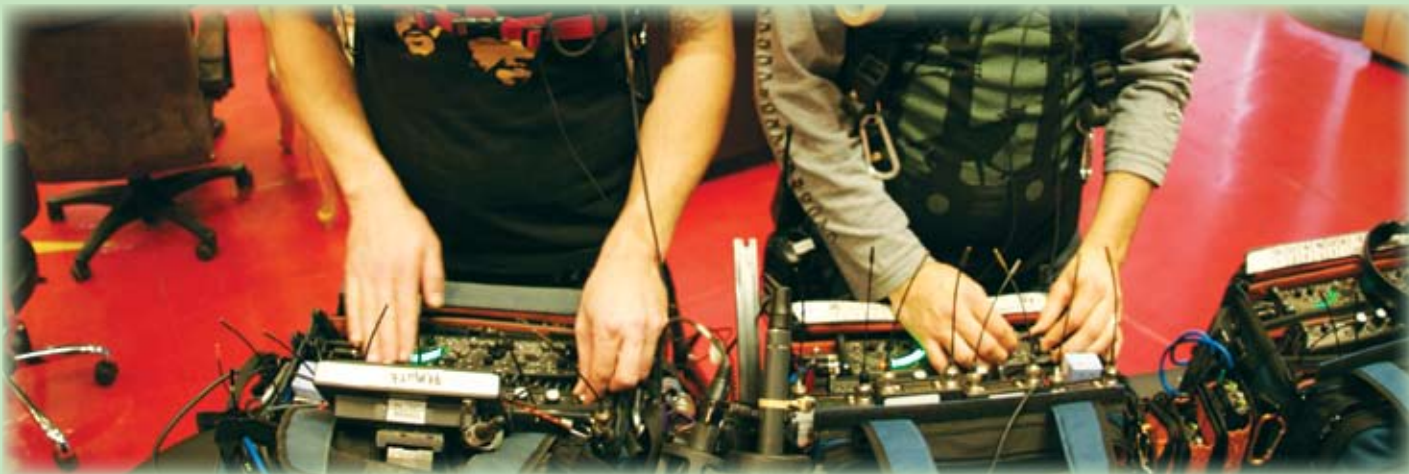
with Sonotrimms for the tattoo artists. Trams work great for the clients but the Sonotrimms with its warmer sound work well with the machine buzz, giving a bit more body to work with in the mix.

Some of the time we mix to whatever is in front of camera but during multi-camera and multi-characters scenes we split up tracks for isolation. Because of budget restraints and tight post schedules that's as close to a multi-track that we get. That's right; we are rebels working without a net, no multi-track.

During the day we are constantly updating the loggers as to what track assignments are on each camera so that post has an idea of where the best sounding tracks are. I am also in contact with post on a constant basis to make sure they know what has transpired and get a heads up on any problems.

For instance when we recorded country band Emerson Drive's # 1 hit song in the middle of the show I first spoke with the bands touring audio tech by phone and found out what instruments the band members were bringing. With this information I then ran two stereo placed booms into A camera, put the lead singer on track one and guitars and back up vocal on track 2 of B camera and finally the acoustic bass direct in on track 1 and fiddle player off his lav into track 2 of camera C. We documented everything for post and called to remind them about the tracks and it came out sounding great on the show.





All three of the sound mixers on LA Ink were at one point working on Miami Ink. Ironically we all had plans to move to California, so when Kat Von D made her way back to LA we could read the tea Leaves, LA Ink was a go!

From Mark Barnes our A2/Video Tech, to Juan Cammarano and Paul Austin, (my son, Paul, started working with me at age 9), we all take our jobs seriously but we have a lot of fun. And second season shop and crew are really working well thanks to the environment show runner Doug Wilson has created.

I have also had luck finding great local day players and I look forward to meeting and working with more of the talent that Los Angeles has to offer. But it wasn't

until my old friend Joe Foglia introduced me to Frank at Coffey Sound that I found the missing LA link. He is a rental house guy that gets what we are doing out here in the real world of TV production.

I look forward to working on other shows with other problems to solve but I have a hard time thinking they'll be anything like the buzz I got off of this show.



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Whit Norris on location in Wilmington, NC for “The Marc Pease Experience”

Earlier this year I found myself in Wilmington, North Carolina, a great coastal town to spend spring. It had been a few years since I worked in Wilmington so I was looking forward to it. This is also the home of Doug Cameron who works with me as a boom operator. He and I have been working together for over six years so, when we were offered a film in Wilmington and one of us could work at home, it was an easy choice. Next was putting the rest of the team together. Jeff Babb joined us for second boom and utility and Matt Andrews came on as the Pro Tools playback operator.

The film that brought me to North Carolina was called the “The Marc Pease Experience”. The script is a comedy that is the story of a struggling young singer in his mid twenties and has never gotten past his days of high school. He dates a high school girl, and still hopes the high school music director will help him with his singing career. Jason Schwartzman, Ben Stiller, and Anna Kendrick were the leads for the film. The story wraps itself around the backdrop of a high school production of “The Wiz”. As we moved through pre-production we realized we were as close as you could be to making a musical, even though the script is not a musical. There is very little of the Wiz that is on camera, only a few numbers. Most of the musi-

cal is in the background of the film. There are scenes in the audience and backstage during the musical. There were also various scenes with voice lessons, duos singing, vocal warm-ups, an a capella group, a flautist, a choir, and an orchestra as well as two scenes with a performer singing and playing the piano.

In pre-production I asked to have a meeting with my department along with the producers, the director, 1st AD, as well as the music supervisors, who were conferred in. I had broken the script down from a music and vocal standpoint. I wanted to be clear as to what would be playback and what would be a live record. When we finished everyone was clear on what the director wanted as well as what was going to be playback or live. We had over 25 different playback parts and live records. Sound post was not hired until after principle photography had ended. I worked with the music supervisors and the picture editor to make sure we had everything in order for how the playback was handled. We did not use any time code slates for the playback. Playback and time code were recoded on tracks on the Deva. The sound specs for the film were 48kHz, 30ND, 24BIT, and BWF.P. DVD RAM's were sent to Modern Film and Video who handled the dailies. I also archived all of the sound files onto a firewire drive that I

“I had broken the script down from a music and vocal standpoint. I wanted to be clear as to what would be playback and what would be a live record.”

sent to sound post after principal photography.

For the playback package we carried in our arsenal, Phonak earwigs, 2 Mackie SRM 450's, an Anchor speaker, a Speak Easy for car playback and a Mackie SWA1501 sub that worked as our thumper. Also in the kit were some of the induction loop PSC earwigs for back-ups. Matt brought his hot-rodged Pro Tools LE rig with a lot of extra outboard gear including a Digi 002.

My recording package included my Sonosax SX-ST8D, along with the Deva 5 as the primary recorder and the Sound Devices 744T as the back-up recorder. I

used the Denecke GR1 as a master time code generator. We used Denecke slates, a TS3 and 2 TSC's. As far as mics we used mainly Schoep's CMC series in doors with the Sanken Cub-01 for plant mics on sets and in cars. On exteriors we used mostly the Sennheiser MKH60 and occasionally a 70. For wireless mics I had a Lectrosonics rack mount with 411's and also a Venue with the SM transmitters. The lavs of choice were the Sanken COS11's. A Comtek BST-25 with PR-25 receivers for all those that joined us to listen, and of course "The Cart". Doug's boom poles were Ambient, of which he is a big fan and has a large selection.

Continued on Next Page

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Doug Cameron & Whit Norris in Wilmington, NC

For actual recording during playback, I would take the playback track pre-fader from Matt's Pro Tools output. The pre-fader would give me the constant level, even if he brought the playback down or up in volume. I also took the time code from the playback and recorded that to a track. This gave post-production all the elements that they would need. The Pro Tools sessions that we received from the music supervisors also had a click track which Matt manipulated into a thumper track which was needed for a couple of the dance numbers. Some of the scenes from *The Wiz* had dialog as well as playback for certain scenes, which Matt was always on top of.

One of challenges was the costumes from *The Wiz*. The Tin Man and the Scarecrow were a little tricky in wiring them, but Doug and Jeff worked that out very quickly. Todd Louiso, our director, wanted to let the cast overlap during some of the more dramatic scenes. We overcame these situations with two booms a mix track and two split tracks, which worked very well in these situations. Most of our locations were very sound friendly, but we did have several pages of dialog in a high school men's room. The floors and walls were all tile, and everyone knows what

this sounds like. The actors were also changing clothes during the scene, so wireless mics were not a part of the mix. We used sheets of Sonex placed outside of the frame to help dampen the acoustics of the room. These sheets of Sonex are part of my regular package. In a situation like this they are very valuable.

One interesting element was recording sounds of a limousine, which played a part in the film. We were able to get the limo for a couple of hours during our final wrap. It was fun recording the drive-bys, idle, starts, stops, power windows and sunroof opening and closing, door locks, door slams and anything other sounds I may have forgotten that a car can make.

This film was a great experience for my department. I had a very strong sound team, which makes all the difference on any production. The crew was wonderful. All of the departments were very cooperative to our needs from production to transportation. I believe capturing great sound on a film is truly a team effort. It is not just the job of one department.

Currently Doug and I are finishing a NBC series in New Mexico then we are on our way to Pittsburg to work with Kevin Smith on his next film in early 2008.



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Music Playback, Pro Tools and Highlights Of My Journey

by Gary Raymond

I recently received an Emmy Certificate from the Academy of Television Arts & Sciences for my music playback work on the TV series "Scrubs." As a result, John Coffey asked me to relate some of the highlights of my 20 year career in music playback and my background using Pro Tools.

I've been in the sound industry for a long time but began as a live concert engineer in the 70's and toured, mixing FOH or Monitors, for roughly 400 bands and artists including War, Earth Wind and Fire, Billy Idol, and Tom Jones to name a few. During that time, at 26, I studied with Don Davis, one of the top sound consultants in the country and as a result, was offered the position of Technical Coordinator at Disneyland. I was the youngest of 70 supervisors in that division. Following in Shawn Murphy's shoes (of post production fame), I was responsible for all live sound and lighting on the 14 stages in "The Park" and designing sound systems for them including the "Electrical Parade" and some of the rides such as "The Matterhorn."

It was a great job and a form of graduate school for me. However, because I was in management, I didn't operate and a year of going through the full rotation of shows, I decided I wanted to go back to mixing live. My time at Disneyland was my first experience with unions and as such, made me a big supporter of unionization. Though I was a supervisor in management, my salary was directly tied to the highest paid foreman's wage. Our counterparts at Knott's Berry Farm, who were not protected by the union, were doing the same work but for half the money.

After Disneyland I continued to freelance with live concerts. Because I had a very solid technical background in sound system design and application, I was asked to create the curriculum and teach live sound at TREBAS; an L.A. sound engineering school. All this background was a tremendous asset when I was asked to do my first film



Gary Raymond and Pro Tools Playback on the set of "Rock Star"

*"We were like
Audio Marines."*

playback job, the "Hands Across America" commercial in 1988. It required playback speakers distributed along the five blocks of city street in Taft, CA. so, a few thousand extras could all sing in sync. Although I had been a film major in school, this was my first time working on a set. I found the whole process fun and interesting. I like the challenge of getting dropped into a technical situation and having to make it work. As director Mike Nichols described our playback crew on "The Birdcage," "we were like Audio Marines".

In 1990 I worked with recording engineer Bob Schaper (the first of many collaborations) and mixer Jim Webb on "For The Boys". This was an awesome playback job, and to this day still one of the most sophisticated in terms of zones and coverage. Mark Rydel, the director, wanted everything "practical." We had several complex set-ups. In the TV studio sequence, I had a working control room, with talkback mic. for the actor (a real 1950's TV variety show director) that fed the floor and BG (audience) through overhead speakers. We had real boom operators on 2 Fisher booms on the floor feeding the control room and audience, plus 17 small speakers behind music stands for the live orchestra, 5 playback zones and 25 speakers. I worked with Duke Marsh and we had 2 Nagra's for playback. I remember the music editor bringing us a box with about forty 5" reels with every 2 track permutation you could think of: Full Orchestra on L, Click on R, Orch. L, Jack Sheldon Tpt. Solo R, Orch and Jack L, Bette Midler R, etc. However they had split all the music into 3 parts. Mark Rydell, being an "actor's" director, wanted the first take to be a master all the way through. We had to change reels on the fly alternating Nagras as we were filming. Mark said "I wouldn't do that job with a gun to my head!" It was after that experience that I said "never again" and the next film we did, which was the "Gypsy" remake with Bette Midler, we switched to Pro Tools. David Ronne was the mixer and I ended up doing six films with him. He is definitely missed.

Almost Famous

In 1999 I was asked by Jeff Wexler to provide playback on Cameron Crowe's "Almost Famous". I called

Pro Tools Playback Continued

up the propman, Ric Ryder, who I found out later was a fellow Bass player, because he was dealing with the band gear. I asked him what they were doing about the practical p.a. and he said "Production hadn't made any decisions." And then asked "Did I have any equipment?" As it turned out, I owned the Neil Diamond touring system that had been in the Greek Theatre. It was a 1970's p.a., correct for the film's period, and in pristine condition. He asked me to bring a few pieces down (a wedge and sidefill stack) for the production designer to look at. He took a look and said it was "perfect." Now for the first time I was going to do both music playback *and* provide a working concert sound system. For that film, I had a three man playback crew; Myself, James Eric, and my son Bud Raymond. We had two weeks to prep in San Diego where the opening concert footage was shot. During that time I also had Bud wiring and loading the rest of the system we'd need when we got to the USC Coliseum; the largest concert venue of the film. We worked with Peter Frampton who along with Cameron's wife, Nancy Wilson (of "Heart") wrote the songs for the film. Cameron wanted everything authentic, even down to the correct period mics on all the amps and drums. It was an awesome experience and I've happily worked on all of Cameron's films since then.



Playback on "Buffy". One of three Pro Tools rigs I own.

Rock Star

The following year I worked on "Rock Star" with Mark Wahlberg. Our director, Steve Herrick, wanted authentic concert sequences so they hired real rockers to play the band members, Zakk Wylde (Black Label Society, Ozzy Osbourne), Jeff Pilson (Dokken, Dio), Jason Bonham (son of Led Zeppelin drummer, John Bonham), etc. Our music supervisor, Budd Carr, with whom I've done several

The production was in a panic because of the amount of time it would take to get new transfers. I pulled out Pro Tools, transposed it on the spot, and got my rental for the rest of the film.

films, had a great concept. They would have the "main" band "Steel Dragon" do their own pre-records after 3 weeks of rehearsal of the material written for the film, and then have the tribute band (also real rock players) rehearse it for only a couple of days, so they would sound rougher. This is not typical on a film but this organic approach resulted in very authentic performances. We also recorded all lip-sync scenes including vocals, guitar, bass and drum solos and used them as guide tracks in post for more accurate sync and editing. This is where Pro Tools was a very powerful tool, being used both in production and post. My sons David and Bud worked with me on the film. Although I usually work by myself for small playback jobs, I'll use assistants when I can get them budgeted. My daughter Wendy has also worked with me on many films and T.V. shows.

Adam Sandler

I've worked with production mixer Tommy Causey on Adam Sandler's last four films. For band sequences Adam likes to play live, so we record him on Pro Tools with 8 tracks and use that for play back with guide track for coverage.

8 Mile

On "8 Mile" Curtis Hanson, the director, wanted the "real deal". The day after Christmas, we packed it all up and went to Detroit, the "Rap Capital of the World." It is definitely a higher art form there. One day near the end of shooting the "Rapper's Battle," our 1st AD made an announcement. They needed 6 amateur rappers to be in a montage scene and requested any one interested to show up a half hour before call the next day. The following morning we had 150 amateur rappers to audition. That was the only playback we did, for that audition. We recorded the real DJ cast in the film and played back his 30 Sec. sequence for all 150 so they all got the same music to work

with. As far as all the performances in the film, Eminem and all the other rappers performed live and we recorded them directly on Pro Tools with splits to Danny Michael, the production mixer.

High Crimes

While working with mixer Steve Nelson on “High Crimes,” Ashley Judd had a scene that involved a series of phone conversations with Morgan Freeman. Morgan had finished his principal photography on the film by the time they got around to Ashley’s side of the conversations and Steve felt it would be more authentic to do Pro Tools playback instead of having an AD read Morgan’s lines. So I loaded up Morgan’s dialogue in Pro Tools and fed Ashley’s telephone with Steve recording both sides for guide. This was quite exciting, I was a virtual actor with Morgan Freeman’s voice, interacting via the phone with Ashley, and receiving directions from our director about “pausing on this line” and “cut her off on her line here because I want a reaction from her.”



Rear view of 2 of the 11 stage stacks used for “Almost Famous” concert scenes.

Britney Spears’ Crossroads

I was hired by mixer Susumu Tokunow to provide playback on Britney Spears’ movie “Crossroads”. The UPM didn’t want to pay the additional rental, preferring me to use a DAT machine. I brought it down as backup anyway and on the first day of shooting, when we received her song, it turned out to be in the wrong key. The production was in a panic because of the amount of time it would take to get new transfers. I pulled out the Pro Tools, transposed it on the spot, and got my rental for the rest of the film.

Unconventional Methods

In 2003 I thought it would be fun to take the Pro Tools classes the Union offered and received my Digide-

sign Pro Tools Certification. Pro Tools has opened other unconventional playback work for me. Both the film “Queen of the Damned” and the TV series “House” required actors to speak lines during slow motion sequences. I performed tests with the actors to see how fast they could say their lines, converted that into frame rate and had the camera dept. shoot at that rate, so the actors could lip sync. successfully. In Post the film was processed at 24 frames and resulted in the actors speaking in a “dream-like state” but with convincing sync.

Scrubs

“Scrubs” came about partially because I had done the “Buffy” musical. That was intense. With a feature you take 3 months to shoot a dozen songs, on “Buffy” we did the same in 2 weeks. The same situation arose with “Scrubs.” I was asked to attend a pre-production meeting and was surprised to see along with the technical dept. heads about a dozen studio execs. Evidently, they had tried to shoot a “music only episode” before and had problems. We began filming with pre-records still to be done. During the shoot I was lucky to have had tremendous support from mixer Joe Foglia and his crew. For 2 weeks it was non-stop playback with ongoing editing from call to wrap. Even more challenging were the stems which had to be added to the sessions while doing playback throughout. This 30 minute show, which is a 22 minute episode, had 20 minutes of music playback and 2 minutes of dialogue. Probably the highest ratio of music playback to dialogue of anything I’ve worked on.

Emmy Award

You never know about awards. As Jim Webb told me years ago, “you always do your best work, but there are so many factors in film making, it’s only about 1 out of 10 where it all comes together, great story, good direction and acting, critically received and publicly supported.” It certainly is nice to be acknowledged!

So far Gary Raymond has provided Music Playback on over 75 films and TV shows. At the time of this writing, Gary is currently working on the TV shows “Californication”, “My Name Is Earl”, “Pushing Daisies”, “Greek”, and “12 Miles Of Bad Road” in between film work.



AN INTERVIEW WITH
PRODUCTION MIXER

Bob Wald

Coffey Sound: Bob, we know from experience that if we ask a hundred sound mixers how they got into the business we'll get about a hundred different stories! What's yours?

Bob Wald: You're absolutely right... I'm an L.A. native but I moved to Dallas, Texas with my family when I was ten years old. When I started college, I looked in the catalog and saw "Introduction to Motion Pictures and Television." I fell in love with the class immediately, and I took all the other classes in film history, writing, television production and motion picture production. One of my scripts got chosen for shooting. I thought, "This is great! I'm going to become a director!"

In my third year I wound up in a sound recording class, but it was specifically for music recording. Since I was a guitar player I thought it might be interesting to learn studio recording. As it turned out, the professor was a professional recording engineer, a very gifted teacher and a genius. I took his basic and advanced classes in studio recording. I later discovered that everything he taught me was dead on correct.

After I graduated I got hired by the PBS affiliate in Dallas to be a documentary filmmaker. My boss was the well known news anchor, Jim Lehrer, who was producing a new show called Newsroom.

Shortly thereafter I got hired by a local post

house which, at that time, had the only real state of the art sound facility in Dallas. The owner heard that I had some knowledge of studio recording. Dallas had become a very hot commercial production city and this particular company had jumped on the opportunity. They had a really nice setup with a beautiful mixing theater, a custom made board and one of the first dubbing systems with on the fly punch in capability.

I was put into the sound department as the assistant to a grumpy old time mixer named Ed Motteram. Ed had left L.A. years earlier to have a quieter life closer to his family, and he had built this post sound facility from the ground up. As far as he was concerned I was

a complete moron until I proved otherwise! To make life even more interesting, he had purposely not labeled any of the patch bays. That was Ed's idea of job security!

So, I guess this moron caught on pretty quickly, and grumpy Ed turned out to be an incredible mentor. I wound up learning how to do both post production and production sound, mostly on commercials, industrial films, military recruiting films and a lot of documentaries. I was basically a one man show. If I wasn't in the dubbing theater I usually had a Nagra slung over my shoulder along with a hand-held mic or on commercials I had a small sound cart. In those cases I frequently

“My greatest “opportunity” has always been having to prove that I’m not a sound geek. I don’t know why this is, but there are a lot of mixers out there who just don’t have very good people skills...”

set a rough level, rolled the Nagra and walked away from the cart to boom! I didn’t even realize that I was supposed to have a boom operator! I was it! I traveled all over the country with a small crew and about 45 cases of camera and sound equipment... usually shipped as checked baggage! We sometimes had to bribe the sky cap to get it on the plane! I frequently came back to edit and post my own production sound. When Ed retired I took over the sound department. I was making \$8,400 a year, so to make me feel better I was given business cards with the title, “Associate Producer.”

One day I got a phone call from my retired mentor, Ed. A friend of his was shooting a feature film and needed a production sound mixer. They offered me about what my annual salary had been.... for eight weeks of work! By this time my own assistant was more than ready to assume my department head position, so I marched into the owner’s office and resigned. The very next day the movie I got hired to do went belly up. Now, I had no movie and no job.

Fortunately, every single commercial producer in Dallas had been using the post house where

I had worked, so they all knew me and started calling me for production sound work. This turned into many years of pretty steady employment. I could work about ten days a month and make a good living. I was making SO much more money as a freelancer. I felt a real obligation to do an excellent job for my clients, who were also my friends. It was a very close knit community. Getting fired was unthinkable, as was quitting. I think we all developed a great work ethic there and it paid off big time later on.

Over the years Dallas evolved into a place where there were enough competent crew personnel to staff a couple of movies at a time, and the word got out in Hollywood. L.A. and New York production companies started coming to Dallas on a regular basis and I was first call for many of them. Ron Judkins and John Pritchett were there, as well. From 1975 until 1989 I did over 40 shows, including feature films, TV movies and mini-series. All of it was union work, but through the Dallas studio mechanics local. All crafts except for camera were represented by a single local. Eventually, a lot of my clients

started asking me to come to L.A., so after doing a lot of traveling back and forth I finally moved back to L.A. in 1989 and joined Local 695.

For awhile I did about 50% movies and 50% TV, and a lot of fill in work for other mixers, mostly on bigger shows. That really helped me get established. For awhile, Bob Eber and I were sharing George Baetz as a boom operator. George made the observation that Bob and I had similar mixing styles, so he and I traded off mixing on some shows.

In 1994 I met my future wife, Suzanne, and I sort of lost my interest in traveling! I had been working on the last half of a Steven Seagal film called “The Glimmer Man,” and then they asked me to do his next one, “Fire Down Below,” which was shooting somewhere out of town. The very same week I had an offer to do a new TV series for NBC called “The Pretender.” I opted to stay home and took that one. The show lasted for four seasons, I made a lot of money and I’ve been doing TV ever since. 2008 will be my 38th year!

Our most recent project was the last part

of season ten and all of the eleventh and final season of a WB series called “7th Heaven.” Forrest Williams had been mixing the show for four years and he had gotten an offer to do another project with a producer friend of his. So, he was kind enough to recommend us. That turned out to be one of the most pleasant experiences we’ve ever had. Good show, nice production staff, great crew, and unbelievable hours. We started our workday at 7am EVERY day and we were usually driving home by 4pm!

Coffey Sound: Can you tell us a little about your own style of mixing?

Bob Wald: I have no style whatsoever! Just kidding! Actually, I think I can best describe the way my crew and I approach the work by using the term, “invisible.” I learned a long time ago that the director already has his or her hands full. The quieter we are the better it is for them. Obviously, we have to sometimes ask questions, but the best way we can operate is to just deal with all the challenges that are thrown our way and try to make it work to the best

Continued on Next Page

Bob Wald Continued

of our ability. In television, if we can keep the usable sound at 85% or more, we feel we've done a decent job, and the post folks love us. When they're happy they let those who hire us know it. I think it's that simple. And, of course, how we conduct ourselves on the set matters a lot.

In terms of technical ability, I'm somewhere in the middle. I know how to operate the equipment reasonably well but I think my reputation is more largely based on plain common sense. My crew and I always try to make our tracks match the perspective of what the camera is seeing. I know that, more and more, directors in television are going for the close mic style regardless of whether the shot is wide or tight. Obviously, in multiple camera situations perspective can be hard to accomplish. In our opinion, if a director truly understands the power of sound in telling his or her story, they will be conscious of our efforts and set their shots accordingly.

We have all been faced with the old simultaneous wide and tight cameras. In our opinion, this is a creative mistake. Not only does it screw up our efforts to bring depth and dramatic effect to our work. It frequently isn't even good for camera. Everybody knows that lighting for a close-up is different from lighting for a wide shot. But, sometimes the economic limitations in television make it impossible to be purely artistic, and we have to just accept that. Otherwise we wind up leaving

the director with the impression that we're a royal pain in the ass! Frequently letting go of perfection is just an unfortunate reality in TV. As I said, we try to do the very best we can without getting in the way. Our experience has proven over and over that this produces the best reputation for us.

Coffey Sound: Do you work with a regular crew?

Bob Wald: In the past few years I have teamed up quite a bit with three Jeffs... Jeff Norton, Jeff Erdmann and Jeff Zimmerman. All three are very capable boom operators and in recent years, Jeff Erdmann has become an excellent mixer, as well. We all worked together on an NBC series called "The Pretender," from 1996 until 2000, and for the last two seasons Jeff Erdmann and I shared the mixing chores. I mixed Monday thru Thursday, Jeff Norton was first boom and Jeff Erdmann was second boom. On Fridays I took the day off and Jeff Erdmann became the mixer. Jeff Zimmerman was involved in some music work at the time and he just wanted to work one day a week. So, on Fridays he took over as second boom. Eventually, Jeff Erdmann and Jeff Norton both took a day off each week and Jeff Zimmerman filled in. We did this for two full seasons and it was absolutely great! It kept all of us from getting burned out. We're very much a team when we work together and I think we all look forward to every opportunity we get to do that.

I have to mention George Flores, as well. We

didn't get to spend enough time working together before George made the move to mixer. He was a great boomer and a great guy. I know he's going to have a really successful mixing career.

Over the years I've had the pleasure of working with many other talented boomers, some who actually started their careers with me, and I'm very pleased at their successes... Randy Johnson, George Baetz, Phil Palmer, Jennifer Winslow-Kusch, Don Broughton and Chris Jones, to name a few.

Coffey Sound: What do you think has been your biggest challenge as a production mixer?

Bob Wald: Well, I'm going to be frank about this, at the risk of pissing a few people off... My greatest "opportunity" has always been having to prove that I'm not a sound geek. I don't know why this is, but there are a lot of mixers out there who just don't have very good people skills and many times at the beginning of a show, I have had to prove to everyone that we don't operate like some of them. I have been faced so many times with some weird pre-conceived negative attitude about how sound people are. Whenever I have had to put a crew together I have always placed equal importance on skill and attitude. More than anything else I want the producers, the directors and all the other crew members to like us... a lot!

Coffey Sound: What recorder are you using these days, and other equipment, for that

matter?

Bob Wald: For the past couple of shows we have been using a Deva V as our primary machine and an FR-2 for backup. At the end of the work day we just dump the Compact Flash card from the FR-2 onto a DVD using a portable DVD burner. Honestly, I really don't see why we really need to do a backup at all. We have about 19 days worth of work on the Deva hard drive, and the mirrored DVD RAM, so unless we had a catastrophic failure it seems like overkill to me. But, if it makes everybody feel all warm and fuzzy, what the heck!

I have to say that I was one of the loudest Deva critics when it first hit the market. To me it looked like an old WW II surplus piece! But, I have to commend Glenn Sanders and Zaxcom for making an incredible turnaround...I really like using their new machines and we have never had a failure. You guys deserve plenty of credit for not giving up on that machine as it evolved.

I generally use a Cooper 208 board and Lectrosonics 400 series radio mics. We have Sennheiser 50 and 60 series mics for the boom, and we keep a couple of AKG C-480s around in case we need to do a right angle number with low ceilings or an occasional plant mic. I have heard great things about two mics I haven't tried yet, the new Schoeps and the Sanken pressure zone mic for car rigs. I have also heard a lot of good stuff about the Ya-

maha digital board that some people are using out there, but my current cart is not quite deep enough for it. I do plan on doing a little hands on with one sometime soon.

My crew tells me that my sound cart is the best they have ever worked with. I designed it over 25 years ago, rebuilt it a few times, sold it to Steve Morantz, bought it back and rebuilt it again! The tires are original equipment and we have never had a flat. Yikes, I shouldn't have said that!!

We also use a typical follow cart, of the slightly modified Rubbermaid variety. Jeff Erdmann uses it mostly for online Poker! Uh oh, now I've done it! Really, I don't know how we ever worked without the follow cart. It really does take the clutter off the main cart and,

since we're pretty neat and organized, we like it a lot.

Playback is usually accomplished with a MacBook and ProTools, although I find the Short Cut 2000 system to be really handy for setting up phone conversations. It's nice to put each cue on a separate button so that the playback operator can do a nice tight response for the actor.

Coffey Sound: Have you gotten any recognition for your work?

Bob Wald: We got an Academy Award nomination for the first "Robocop," and an Emmy nomination for a mini series called "The Kennedys of Massachusetts." You know, it's always great to get noticed like that but let's be honest... First, the show has to be

pretty high profile, and second, the post folks have to do a really good job. My most flattering comment came from Todd – AO when we were doing "The Pretender." They told us that our production sound was the best they had ever worked with, and that really meant a lot to us.

Michael Kohut, Carlos DeLarios and Aaron Rochin were the dubbing mixers for "Robocop." Their work was incredible, and it was Michael Kohut who sponsored me as a candidate for my membership in the Motion Picture Academy. I'll always remember that very generous favor. I'm a voting member of the Television Academy, as well.

Coffey Sound: How do you deal with actors who have very soft voices?

Bob Wald: That's easy... we quit! But, seriously, folks... it really does depend on the situation and you can only ask for more level so many times. My favorite story is one Chuck Norris told me. I did a couple of shows with him and then we got separated for awhile. Chuck was sort of mentored by Steve McQueen who was a very soft spoken actor, and he convinced Chuck to do it that way. After Chuck and I did those initial shows together he went off somewhere and wound up working with another sound crew. I guess they were always asking him to speak up, and for awhile he just put up with it. But, apparently, one day he had had enough, and when the

Continued on Next Page

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Bob Wald Continued

mixer asked him to speak up he snapped back at him, “Well, Bob Wald never asks me to speak up!” So, there you are.

Coffey Sound: Have you had any experience with HD?

Bob Wald: Not yet, but I’m pretty sure our next show will be done on HD. I’ve made it a point to keep up with the technology. Really, the only significant issue is that tendency for so many directors to keep the camera rolling for multiple takes. This may be a very good time for all the boomers out there to start asking for Fisher booms again! Of course, not a lot of sets are designed anymore with that

in mind, so there are going to be some very tired arms and, I’m afraid, job related, worn out joints.

Coffey Sound: Any pet peeves or beefs you want to share with the world? Now’s your chance!

Bob Wald: I think that a lot of people out there already know that my big problem with our industry is that it still hasn’t embraced the concept of balancing work and good health. I believe the motion picture industry has one of the very lowest average life expectancies of all American professions. There are a number of very basic reasons for this... Long work hours and chronic lack of sleep, plus the stress brought on by these factors along with financial pressures, and quality of life

issues, such as no time for family and friends. I find it very hard to understand why an industry of supposedly creative thinkers can’t figure out a way to make a decent profit without sacrificing everyone, including themselves, in the process. I could write some books about this so I’ll stop now! If your readers haven’t seen Haskell Wexler’s documentary, “Who Needs Sleep,” they certainly should locate a DVD or watch for screenings around town. Haskell invested eight years into that project and I wish the industry would start to take it seriously.

Coffey Sound: Any plans to retire? After all, you’ve been at this for 37 years!

Bob Wald: Well, like ev-

eryone else who has been doing this for a long time, I do have thoughts for the future, but I’m not sure I’ll ever retire in the classic sense. I like to stay busy, but I do have to admit that I’m not taking every show I get called about. Right now, a nice little half hour comedy sounds really good! As a matter of fact, we actually got hired to do a show just like that, but the writers’ strike shut it down. Hopefully, when it all gets worked out we’ll get called back.

Coffey Sound: Bob, thanks very much for sharing with us! Stop back by anytime!

Bob Wald: Wait! I’m not done yet!!! Did I ever tell you about the time tha..... (white noise).

PD606

- >Longer Battery Life!
- >8 Track Poly File Recording (606)
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- >User Replaceable HDD
- >Digital Mixer Routing
- >Full Size DVD RAM With Dual Drive Recording
- >ES Buss
- >Tri Level Sync
- >Full Size DVD RAM

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Fostex
The New Series of Recorders



PD204



Zaxcom Fusion

By Robert Kennedy

Zaxcom’s newest product, the Fusion, offers the cumulative functionality of an 8 channel ENG mixer and portable recorder by offering the proven technology of the DEVA in a smaller more affordable package. The unit uses the same colorful touch-screen interface to control its intuitive operating system. Fusion features 8 analog inputs via full-sized XLR connectors and 8 AES digital inputs via a 15-pin D-sub. Each analog input is mic/line switchable and offers 48V phantom power and each digital input offers superior sample rate conversion. These sixteen inputs can be mixed to 4, 6 or 8 record tracks (upgrade option) using the 8 assignable fader knobs on the front panel. The machine is fully matrixed so any input can be assigned to any record track and/or physical output pre-or-post any fader! This unparalleled flexibility makes this location recorder uniquely intuitive and powerful.

The Fusion excels at collecting and delivering audio. The unit records to a removable compact flash (CF) card in Zaxcom’s MARF format and simultaneously copies to a FAT32 formatted CF card. The Fusion can mount, format and copy to external media via Firewire including external hard drives and DVD-RAM drives. A 10-pin Hirose camera output includes a stereo send and return over a standard beta snake. Along with the included High-pass Filters, Limiters and Phase Inversion, Zaxcom offer an EFX package which adds an EQ, Compressor and Expander to each input. A timecode generator comes built-in and supports all standard frame rates as well as advanced “auto-load” functionality. Scene and take information can be entered via a USB keyboard (not included) and is embedded as BWF metadata and iXML metadata in each WAV file. The Fusion will surely put a smile on the faces of many production sound mixers.



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M-Audio MicroTrack II

By Steve Eagle



When M-Audio introduced its first MicroTrack in 2005, it surprised many in the field recording market when it was shown to be a legitimate 2 track recorder. The MicroTrack received high marks for its input options (1/4", 1/8" and SPDIF coax), diminutive size, and price point. Originally priced at \$399, it quickly carved out a niche for itself in the handheld recorder market. Some issues arose, including an occasionally temperamental OS which didn't like certain kinds of Flash cards, and a lack of sufficient gain on the 1/4" inputs, but this didn't detract from its appeal. Instead, the MicroTrack went on to become one of the most popular recorders in its class. Fortunately for us audio enthusiasts, M-Audio has gone back to the workbench to iron out its previous issues.

This past September, M-Audio announced the release of the MicroTrack II. This second generation recorder unveils a few major improvements that justify the phrase "pro audio recording." First, the 1/4" inputs have received a significant gain boost, allowing users to plug in more sources without having to rely on preamps as often. This is great news for those with quiet mics or low-level audio feeds. Second, the internal voltage has been improved to provide 48V phantom power - the original MicroTrack clocked in at only around 20V. Third on the list is a defeatable analog limiter, helping to reduce clipping on your recordings. The fourth most significant update is the ability to record files in excess of 2GB, which makes it ideal for extended, "leave it alone" takes, like long jam sessions with your band or those never-ending corporate seminars. It has also received a visual makeover - sporting a slick, black body instead of the original version's gray.

The coaxial SPDIF input continues to be useful for ultra quiet digital transfers, a bonus that many other recorders in this price range still don't offer. But now you can directly monitor the SPDIF input while you're recording - a very nice touch! As before, the MicroTrack II can

record directly to MP3, WAV or BWF formats, making it an extremely versatile recorder not only for sound recordists, but podcasters, teachers and students, worship leaders, voice actors, law enforcement... in fact, we can't really think of a profession that couldn't use this in some way. And at a street price of just \$299, the MicroTrack II keeps M-Audio's reputation for low priced yet high quality products intact.

Our verdict: It seems M-Audio has another winner on its hands. We would have liked to have seen a version with XLR inputs, so it could compete more directly with products like the Zoom H4 and Marantz PMD-660, but it's a small gripe, considering all the other bonuses. This small guy packs a large punch.

For more information: www.m-audio.com

Street Price: \$299 (MSRP: \$399)

New features and enhancements including:

- Extended input gain range
- Analog input limiter with bypass
- 48V phantom power
- Faster data transfer rate via USB 2.0
- Easily add markers to BWF files
- Monitor S/PDIF input via headphones while recording
- Seamless recording of files greater than 2GB
- Customizable folders for organizing files
- Built-in Compact Flash speed test
- Backlight dimmer
- Hibernation mode
- Storage via convenient Compact Flash or Microdrives (sold separately)
- Immediate drag-and-drop file transfer to PC and Mac via high-speed USB 2.0 mini-connector
- Powered via USB, built-in rechargeable lithium-ion battery or included power supply
- Separate left and right input level controls with signal and peak indicators
- Professional balanced 1/4" TRS inputs capable of mic or line-level signals
- Dual microphone preamps with 48V phantom power for studio microphones
- 1/8" TRS input with 5V power for use with stereo electret microphone (microphone included)
- S/PDIF coaxial input for digital transfers
- Monitoring via RCA line outputs or 1/8" stereo headphone output
- Output level control
- Dedicated buttons for navigation, record, hold, pause, delete, menu, and power
- Large LCD screen
- Includes electret t-shaped microphone, software for editing and file format conversion, carrying pouch, 1/8" stereo extension cable with lapel clip, power supply, and USB cable

MP3 recording:	96 to 320kbps at 44.1 or 48kHz
PCM recording:	16 or 24-bit at 44.1, 48, 88.2 or 96kHz
Storage Capacity:	variable based on data rate and storage medium
Battery Life:	Approximately four to five hours (three hours with phantom power)

Zaxcom ZFR100 Cheat Sheet

By Robert Kennedy



Zaxcom introduces its new ZFR100 a time code referenced audio recorder. The belt-pack style ZFR100 can be used in a sound bag, as a body worn recorder or any other application that requires a time code referenced audio recording.

The ZFR100 features a fault tolerant recording system. If a memory card is ejected or accidentally turned off while recording there will be no audio loss prior to the point of interruption. The ZFR100 records on removable miniSD Flash media. Both record / stop and continuous loop recording is supported. The ZFR100 boasts a full-featured time code reader / generator with accuracy of 1 frame every 12 hours. The ZFR100 can auto-detect the time code framerate when jammed. The ZFR100 operates using a single mic level unbalanced input with powering for lavalier microphones.

File transfer software that runs on both Mac and PC operating systems is included with the ZFR100. By default, the audio recorded on the ZFR100 is converted to 48 kHz/ 24 bits. Software utilizes sample rate conversion to obtain the sample rate and bit depth of choice when files are imported. There are two time code stamped file types to choose from: BWF (Broadcast Wave file) or ZTF (Zaxcom

Transcription Format). Zaxcom Transcription Format is ideal for compressing the audio so it can be transferred to a transcription house via the internet.

Key Features:

- Fault-tolerant recording
- Removable miniSD media
- Built-in time code reader / generator
- Small size & rugged design

Specifications:

- Audio input connector: 3-pin Lemo (Part # FBV.00.303.NLA)
- Microphone input level: -60dB to -24dB
- Microphone Power: 3.3 volt DC @ 10mA max
- Dynamic Range: 108 dB
- Distortion: Less than .001%
- Frequency response: 20 Hz to 20 kHz
- High Pass filter: 6dB per octave
- High Pass Filter frequency: 30 Hz to 220 Hz
- Output file type: .WAV or .ZTF
- Output resolution: 16 or 24 bits selectable
- Output sample rate: 32 kHz, 44.1 kHz, 48 kHz, 48.048 kHz
- Time Code Type: SMPTE
- Time code rate: 23.96, 24, 25, 29.97, 29.97 DF, 30, 30 DF
- Size: 3.0" x 2.3" x 0.75" / 76mm x 58mm x 19mm
- Weight: 3.5oz

ZAXCOM ZFR100 MINI CHEAT SHEET

(cut out and put in your wallet)

Remember: Use SanDisk miniSD cards (but not the Sandisk Ultra II variety) or insufficient tolerances can result in the card becoming temporarily stuck.

Recording times are as follows:

2GB miniSD = 8 hours // 1GB miniSD = 4 hours // 512MB miniSD = 2 hours

To add the stereo adapter:

Attach the unit with a small philips head screwdriver making sure The gold-colored contacts line up.

Hold in the menu key and power on the unit.

Press menu 3 times to reach the record format menu. Press the up arrow so the unit reads Stereo.

Press the menu key 7 more times to reach the analogue to digital conversion (ADC) menu

Press the up arrow so the unit displays ADC=External.

Power off the unit. Power back on the unit.

REGULAR MENU

There are 8 menus on the ZFR100.

Pressing the play button on the top of the unit will playback the current segment. It will continue to playback consecutive segments until it reaches the final recorded segment or the user presses the STOP button. LREC means the unit is recording.

Pressing record on top of the unit will record to a new segment after the last segment. It is not possible to record over a previously recorded segment unless the card is full in which case it records over the oldest segment.

The first menu shows segment number and input level. The second menu shows the gain in dB on top and battery power and input level on bottom. The third menu is high pass filter. The fourth menu is limiter. The fifth menu is the timecode menu. The sixth menu allows the user to choose the TC Jam Mode. The seventh menu selects the TC source. The eighth menu is used to format the miniSD card. Pressing the up key five times will format the miniSD card to FAT32 format.

The final menu locks the unit. When this menu is selected the unit counts down from 5 and locks the front panel buttons. It does not lock the record and stop buttons. The front panel displays LOCKED when the unit is in this state. To unlock the unit simply press the up and menu button simultaneously.

The recording are made to the .ZAX file format. Free file-converting software is available from Zaxcom.com. The program is called Zaxconvert and will convert the ZFR-100 recordings to 48khz, 24-bit broadcast wave files.

Fostex PD606 Cheat Sheet

By Robert Kennedy & Jennifer Paro



Carrying on from the award winning PD-6, Fostex is proud to announce the new PD606 professional location

recorder. The PD606 records audio to the internal (user replaceable) 1.8-inch 80GB hard disc drive (HDD) and standard-size 12cm DVD-RAM discs. Simultaneous recording to both media is available in three varieties. Methods include simultaneous record, immediate copy and an intelligent 'background mode' which automatically copies recorded audio from the HDD to DVD when the machine is idling. The DVD drive can also write to DVD-R/RW and CD-R/RW discs for easy data copy / backup.

Following Fostex's philosophy of real knobs and buttons are better, recording, mixing and routing on this new recorder is an intuitive experience. No multiple button pushes and complex menus to change a level, just turn a knob. Yet don't confuse ease of use with a lack of features as the PD606 offers a multitude of mixing options and recording sophistication. The PD606 offers flexible 8 track simultaneous recording via AES/EBU, (6 channels when using the analog XLR inputs), full 8 channel analog outputs and the ability to digitally store monitor mix settings.

Battery life is perhaps one of the most important features of a location recorder and it's here these new machines really show their class. Not one, but two standard V-mounts are offered with the user being in control of power management. Choose BATT.1, BATT.2 or External DC power. A smart function switches which battery is used

when the primary source voltage falls below user-definable level. When connected to a host computer via the USB 2.0 interface, the recorder can be directly mounted on the desktop for easy drag and drop data copying. Future enhancements will include the ability to use USB 2.0 flash memory pens. A standard QWERTY keyboard can also be connected for easy file name editing.

These being Fostex recorders, the implementation of timecode is beyond reproach with an incredible ± 1 ppm accuracy. That's 0.0001% accuracy for both recording and playback of IEC format timecode with Jam Sync also available. Four modes of timecode are offered: 24H RUN (sync to the internal clock); REC RUN; FREE RUN; and EXT RUN with 7 frame rates (23.97, 24, 25, 29.97ND, 29.97DF, 30ND, 30DF).

Use a PD606 in the field and you're immediately aware that Fostex know a thing or two about professional location recording. At almost every point in the acquisition process there are clues: Automatic file closing in the background every 60 seconds means fast data recovery in the event of a power outage, 10 seconds (max) of pre-record means never missing the beginning of a take, the 99 cue point memory, an Avid™ compatible EDL file (ALE) can be created and edited, a 9pin remote connector for simultaneous recording using two PD606 or PD204s, the crystal clear 16 segment LED metering, the slate tone generator with hold mode, etc., the list goes on. The PD606 is also tough, being manufactured from ultra-durable materials specifically designed for a busy life in the field. No MP3. No compression. No short cuts. No compromise. The new PD606 simply features sonically superior recording at up to 24-bit / 192kHz resolution.

FOSTEX PD606 MINI CHEAT SHEET (cut out and put in your wallet)

Formatting a hard drive partition:

Select a partition in which to record by pressing the shift key, then the DRV,PAT button. Select a hard drive partition that does not contain any important recordings.

Format the hard drive partition by pressing shift then enter (pushing in the menu knob), scrolling down to the disk utility menu then enter. Scroll down to format using the menu knob, then enter again to select format. Verify you want to format the partition in the "Drive:" field. Enter a reel name. Ensure format mode is set to "normal" and physical format is "off". Turn the menu knob to EXECUTE and press enter. Ensure you're formatting the desired partition & press enter again. The display will read Fmt Completed! press enter.

Formatting the DVD-RAM:

Insert a DVD-RAM and begin by pressing shift then enter (pushing in the menu knob), scrolling down to the disk utility menu then enter. Scroll down to format using the menu knob, then enter again to select format. Scroll up to "Drive:" and press enter. Turn the menu knob to select DVD-RAM then press enter. Confirm you want to format the DVD-RAM and press enter. Once the format is finished, press enter. Press exit to get back to the home screen.

Automatically copy files from hard drive to DVD-RAM:

At the home screen, press shift then the menu knob to enter the menu. Scroll to SYS setup and press enter. Scroll down to autocopy and press enter. Scroll to

IMME to set up immediate auto copying from the hard drive to the DVD-RAM. It will display setup auto-copy and then read auto-copy. Press exit to get back to the home screen.

Set sample rate and bit depth and entering scene name and take number:

At the home screen, press shift then the menu knob to enter the menu. Scroll to SYS setup and press enter. Scroll down to Record FS&Bit and press enter. Select 48K/24 and enter. Scroll up to default file name and press enter. Scroll down to scene name and press enter. Use the menu knob and the forward and backward keys to enter the desired scene name. Press enter. Press exit to get back to the home screen.

Set the frame rate and jam the current time of day:

This can be set under the TC SETUP menu. Scroll to Frame Rate and press enter. Choose the desired framerate and press enter. Scroll down to Gen Mode and press enter. Choose Free Run and press enter. Scroll down to Set Gen. TC and press enter. Press the Time button to jam the real-time internal clock to the generator. Note: If the real time clock is not set correctly it may be set under SYS Setup/Adjust RTC. Press exit to get back to the home screen.

Arming record tracks:

Press the ready button for each track you wish to record including the stereo bus. The ready button is so labelled and found to the upper left of each tracks send potentiometer. Press the red REC button.

G

Gain

An increase in strength or amplitude (voltage) in a signal. The increase in signal power that is produced by an amplifier; usually given as the ratio of output to input voltage, current, or power expressed in decibels.

Gain Control

A device that changes the gain of an amplifier or circuit, often a knob that can be turned or a slide that can be moved up and down.

Gain Reduction

The working of a limiter or compressor reducing gain during high-level passages.

Gain Stage

An amplification point in a signal path, either within a system or a single device. Overall system gain is distributed between the various gain stages.

Gain Structure

The way in which the gain varies in the stages or sections of an audio system.

Gate

A dynamics processor that automatically turns off an input signal when it drops below a certain level. This can reduce the overall noise level of your mix by turning off inputs when they are not in use. Threshold, attack time, hold, and release time are some of the adjustable gate parameters.

Graphic EQ

A graphic equalizer uses slide pots for its boost/cut controls, with its operating frequencies evenly spaced through the audio spectrum. In a perfect world, a line drawn through the centers of the control shafts would form a graph of the frequency response curve. Or, the positions of the slide pots give a graphic representation of boost or cut levels across the frequency spectrum.

Ground

A heavy cable connected to earth via a metal copper stake for the purpose of grounding electrical equipment. In the U.S. a third wire in our electrical system is connected to this earth ground to provide a means of connecting the chassis of electrical equipment to the earth ground and thus

provide protection against hazardous electrical shock.

Ground Loop

Hum caused by return currents or magnetic fields from relatively high-powered circuits or components which generate unwanted, noisy signals in the common return of relatively low-level signal circuits. A potentially detrimental loop formed when two or more points in an audio system that are nominally at ground potential are connected by a conducting path.

H

Haas Effect

A psychoacoustic effect in which the time of arrival of a sound to the left and right ears affects our perception of direction. If a signal is presented to both ears at the same time and at the same volume, it appears to be directly in front of us. But if the signal to one ear, still at the same volume, is delayed slightly, the sound appears to be coming from the earlier (nondelayed) side.

Harmonic

One of a series of sounds, each of which has a frequency which is an integral multiple of some fundamental frequency.

Headroom

The difference between the average operating power level of an amplifier circuit and the point at which clipping or severe distortion occurs.

Hearing

The human hearing system is very well designed. It has a dynamic range of over 120 dB. Contemporary digital recording techniques can only achieve a dynamic range of about 90 dB. The typical threshold of pain is around 140 dB, with discomfort starting around a sound level of 118 dB. The normal hearing range is considered to be 15 Hz to 20 kHz. The typical Hi-Fi specification range is 20 Hz to 20 kHz. However, many people cannot hear 20 Hz. Sound reinforcement specifications reflect 50 Hz to 15 kHz (sometimes 40 Hz). Interestingly enough, this just happens to be the FCC limits on FM radio. The typical telephone has a frequency response of 400 Hz to 4 kHz. The human ear does not hear all frequencies at the same intensity. It's less

sensitive at both the lower and upper ends of the frequency spectrum, and this characteristic varies with both age and sex. The amount of sensitivity is also a function of sound pressure level. The greatest intensity variations occur at very low sound pressure levels. The curve is relatively flat at sound pressures of 90 dB or so (Fletcher-Munson). The decibel is used in acoustic measurements because the human ear responds to the intensity of sound in approximately a logarithmic manner.

Hertz (Hz)

A unit of measurement, previously referred to as cycles per second used to indicate the frequency of sound or electrical wave. A unit of motion referenced to a time period of one second. The frequency of a vibration or oscillation in units per second.

High Pass

All signals above a given crossover frequency.

High Z or High Impedance

Any resistance to AC voltage or current generally greater than 2,000 Ohms.

Hiss

Audio-frequency noise having subjective characteristics analogous to prolonged sibilant sounds.

House

In Sound Reinforcement parlance, “house” refers to the systems (and even persons) responsible for the primary sound reinforcement in a given hall, building, arena or “house.” Hence we have the house mixer or house engineer, the house mix, the house mix amps, the main house speakers and so on.

Hum

An electrical disturbance that can occur in sound equipment due to the frequency of the power distribution system or any number of its harmonics. Our power line frequency in the U.S. is 60 Hz. Hum can occur at 60 Hz, 120 Hz, 180 Hz, 240 Hz, etc.

I

IM (Intermodulation Distortion)

Nonlinear distortion characterized by the appearance of output frequencies equal to the sums and differences of

integral multiples of the input frequency components. For instance, an amplifier with high IM distortion amplifying two frequencies of 100 Hz and 2,000 Hz would also generate distortion components of 1,900 Hz and 2,100 Hz.

Impedance

The total opposition to alternating current flow presented by a circuit. The resistance to the flow of alternating current in an electrical circuit, generally categorized as either “high” or “low”, but always expressed in ohms. Commonly used to rate electrical input and output characteristics of components so that a proper “match” can be made when interconnecting two or more devices, such as a microphone, loudspeaker or amplifier.

Impedance Match

The condition in which the external impedance of a connected load is equal to the internal impedance of the source, thereby giving maximum transfer of energy from source to load, minimum reflection, and minimum distortion.

Impulse

A type of signal that switches on and off as opposed to remaining in a steady state like a continuous sine wave. Music is more impulsive in nature than it is steady state.

Inductance

That property of an electric circuit or of two neighboring circuits whereby an electromotive force is generated (by the process of electromagnetic induction) in one circuit by a change in itself or in the other.

Inductor

A coil of wire used to create an impedance whose reactive component is low, therefore offering low resistance at low frequencies and high resistance at high frequencies. An inductor passes low frequencies and attenuates or rolls off high frequencies.

Infinite Baffle

A baffle that effectively prevents all of the loudspeaker’s rear sound waves from interfering with its front waves.

Input Overload

Distortion produced by too strong a signal from the output of a microphone or other signal source connected to the input of a preamplifier.

Insertion Loss

A loss in gain of a system after a component has been added or inserted in the system, usually expressed in decibels.



EMMY WINNER SPOTLIGHT: MICK FOWLER CSI: LAS VEGAS

How long have you mixed CSI?

This is my eighth season. I didn't mix the pilot but have done every season since.

Tell me a little about mixing CSI in general:

Since day one it has never been tough. There are usually no more than six people in a scene so that's pretty easy to deal with. The show is wireless heavy as there are lots of wide shots, walk and talks, that sort of thing, and the occasional noisy location but by and large this is the easiest show I've done both in terms of the job and the characters I interact with.

In what locations are you currently working? Night or day work on your show? Interior or exterior differences in how you work?

We usually work a 60% studio, 40% location schedule. Not so many nights as splits really. The latest call we've had in a while is 3pm. I use the same mics indoor as out. I adopt the KISS attitude as much as possible!

The usual sets at CSI and inherent obstacles such as reverb, noisy clothing, permanent lights and glass reflections.

Of course we deal with these things just like any other show. Sometimes I have to resort to wires on close-ups because of reflections, but it's rare. We work pretty closely

with wardrobe so problems are few and far between. The only items of clothing that still bug us after eight years are those nylon FBI / Forensics jackets that the actors love so much!

Dealing with the actors different voice levels...who's got strongest voices?

Billy Petersen and Robert David Hall have theater voices, robust and projective. The others are all good really, although Paul, Marg and Gary have their mumbling moments, but nothing we can't deal with.

Any stories about directors, producers, etc... that pertain to sound in a positive way? Their expectations?

After eight seasons the regular directors, ie those that are producers, leave us totally alone to deal with situations as and how we can. They think of this show as a well-oiled machine which it really is on all levels. No surprises, no complications. We've pretty much dealt with every sound

Continued on next page

***Pictured Above:
Mick Fowler, Brian Wholley & Kenny Mantlo***

Mick Fowler - Continued.

situation there is for TV. Vehicles, playback, playback with dialogue, odd frame rates, multiple cameras etc etc. The directors that guest on the show rarely even bother us. Tarantino was very considerate of our department in that he would do extra takes if there was even a hint of less than total adequacy. Same with William Friedkin. You'd think "old school" about him, but not true. Very savvy director and fun to work with. Although if your name is "Mo" you're going to be saying "what?" an awful lot!

Set politics to get good sound?

I yell a lot. Doesn't work though.

Any special effects that make it tougher to record sound?

None so far.

Your crew? Who does your 2nd units?

Double-ups are mixed by Kenny Mantlo my boomer. We then just hire two other boomers and a utility person. He's been doing it for a couple of years now and he's ready to move up. I'm spawning mixers! (Donavan Dear was my boom man before he started mixing CSI Miami)

Give us a general rundown of your sound package and be specific about any certain parts of it you want to highlight?

Again, KISS as much as possible. Deva 5, Deva 2, Cooper CS208, Marshall monitors, two Lectrosonics rack mount quad boxes with a mixture of 211s, 210s, 205s and 195s I'll be switching to the new Zaxcoms, probably before next season. I'm rigidly biased towards Neumanns. I use them exclusively. I keep a Schoeps for planting in cars and the like, but for indoors we use the KMr81i and the KMr82i for exteriors. Sanken lavs for most of the dialogue and Tram lavs for when we go to Vegas and I need a less sensitive mic to improve the background to dialogue ratio.

What would you add to your sound package someday (if anything)?

An integrated laptop backup system. I don't like many of the available ones for a variety of quibbles, but sooner or later I'll adopt one that's Mick friendly!

How much does your sound package differ from project to project (if at all)?

Not a bit.

What is your workflow from set through editorial?

Deva 5-DVD-transfers....then I lose sight of it!

Who is doing your post sound?

The Post Group for video, Zoic for visual effects and

Todd-AO for audio. The lab is Photo Kem.

At what rates do you record?

30fps nd, 48048khz sample rate, 24 bit BWF poly.

Any other awards or nominations you have received?

Nope, just the one, and this one is...just the one!

How long have you been mixing?

Including music in England about thirty-five years, but only twenty-one of those in film and TV.

Can you give me some highlights from your mixing career?

I did Unsolved Mysteries for six years. The DP was my best friend and a fellow musician and after a hard day in Memphis, (one man sound crews) we'd go down to the Rum Boogie café and jam blues with their incredible house band. We traveled all over the USA and went to Belgium (UFO Story), Hawaii, Guam and Saipan, (Amelia Earhardt Story) You'd need a separate publication for all the tales and anecdotes we amassed during that time.

Some series I worked on were more fun than others but by and large no real clunkers. My later career has been fairly mundane in terms of challenges, which is probably why I'm trying to become a director, but that's another story. It was the formative years in Miami that provided the challenges, anomalies and quirks. I mixed the Wild World of Women's Wrestling, Diane Bish at the organ of Miami Springs Presbyterian Church and throughout churches in Switzerland, The Gold Coast Symphony Orchestra with Soog Sook Lee (soprano), all to six tracks of video with no rehearsal! Sweat flew at that gig! 2Live Crew (in the fledgling days of rap) at the Miami arena. Lucky to get out alive!

I've mixed one season of many different shows but none that had the legs of CSI.

Other people who have influenced you?

I was inspired to become a film/TV mixer by working with Henry Lopez, a mixer in Miami. He and several local guys would hire me as a boom man and I progressed from there. Joe Foglia was a local Miami mixer when I was just starting out and he too was influential in my decision to give film and TV a try. Peter Devlin was also around at that time and his meteoric climb to his current lofty status was an inspiration to me. As well as all three gentlemen being good, solid guys. I saw Joe at the Emmys, (he won for Scrubs) but in the crush I didn't get chance to chat with him. Congrats, Joe!!

What future new technologies are you excited about?

The Zaxcom wireless that I mentioned before and some other Zaxcom products that I'll put to good use before

long. I'm not really into it as much as I used to be because I'd like to switch careers, but I don't see anything on the horizon that instigates fundamental change in the job we do. When it's all condensed it's your ears and mixing capabilities that count. The ability to mix to picture maintaining intelligibility and quality of sound is what's important to me. The method of delivering that mix to post is immaterial as long as everyone is communicating about frame rates, sampling rates, time code rates, hourly rates, (that just slipped in!) etc etc.

Film or HD? Is your camera fed by wireless or hard wire?

Film all the way, so no feed to camera or even video assist on our show. I've yet to do a job requiring HD audio expertise of which I have none, but I look forward to it.

What do you think about the 700 MHz auction and will it make your job more difficult?

So far no problems (I'm in block 21,) but when that time comes I hope to have the Zaxcoms in place, or be directing my first episode of CSI Honolulu! (tongue in cheek)

Of all your experiences, what has been your most memorable moment in your career?

I moved from Miami to LA in 1990 and worked steadily on TV movies, Hard Copy, (thank you Michael Jackson, OJ, and Menendez brothers for my health insurance hours!) ET, and that kind of thing, but I was out of work for nine months in 99/2000, about to pay the mortgage with a credit card when I was called in for an interview for a new show on CBS called CSI. Let your imagination run free from there about how I felt for my family.

What is one unique aspect of your style that you'd like people to notice?

I'm happy with the percentage of production dialogue that makes the final cut on CSI. My team is very proficient and I keep a mostly hands off work ethic with regard to how the shots are single or double-boomed, wired etc. I like to think that my interference ends at the back of the mixing panel. I occasionally stick my face in just to be a nuisance but my guys know what they're doing and for the most part I let them alone. I'm not sure that's anything that people would notice, but that's how it is. My mixing style is no different than that of any other episodic TV mixer. It ebbs and flows constantly as do we, so each day's work is a blessing. Now if those bloody writers would come to some agreement we could all get back to work!

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Emmy Winner Spotlight:

Steve Morantz

I started out as a production assistant on commercials in the late 90's and after a few years of seeing how each department ran, I gravitated towards sound and decided to make it my career.

I enrolled in Jim Tanenbaums' "Introduction to Sound" class at UCLA. I struggled for a while and then got into the low-budget feature world; eventually mixing films like "Thirteen" and commercials for the people I used to PA for.

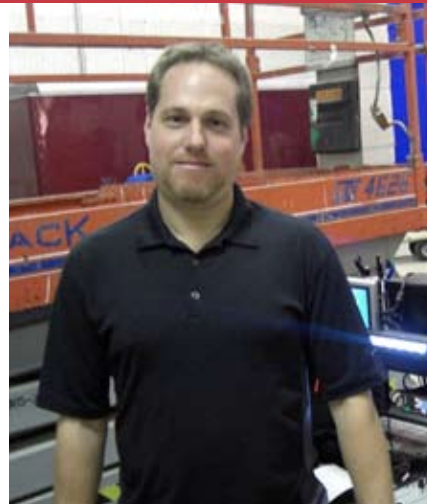
Along the way I have met a lot of sound mixers, Glen Berkovitz, Steve Weiss, David Kirschner, and Paul Marshall to name a few. I have built relationships with these people and from time to time I call upon them for guidance.

My work ethic and how I handle myself on set are among the most important things I've learned. If something goes wrong or a piece of equipment shuts down, I troubleshoot it quickly and always remain calm. Nine times out of ten you will remedy the situation quickly.

Some of the problems we as sound mixers face are multi-cameras shooting wide and tight, noisy locations, lighting setups and just general background noise. My motto is "I will ask for the world and if I get 75% of what I want I am generally happy". Know when to pick your battles and when you do, know how to approach the situation. I fight for what I believe is right.

The differences between mixing a show like "Entourage" and mixing "Samantha Who?" are vast. "Entourage" was filmed almost exclusively on location with very little stage work and Samantha is shot almost entirely on stage or the lot (CBS Radford) with very little location work. Being in a controlled environment we are able to boom almost everything with minimal wiring to be done (on "Entourage" everyone was wired). I am not afraid to wire when necessary or when might be necessary and I double-boom almost everything including off screen dialogue. We've had issues at times with the set lighting but my wonderful sound team, Aaron Wallace and Mitch Cohn go out there and fight to get their booms in. They also watch all rehearsals and setups so that *when* something changes they can address the situation and be ready.

Currently my sound cart consists of a Zaxcom Deva V as my primary recorder with either a Sound Devices 744T or a Fostex PD-4 (commercials) as my backup. I am using a Cooper 208D Mixing Console with a Lectrosonics Venue Receiver and a combination of SM and UM Transmitters. Sanken COS-11's are my lav of preference. I usually run a wireless boom but have started to switch to hard line in certain situations. My microphones of choice are the Schoeps MK-41 for close-ups and the Schoeps CMT-5 shotgun microphone for anything over 18 inches. I have a magliner cart and a standup cart, but



have not found the "perfect cart for me" just yet (not from lack of trying). In this day and age a mixer's sound package is all about preference and not price. If you own a Deva, Fostex or Metacorder recorder, a Cooper, Mackie or Yamaha mixer, none are the wrong choice. The best equipment won't do you any good unless you know how to use it. I am constantly trying new things and always find it to be a trial and error process.

On Samantha we are using the Genesis HD Camera, which are nice, but I still prefer the film format. We are not sending audio to the camera but we are sending a mono mix to the DIT (*editor's note: DIT stands for Digital Imaging Technician*) that is recorded on a side deck. We also send an audio feed that is sent out to the production offices and writer's offices that are always off when we are not rolling. We record audio at 29.97fps non-drop and jam the lock-it boxes to 23.98fps; sample rates are 48k, bwf polyphonic, FAT32. I am recording a 2 track mono mix with track 1 at -20DB and track 2 at -25DB but so far they have not gone to track 2 and I am thinking of abandoning it altogether.

I have great communication with our Post Production Producer, Chris Connolly, and have been told by the post-sound crew, sound editor, Trevor Jolly M.P.S.E and recording mixers, John W. Cook II and Peter Nusbaum, that they rarely go to the isolated tracks. I ISO track everything when I have more than one microphone out. I am a big believer in them and they definitely come in handy. The post sound mix is being done over at BluWav Studios on the Universal Lot.

My experience on Samantha has been great. The cast and crew are wonderful. We just started doing music playback before every scene and everyone gets up and dances and it just puts everyone in a good mood.

Steve Morantz, CAS has found success early on in his television mixing career. After his first endeavor in the episodic television world mixing the HBO series "Entourage", Steve parlayed that into an Emmy Award and is currently mixing the ABC hit series "Samantha Who?" starring Christina Applegate.

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