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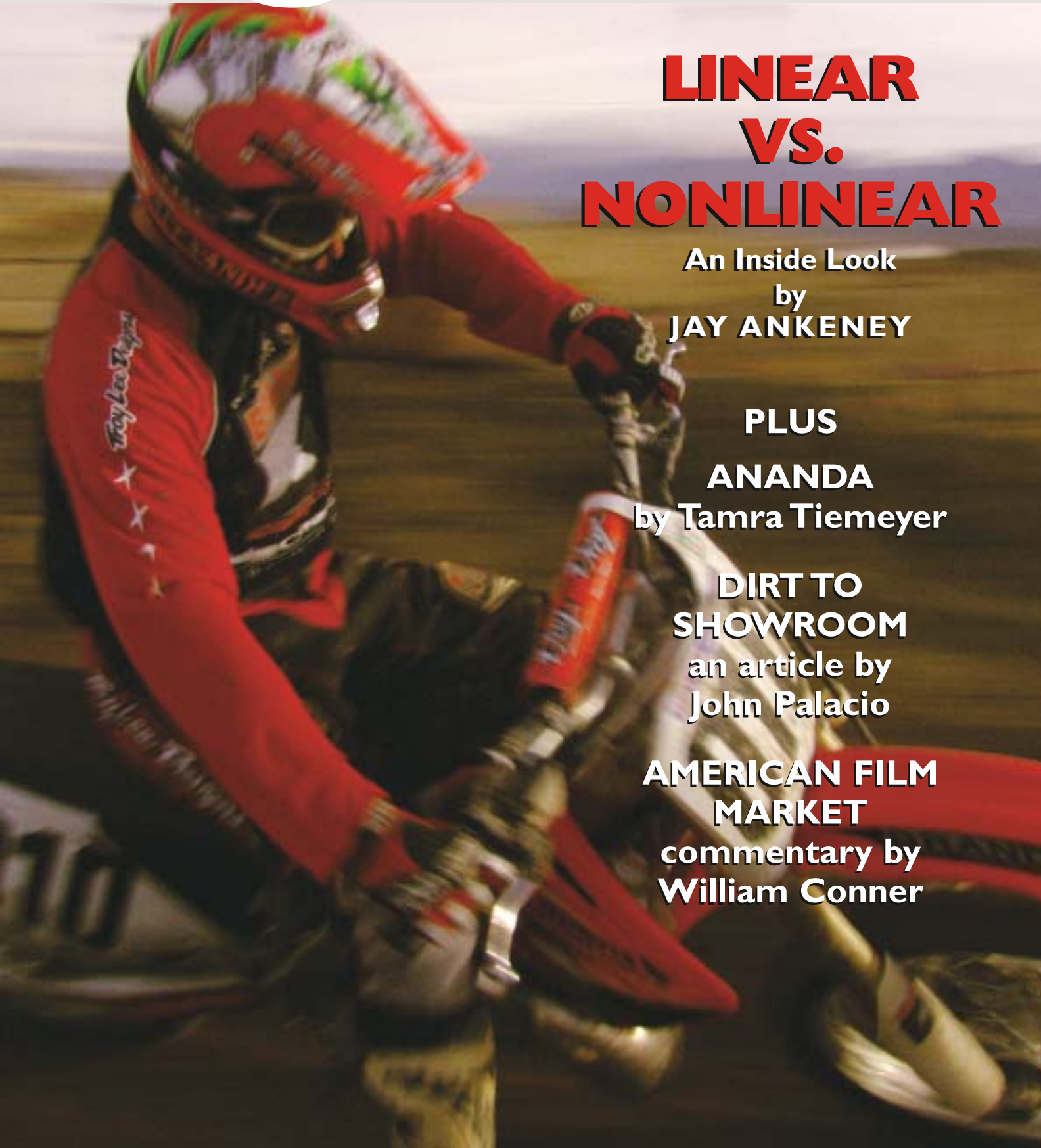
ON THE INSIDE

The Latest in HD News including Sean Fairburn's

HD TIPS



LINEAR VS. NONLINEAR

An Inside Look by JAY ANKENEY

PLUS

ANANDA by Tamra Tiemeyer

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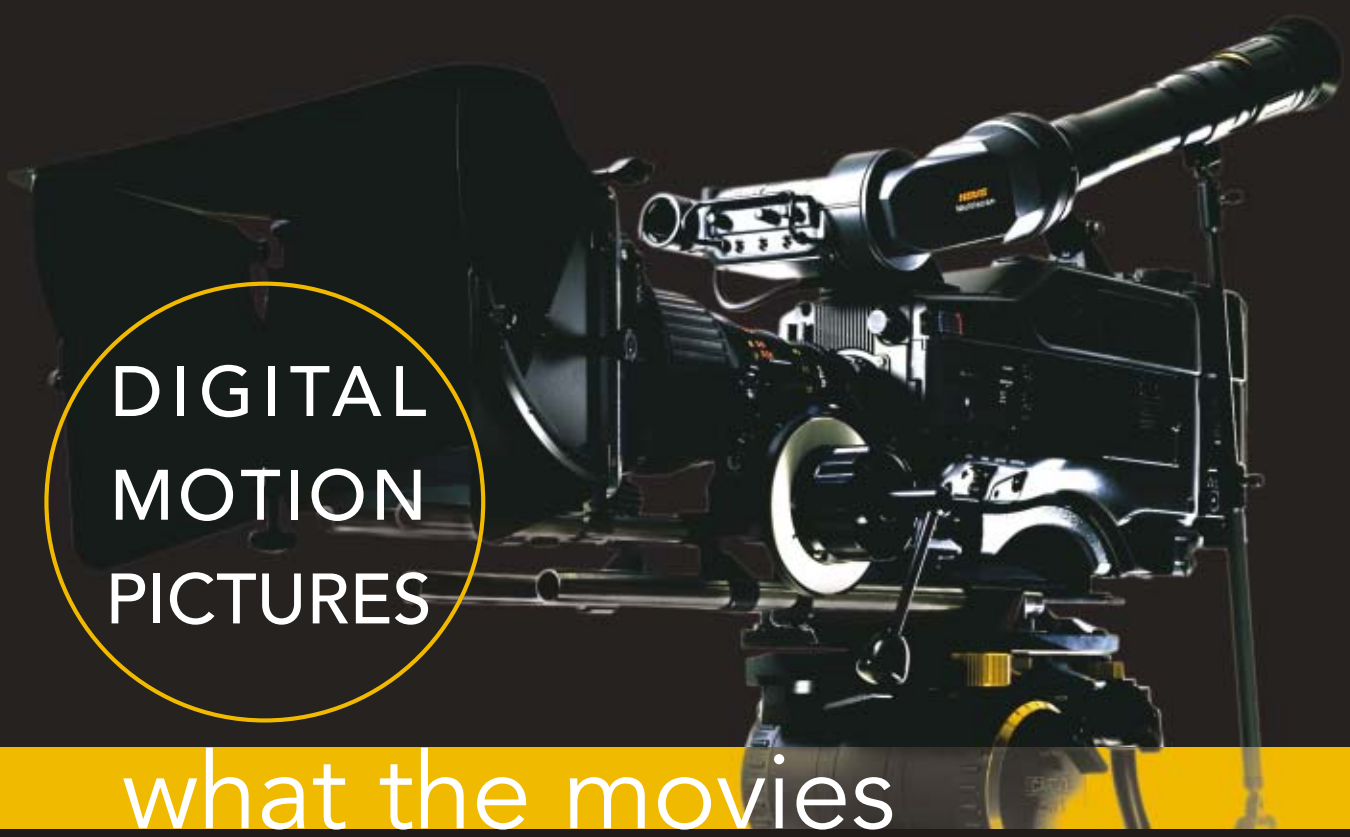

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Vol.5, Issue 2, HighDef Magazine is published by American Press Services, 2247 15th Avenue West, Seattle, WA 98119. PUBLISHER: Conrad W. Denke EDITOR: David W. Thompson CREATIVE DIRECTOR: David Willardson/Willardson & Associates DESIGN DIRECTOR: Roger Carpenter PRODUCTION: Gina Griffin Hanzsek. DISPLAY ADVERTISING: Call David Thompson at 1-888-282-1776 or e-mail David@VictoryStudios.com. Deadline for advertising confirmation and mechanicals is fifteen (15) days prior to publication date. HighDef Magazine is distributed to professionals in all areas of video and film production nationally and is also available on the web site: www.HighDef.com. HighDef Magazine is printed by Olympus Press, Seattle, WA. For information call 206-242-2700 or visit www.olypress.com.

IN MEMORIUM

Panasonic Broadcast & Television Systems Company announced the death of J. Michael Brinkman, its Vice President of Strategic Business Development. Mr. Brinkman died Sunday, March 16 in Santa Clarita, CA. Michael was a dedicated, talented executive who was a powerful pioneer in Highdef technology. We will miss him.

MASTERS SWING 'LARGEST HDTV PRODUCTION EVER'

The Augusta National Golf Club and CBS Sports are bringing the 2003 Masters Tournament to viewers in HD, April 10-13. The production will use 42 HD cameras and 10 hand-held 16: 9 SD cameras, in what CBS Sports is touting as "the largest HDTV production ever." Produced in 1080i and downconverted for the networks' analog broadcast, the 2003 event marks a return to HD coverage of the Masters for the first time since 2000, when it was the first golf tournament presented live in HD on network television.

SONY INTRODUCES LOW COST HDCAM PLAYBACK

Sony Electronics is now offering two cost-effective HD multi-players that offer excellent image quality in a small footprint. The J-H1 is a compact player that plays back material recorded at 1080 29.97PsF/59.94i and 25PsF/50i modes, and is listed at $12,200. The J-H3 will play back HDCam material recorded at 1080/23.98 and 24P, and has a list price of $22,000. these decks will provide lower cost playback for production and trade shows, and for feeding servers and non-linear editing systems.

VICTORY STUDIOS AND POST SOLUTIONS

In Los Angeles Victory Studios office and Post Solutions announced that they will be taking up housing together. Victory LA will be moving within the next three months to Post Solutions building at 10200 Riverside Drive in Toluca Lake near the major studios in Burbank and Universal City. "By combining the power of linear and non-linear HD in the same facility, the two companies will better be able to service the diverse needs of clientele in the expanding Highdef arena," said Victory CEO Conrad Denke. This will have no effect on Victory Studios in Seattle, and Victory Studios and Post Solutions will still keep their separate identities.

PANASONIC HD VTR EXPANDS TO TWO HOUR CAPACITY

At NAB 2003, Panasonic will unveil their new AJ-HD1700, a DVCPRO HD extended-record (EX) format VTR ideal for mobile van, production studio and editing suites, delivering extended recording times, superior slow motion and low tape costs for Highdef program production. The VTR will record up to 126 minutes in 60 fields per second 1080 line interlace, or 60-fps 720 line progressive scan HD video on a single XL size cassette.

HDNET PRESENTS TENNIS CLASSIC

Sports is leading the way in HD broadcasting. And now even tennis is available in Highdef. HDNet, the all-high definition national television network, presented an HDTV broadcast of the Volvo Classic, from the St. Pete Times Forum in Tampa, Florida. The event featured professional tennis icons Tracy Austin, Jim Courier, John McEnroe, and Martina Navratilova, winners of more than 50 combined Grand Slam Titles. The program premiered March 8, 2003 at 8:00 p.m. ET / 5:00 p.m. PT.

FLETCHER CHICAGO ALLIES WITH CINEWORKS

Fletcher Chicago, a leading sales and rental facility for HD field acquisition and post production, has tapped Miami's Cineworks Digital Studios, Inc. as its new agent for the South Florida market. This new alliance further develops Fletcher's expanding nationwide network of HD partners. Other agents are located in Michigan, Ohio, Minnesota and Kansas. Cineworks Digital Studio, Inc. owned and operated by President Vincent Hogan, is a high-end telecine and post production facility along with its own in-house professional motion picture laboratory. It joins Fletcher in facilitating HD rentals.

CHARTER TO CARRY HDNET AND HDNET MOVIES

Charter Communications will be carrying two around-the-clock HD networks, HDNet and HDNet Movies. The first areas to be serviced will be University Park/Highland Park in Texas in the Dallas/Fort Worth area and Glendale/Burbank.

PANASONIC EXPANDS LCD MONITOR LINEUP

Panasonic is introducing two more LCD TFT monitors – a new 8.4" HD resolution field portable, and an economical 14" SD model for studio applications. The 8.4" diagonal BT-LH900 has 1024 x 768 XGA native resolution, brightness of 300cd/m2, 300:1 contrast ratio, and can display 1080/24psF, 1080i, 720p, 576i, 480p and 480i. It weights about 5.5 pounds.

CNN SELECTS FUJINON LENSES IN HD UPGRADE

CNN purchased 26 Highdef lenses for its broadcast facilities in New York City and Washington, D.C. The lenses are being used on *American Morning with Paula Zahn*, *Connie Chung Tonight*, *The Capital Gang*, *Inside Politics with Judy Woodruff*, and others. The lenses will be used with Sony HDC-950 HD cameras in this major upgrade to Highdef for CNN.

NCTA TO FEATURE HD IN 2003

The National Cable and Telecommunications Association (NCTA) will showcase what's hot in HDTV at its 52nd annual convention, June 8-11 in Chicago. Cable, which is slowly increasing its HD programming, is working to build DTV support after the recently announced "plug and play" DTV transition agreements between cable operators and CE manufacturers. The HD pavilion at the event will feature HDTV sets and programming and demonstrations of HD equipment including integrated set-top boxes, point of deployment modules and other DTV products.

SONY TO INTRODUCE NEW CAMERAS AT NAB

Sony Electronics is expanding the family of CineAlta cinematic capture and production equipment. A new camera, the HDC-F950 captures a full 1920(H) x 1080(V) digitally sampled image. This image is output as uncompressed 4: 4:4 digital RGB high-definition video for direct connection via dual HD-SDI to Sony's new family of HDCAM SR recorders or third-party hard disk recorders. On the other end, Sony is also introducing a less expensive line of HD cameras. All will be shown at NAB.

Linear vs. Nonlinear Finishing

by Jay Ankeney

Scene from the documentary, "A Day in the Dirt" posted on a linear HD system.

Just as in life there is a time for every season, in today's world of high definition mastering there is a tool for every purpose. Yet increasingly the excitement over the new nonlinear HD finishing systems has led some post houses to reject the value of tape-based linear procedures without considering their advantages. Is this hype? Hope? Or heresy?

One of the mid-Atlantic's most extensive high definition facilities, Henninger Media Services, is finding that in addition to offering Avid|DS HD nonlinear mastering capability there is still plenty of call for their traditional linear suites featuring both Sony BVE-9100 and CMX Omni edit controllers. "There really are some projects best suited for disk-based mastering and still others that are best finished with linear technology using

One of two High Definition suites at Henninger's Arlington, VA facility, featuring a 103" front projection screen.

the first generation tapes," says Henninger's CTO, Steve Wiedemann. "Short projects with a lot of compositing can take advantage of the NLE's speed, but long-form productions with a good clean EDL can be assembled faster in the linear bays."

Wiedemann admits it is kind of an east coast/west coast phenomenon with a higher percentage of documentary style productions being posted in the Washington, D. C. area than would be seen out in Hollywood. "Trying to store massive amounts of footage in limited disk storage ties up the whole edit system while the producers scratch their heads over creative decisions," he explains. "That has taught us to often rely on our clients' relationship with our editors to decide which technology to utilize when mastering their productions. Most of our staff editors are 'ambidextrous' as it were, and we've learned that the trust the editors have developed with producers often puts them in the best position to recommend whether a project should be cut with a linear or nonlinear approach."

Deep in the heart of Dallas, Texas, editor Tim Werner is a senior editor at Greene HD using an HDBoxx, a Windows 2000 NLE running insync's Speed Razor software, for many of his high definition projects. But he also recommends the advantage of linear finishing directly from tape for its ability to color correct on the fly. "It's very, very fast," he recalls, "and much faster than the current state of desktop PC systems. Hopefully, when 64-bit technology is introduced the NLE systems will get a significant speed boost, and we should see a lot about that at this year's NAB."

But Werner accepts that as long as tape is the acquisition medium of choice, disk editing will always have the drawback of needing to digitize the source material before you can begin work. "With VTR playback you can just slap up the tapes and rip and roar ahead with the editing," he muses, citing an experience he had as online editor for the kidvid show, "Wishbone" for Lyrick Studios. The program was completed but had to be re-versioned for overseas distribution. "It would have been a wasteful exercise to feed the master onto multiple terabytes of disk space," he says. "But in a tape bay I could insert the necessary changes during linear mastering by altering only the relevant elements. It saved a great deal of time."

With facilities in both Seattle and Los Angeles, Victory Studios has been a strong advocate of HD finishing in whatever fashion its clients demand. Conrad Denke, CEO of Victory Studios, says the choice between linear and nonlinear systems depends on how many changes might be needed during a production's assembly. "We recently finished a documentary called '*A Day in the Dirt*' produced by Kenny Alexander about motorcycle stunt men," Denke

tells us. "Since we had to access a quagmire of footage in every imaginable digital format, the project would have clogged most disk editing systems. So after offlining it on an NLE, we finished the project in our linear room. Even the inevitable last minute tweaks turned out to be easier on tape since it gave us direct access to the original material."

Denke's experience has also taught him that hard drives can be skittish. "Disks have been known to crash at the worst time," he asserts. "So even today a system playing from tape can sometimes provide greater safety. But I'm sure that in the near future we will see a hybrid of the two approaches that will give us the best of both worlds."

Post Solutions, Inc. a Toluca Lake facility near Burbank, CA, is actually in the process of installing a new linear HD mastering bay built around a BVE-9100 edit controller to compliment their Avid DS nonlinear finishing system.

"Our clients who shoot their productions in continuity will simply be more comfortable in a linear edit suite," the CEO of Post Solutions, Newt Bellis, tells us. "And this new tape-based bay will be invaluable if a solid offline EDL has been created, or when there are only minor changes needed to get a master ready for approval."

High Definition linear edit suite, Edit Z, located within Seattle's Victory Studios.

Post Solution's President and COO Hope Schenk adds, "It ultimately turns into a time factor that impacts both budgets and schedules. Rather than spending hours loading material onto disk, in some cases it is much quicker to build composites and perform color correction directly from the original tapes. Or, if you just have to add an ID logo to an existing tape it is obviously much more efficient to hop into a linear suite than tie up a whole NLE."

As pioneers in HD mastering for episodic television and feature films, Hollywood's Laser Pacific Media is on the forefront of finishing with its unique online SuperComputer Assembly process as part of its Emmy Award-winning Electronic Laboratory services. Emory Cohen, President and COO of Laser Pacific Media, explains that the dichotomy between linear and nonlinear approaches is only relevant during the final finishing process. "After all," he begins, "assuming that a show starts off in film the telecine is all linear, duplication and dubbing is usually linear, and the timing and color correction proceeds in a linear workflow even if we are playing back from disk. So when people talk about linear vs. nonlinear they are usually only referring to one step in the chain--the creation of the delivery master."

Built on an IBM PVS ("Power Visualization System") platform, Laser Pacific's SuperComputer Assembly process has combined the benefits of disk and tape for finishing ever since it was introduced a decade ago. "Because of the huge bandwidth of the system, we can capture four video streams simultaneously onto disk," Cohen describes, "and then output off the disks often back to tape. Then we might go into a linear bay to either make changes or drop in effects and titles. So we are drawing on the best of both worlds."

Laser Pacific Media's philosophy is to choose the procedure that best suits the task, regardless of its label. "I think the danger in many people's concepts is that if you are not nonlinear you are considered old fashioned," Cohen says. "The winners are the facilities that can pick the proper technology to fit the task. This is a terribly competitive business under constant time pressure so I'd never tell anyone that the way we do things here is the right way for everyone. But it has worked well for us."

So even as we see capabilities of nonlinear HD finishing systems make quantum leaps on an annual basis, many post houses are still finding that linear mastering processes offer unique benefits to solve the needs of digital productions. There's a time for disk and a time for tape, and the successful mastering facility will know when to choose the most appropriate technology. HD

ANANDA

VINTON STUDIOS'

By Tamra Tiemeyer

Tamra Tiemeyer is pursuing freelance writing and production work from Portland, OR after 10 years with Fletcher Chicago and Kurtis Productions in Chicago, IL. tamra@highstream.net.

Ten commercial directors from around the world have been given the single concept "JOY", a timeline, and a Sony F900 24P camera package. Working within these parameters, each director receives complete artistic freedom to create an HD digitally captured short totaling four minutes or less. Sponsored by Young and Rubicam Advertising and Sony Electronics, Inc., "Joy" follows the celebrated *Dreams* project, presented by the same joint venture in 2002. Conceived by Ken Yagoda, managing partner/director of broadcast production for Young and Rubicam, Yagoda's ambition for *Dreams* and "Joy" is to put Sony's 24P HD camera technology in the hands of artists, shifting the ongoing technical discussion to a creative one. *Dreams* participant, director Clay Williams, commented on the incredible care and dedication that went into the first series of shorts, "I was really blown away by the amount of effort, energy, expense and time that people obviously put into this project."

This couldn't prove truer for this year's "Joy" contributor Vinton Studios. Specializing in dimensional animation, their entry will be the first of its kind, combining live action, stop motion, cel, and computer-generated animation. Their four-minute piece translates into almost 6000 meticulously designed frames, each a vivid collage of individually created elements. It would be hard to find a production company better suited to the task than Vinton Studios. As one of the largest suppliers of animated television spots in the world, they have produced over 1.5 million frames of animation in the last two years alone.

Celebrating their 27th anniversary, Vinton Studios' pioneering spirit and creativity continues to win industry recognition. From founder Will Vinton's 1974 Oscar for *Closed Mondays*, the studio has gone on to win six prime time Emmys and numerous Clios. "Claymation" and "Foamation," both registered trademarks of Vinton Studios, are the techniques behind such memorable Vinton creations as the California Raisins and the cast of the first prime-time stop-motion series *The PJs*. Complimenting their stop-motion tradition, Vinton's computer generated work led to the six-year old M&M commercial campaign with BBDO/NY. With the addition of Celluloid Studios, acquired in 2002, Vinton adds the expertise of cel animators responsible for such icons

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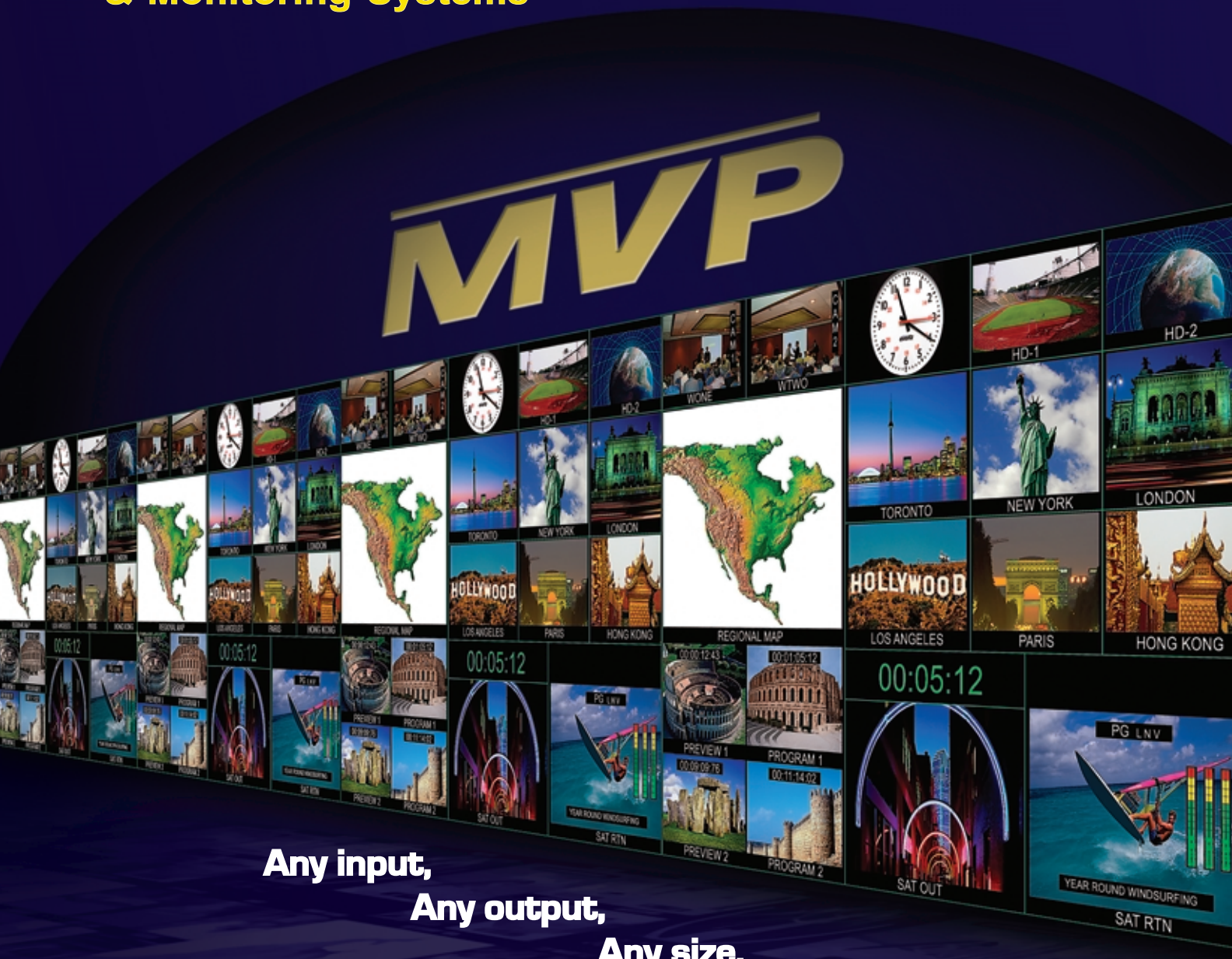

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as Tony the Tiger and the Keebler Elves.

It is this rich combination of dimensional animation that is the creative force behind Vinton's short titled "Ananda." With more than 20 years experience directing international animated commercials, project Creator/Creative Director Mike Smith is undaunted by the challenge, "There are all these different talents at Vinton and this is an opportunity to find out how we can all work together while trying something different and breaking new ground." Project Manager Nick Childs agrees, "We'll look back on this and know we really raced the calendar to freely create something that shows our different styles and techniques which is something we don't get the opportunity to do very often." In addition to testing their creative boundaries, this will be Vinton Studios' first experience working exclusively with HDCAM using a Sony F900 camera package supplied by Fletcher Chicago, Inc.

Mike Shearon, head of engineering at Fletcher Chicago, traveled to the studio's Portland, OR location to provide hands on training and advice. Shearon's early recommendation was to use the Sony F500 deck as the record and transport mechanism as opposed to the camera. On a good day, a stop-motion DP may record six seconds, or about 150 frames of content, sometimes taking as long as 15 minutes between frames. The F500 provided the reliability needed in this setting, not to mention saving the camera heads hours of use. An Evertz F9-2410MD adapter provided the HD-SDI feed to the F500 deck as well as the down-converted feed to an animation station that digitally grabs frames, allowing for instant playback, referencing, and viewing of real time motion effects. In comparison, Vintons' 35mm Mitchell cameras require a video feed from a camera positioned to the side of the lens, rather than the through the lens capture and output that the F900 offers. Toby Ethridge, Stage Manager, explains how the F900 interfaces with their system, "The video output runs to our video animation station, which is doing frame grabs and playback at 24 frames. Nothing has really changed in terms of how it's fallen into use by the animator. He's relying on the same software and referencing that we've always utilized. It has integrated with our system fairly well."

To see the F900 at work, Etheridge leads a tour of the stage in search of DP John Ashley and animator Chris Calvi. Walls of black drapes create dark tunnels that weave between miniaturized sound stages. The smaller scale sets require equally small lighting instruments. Mole Minis, Kino Flos, speed rail and pipe clamps crowd each space, Ethridge remembers using 1500 pipe clamps during the filming of The PJs.

Around every turn, intimidating signs warn of live sets where animators are shaping life into characters. One wrong step could result in days of wasted work.

DP John Ashley is making lighting adjustments to a set, checking the frame through the Fujinon HA13x4.5 cine-style super wide angle zoom lens. The lens has proven to be a versatile choice for both live action and stop motion set-ups. Diopters provided the increased close focus needed for tight shots and adjustments to the back focus, an F2 aperture and partial lens filtering achieved the depth of field affect Ashley desired. Animator Chris Calvi has found the increased depth of field to be an advantage, resulting in fewer lights for his set-up. In addition, judging motion effects during playback is easier with the F900 when compared to the offset video image provided during a film shoot. Calvi states, "What I see is what I get which is such an improvement over having a camera off to the side." Calvi admits he's sleeping better knowing there is no film to be processed.

Ethridge commented on the advantages of HDCAM for live action sequences, "One of the good things about it is that it's essentially video and doesn't feel as precious as film. We were able to get opportunity shots, picking up background plates and elements easily, in a way we couldn't necessarily have done with a film camera. There's a real versatility, you can set-up and shoot very quickly with it and we had to be quick because we had a very short schedule. The color saturation is really nice, especially when you can view it out on the set."

Mike Smith's artistic vision for *Ananda*, Sanskrit for "Joy", is to present a Bollywood kitsch feel with a theatrical flavor rather than a realistic look. This approach has presented creative opportunities for Effects Designer Mike Ciacciarelli of Optimus, serving as a lead compositor for "Ananda." Ciacciarelli states, "This project has been unique for me because of its scale as well as the depth of imagery involved. Each shot that I've worked on so far has been manipulated in so many extraordinary ways and the results have been very rich." Ciacciarelli is working with Inferno version 4.7.2IR2 on an Onyx2, while additional assistance is completed on a Flame on Octane, a Flame on Octane2 and a Quantel EQ. In all, seven compositors are contributing to the final cut including Tom Burney and Rex Carter at Vinton Studios and Michael Nicholas at Downstream Digital, Portland, OR. Final online assembly will take place at Optimus in Chicago and will be split between an Avid HD DS and a Discreet Fire. HD

Do Over: Choosing Film for Creativity on a Budget

By David Heuring

Pat (Josh Wise), Isabelle (Natasha Melnick) and Joel (Penn Badgley) at the movies.

Time and budget pressures often work against creating a fresh look for television series. The makers of *Do Over* (formerly on the WB) found a way to beat the system—creating innovative, eye-grabbing visuals without busting the budget by shooting their series in the Super 16 mm format with a single camera.

The *Do Over* pilot was shot in 24P digital format. "Our experience on the pilot was that the 24P took longer to light," producer Mark Ovitz explains. "We had to take a little more time with hair and makeup. We also wanted the additional flexibility that comes with the 16 mm camera."

The decision to use Super 16 was made in collaboration with series cinematographer Paul Maibaum (*Weird Science, The Invisible Man*). "I'm happy behind any image capture device, but until technology catches up with people's imaginations, it slows you down," says Maibaum. "24P works for certain situations, but as far as image quality, for now it's still playing catch-up. In postproduction, film gives you a tremendous ability to manipulate the image because you're retaining all that information. Improved TV distribution systems like HDTV will make that even more apparent."

Maibaum took advantage of the improvements in film stocks and the physical freedom afforded by the small 16 mm camera. He says once writers saw the adventurous shots that were possible, they wrote them in. "I wanted to free the show from a proscenium, and put the camera in places where you can't put it with multi-camera or tape shoots," he says.

"Mark and I agreed that to make it work, we would do the show with no overtime," says Maibaum. "My side of the deal was that we would shoot Super 16, and always have a Steadicam and remote head and crane package available."

Ovitz concludes, "We've proven that you can produce a quality show on budget." HD

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hd tips

by B. SEAN FAIRBURN SOC

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Tech Prep Q's for HD Shoot

Early in the prep of any job, some questions must be addressed that set the course the job will follow. These are some considerations that must have answers before shooting begins:

1) Where is the show going once done? TV, Feature, DVD, Internet, Interactive CD Rom.
2) What Frame rate will you shoot? 1080 is not an answer. 23.98Psf, 25Psf, 29.97Psf, or interlace 50i, 59.94i. All are available on the F-900.
3) What Aspect Ratio will you compose for? HD IS 16x9 (1.78), or will you need the program in 1.85, 2.35, 4x3, or 16x9 letterboxed to 4x3.
4) What safe area will you use in the viewfinder and through post? 90%, 95%, 92.5%, 80% or a custom size.
5) Will you record sound on the camera as it's shot and/or record separately?
6) What timecode method will you use? Free run time of day (TOD) or Record Run? Free run TOD is broken code, Record run Hour # = Tape #. If you are using Record Run, at Tape # 21, it's advisable to roll the TC back to hour "1" keeping tapes in 20 tape blocks.
7) What is the route for the footage you will take through post? Downconverts to Digibeta, DVCam or some other format for AVID offline then Online in HD? How will you handle audio in post?
8) How do you intend to move the camera? Dolly, Boom, Ped, Sticks, Geared Head, Fluid Head, SteadiCam, Handheld.
9) Are you shooting with Primes and Cinestyle Zooms or ENG style Lenses? Consider all accessories and setup time for both. I use Both whenever possible or practical.
10) How much work do you expect to do in Color Correction? Getting as close as possible to the intended look will only help, as long as you're all in agreement on the look.
11) How will you intend to Monitor the HD in the field/on set? In HD and or Downconverted. Will there be Video Playback? Size and proper viewing environment must be considered. 9 inch monitor for composition only, 24 inch for true tech look in dark.
12) Are you going to hire a DIT(Digital Imaging Technician) or are you going to fly the Plain? Getting an experienced Technician will help insure success.

Every show is different. This checklist is intended to open up the necessary dialog with those persons responsible for the successful production of the show. Understanding the ramifications to each decision will help guide you to the decision that's right for your show.

Here's an example of some choices I tend to usually make.

1) Feature, TV, or Commercial. I do a little of each.
2) 23.98Psf
3) 1.85 cut from 90% safe, 16x9 cut from 90% safe , Same as #1
4) 90% Safe Area, shoot frame chart so post knows your framing.
5) Sound on Camera and separately
6) Record Run Time Code, Tape 1 = Hour 1 TC
7) Downconvert to DVCAM to keep them from considering the option of onlining and color correcting straight off the DigiBetas. Of course, it's up to them.
8) All of the above. I also do lots of handheld.
9) All of the above the ENG style lenses are great for handheld.
10) You never get enough time in Color Correction, Do as much as possible in camera.
11) 24 inch HD on an HD Cart with a special HD Tent www.filmtools.com. Downconvert for video playback whenever possible "Don't use the HD camera."
12) Hire a DIT or learn to fly. I Learned to fly but I hire DIT's whenever possible.

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FLETCHER

Making of "Journey of Redemption"

by William Wheeler

Two renegade producers, Del Torrans and Mark Harwell, under the banner Texas 2 Star Productions, recently wrapped their feature debut *Journey of Redemption*. The movie was shot in 24P HDCam. Harwell wrote, directed and starred as well. The heartfelt drama also stars Brent Briscoe, Mark Fauser and Gary Grubbs. Highdef Magazine caught up with Harwell in Los Angeles, who is now looking for a distribution deal for the newly completed feature.

Q: How did this project come to life?

A: It came out of our desire to make movies that were character driven, with no explosives, nudity, and unnecessary violence. At the end of the day we wanted to expose the goodness in us all regardless of our flaws or defects.

Q: What led you to high definition?

A: I had experimented with several cameras but Del and I went into this project with the intention of selling it upon completion. We knew the odds....most independent films are never completed much less sold. With that in mind we considered the Sony 24p camera. Dave Trulli, a veteran Director of Photography and good friend, had worked with the 24p before. We got together to discuss my concerns of color and the fear of the "video look." He assured me I would be pleasantly surprised and boy was I ever! It was simply breathtaking. The movie has several panoramic shots of the ocean, sunrises and sunsets. The colors are fantastic.

Q: Was lighting for HD a concern?

A: No, we took advantage of available light and used a small supplemental package. The crew was experienced and moved quickly.

Q: How did you land such an experienced crew with your low budget?

A: Del and I started by setting up an office at CBS Radford Studios. We got a small bungalow and decorated it with leather couches, overstuffed chairs and weathered mahogany furniture. It had the

Producers Mark Harwell (l) and Del Torrans (r) oversee their feature debut "Journey of Redemption."

Starring from left to right.; Introducing Kyle Kearbey as "Hattie," Brent Briscoe as "Badge," Mark Harwell as "Cap," and Mark Fauser as "Doug."

warm feel of a gathering place. Then we invited friends we knew working in the business to drop by and visit. I pitched them the story and we signed them on one by one. It snowballed from there, one friend knew another friend and all the pieces fell into place. We were very lucky to have Katina Le Kerr as our costume designer. She had worked on numerous big budget films such as *Batman*, *Men In Black* and is currently working on *Spiderman II*. Our hair and makeup team was keyed by Elizabeth Mbousia. She had films such as *The World Is Not Enough* and *Laura Croft: Tomb Raider* under her belt. Patrick Decker, who has been in television twenty years, served as the executive producer's consultant. He helped broker stage rentals and shepherd the project. I could go on and on about our crew.

Q: What about your shooting schedule?

A: We shot it in three weeks. The amazing part was, we only exceeded twelve hours on two days of the entire shoot.

Q: How was the post-production process?

A: Victory Studios did all our transfers throughout the whole shoot. We gave them the HD tapes and they transferred them to Beta. We were lucky to get a great editor, Dan Schalk, who has worked on several studio projects, the latest, as the assistant editor on *Road To Perdition*. He worked from his home studio in Chicago while I was in LA. He would FedEx the tape to me and I would email the changes back to him. We did all our editing long distance.

Q: Would you shoot on 24p again and if so, why?

A: Absolutely. From beginning to end you have greater control. While shooting you're able to see the final product in the viewfinder rather than waiting for dailies. Because of the cost factor you're able to be more generous with your selection of shots and number of takes. In post you're better able to manipulate the colors without any loss of resolution. HD

For more information go to www.journeyofredemption.com

Highdef

Why Food Tastes Better in

by Marta O'Malley

For more information on "Chefs A'Field," see www.chefsafield.com

Chefs A'Field is the first American cooking program in high-definition for PBS. The series is produced by by Warner Hanson Television (WHTV) of Washington, DC through PBS station KCTS. Each episode starts with a well-known restaurant, travels to the field, and returns to the kitchen, where the ingredients are transformed into some of the most delectable dishes on the menus of America's finest restaurants.

"We were looking for a way to get people interested in farming, particularly the small, family farms that are vanishing at an alarming rate. By taking chefs out to fields, we bridge that gap between farm and market - hopefully making it easier for the viewer to identify where their food comes from," said Heidi Hanson, producer.

Chefs A'Field is shot in 1080i with Sony's HDW-700A. The producers did initial tests shooting 24p with the HDW- 900, but decided that the 700A offered the look they wanted. "At present, we really like the clarity of 1080i, especially in close-ups. 24p felt great, but lacked the crisp clean look we were going for," explained Executive Producer Chris Warner.

Chefs A'Field's Director of Photography is Tim Murray of Ventana Productions in Washington, DC. "At first I was a little too paranoid about overexposing and set up a battery powered monitor at every opportunity...but after shooting 13 episodes I can easily work without it. This camera is one of the most versatile and visually pleasing I've worked with."

Presently *Chefs A'Field* airs on roughly 160 PBS stations throughout the United States. An additional 150+ stations are scheduled to begin airing the series this spring and summer. The series has already received ratings of 2.8 in markets like Phoenix (PBS cooking programs average about 1.0), where the series was placed in evening/primetime slots.

Roger Downey from The Seattle Weekly recently stated: "The series, shot on high-definition, makes the food look so good you can almost smell it… until the first radish and rhubarb make their appearance in spring, stay your appetite with this show."

HD

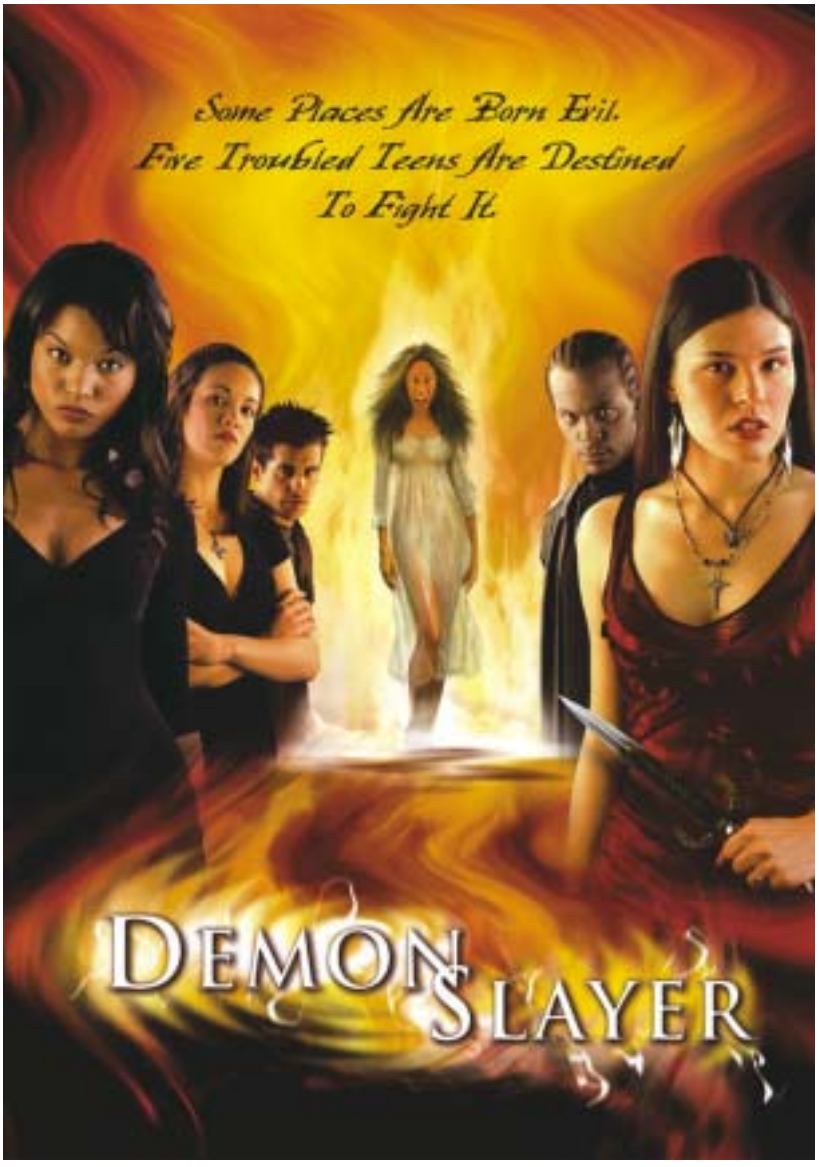
HD at American FILM MARKET 2003

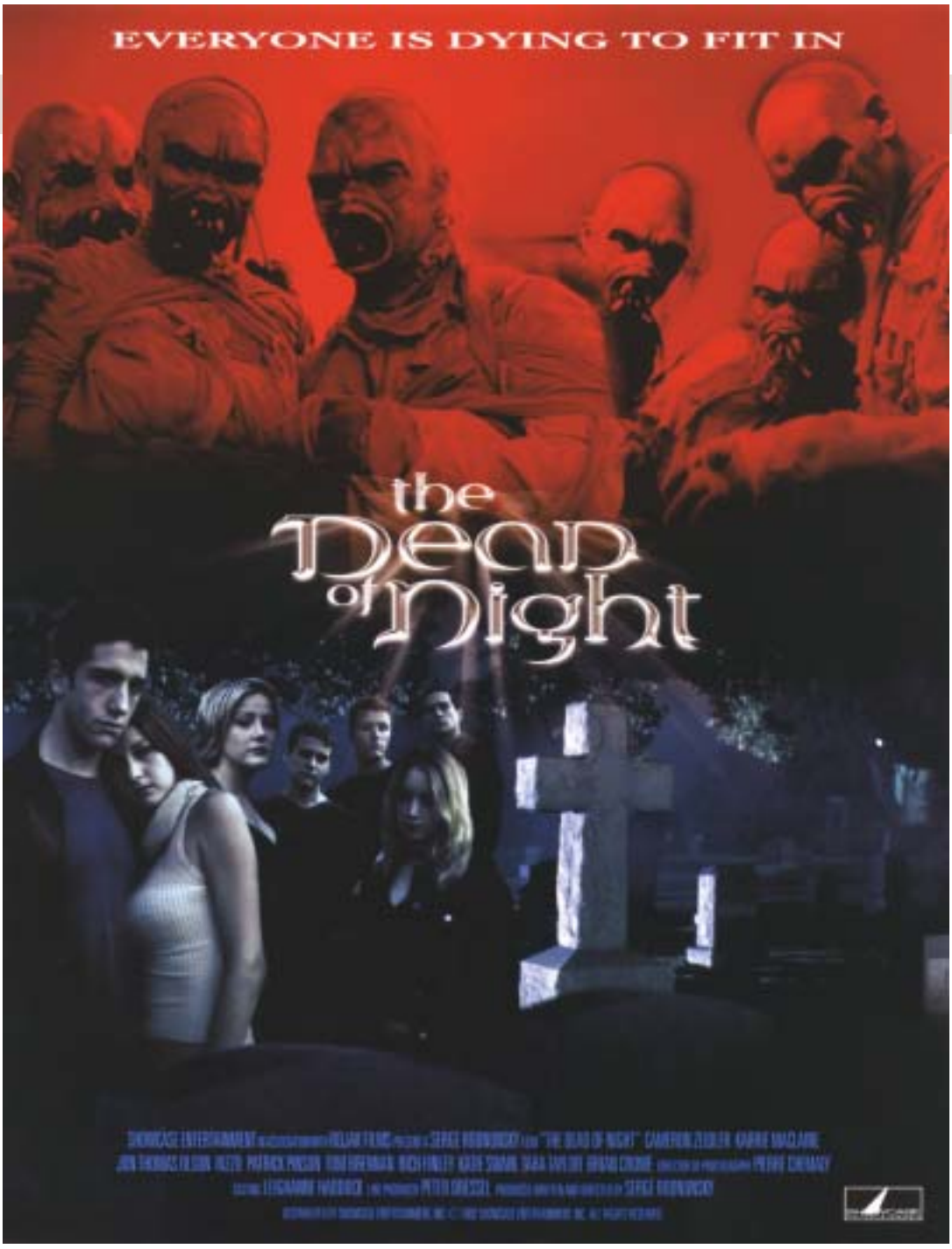
by WILLIAM CONNER

The 23nd annual American Film Market (AFM) took place February 19-26 in Santa Monica, California. Founded in 1981, AFM has about 7000 people attend from over 70 countries. One quiet significant change this year was a proliferation of films shot on HD. Most distributors I visited had one or more films shot and finished in HD. When asked why, one distributor said, "It looks great. Our buyers can't tell the difference between HD and film. And it saves a lot of money in production."

AFM has grown steadily over the last two decades to become the largest film market, generating more than $500 million in film production and distribution deals. All of Santa Monica's 23 screens held AFM screenings with more than 600 screenings of some 400 films. The majority of the films were world or U.S. premieres.

One of the HD films this year in Roger Corman's camp, New Concorde International, was *DemonSlayer*, produced under the auspices of the LA Film School. This was Corman's first feature film shot entirely on HD. The veteran filmmaker, known for starting the careers of such notables as Martin Scorsese, Francis Ford Coppola, James Cameron, Ron Howard and Jack Nicholson, jumped at the opportunity to work with new filmmakers who were trained on HD cameras. Through a program called 1st Chance Films, the Los Angeles Film School is teaming up with well known producers to make cost-effective movies using its state of the art facilities and its graduated pool of talent to fill department head titles (thus the name 1st Chance). One of the program's mission statements is to forward the use of HD technology. Despite its HD format, *Demon Slayer* has a look and feel of film. "With the amazing lens technology developed by Panavision and lighting techniques that convey a dark, spooky look, people walking out of our first screening thought that it was shot on film. And we didn't even have to put it through the "film look" process!" says





Diana Derycz-Kessler, CEO of the film school, and a producer of *Demon Slayer*.

Other HD films at AFM included *Crazy Jones*, produced by Joe Aaron and distributed by Harmony Gold. Other HD titles include *New Suit*, *Hunting of Man*, and *DOM* (York Entertainment). *New Suit* was produced by Trillion Entertainment. In addition to the many films with distribution, other producers were at AFM looking for distribution deals. One such film is *A Light in the Forest*, a fantasy family film about rediscovering the spirit of Christmas. This HD feature was executive produced by Echelon Entertainment.

Serge Rodnunsky, AFM veteran and producer of some 40 feature films, had one HD entry entitled: *The Dead of Night*. His company, "Rojak Films," produced the picture for distributor Showcase Entertainment. The film is of the Teen Horror genre. HD allowed him to keep the costs low and the look high quality. The film was shot in 11 days in 7 different locations. Serge used the Varicam Panasonic camera from Birns & Sawyer. He used a lot of KinoFlo lights which put out a great look, and make it possible for quick location changes

Marisa Coughlan plays Marianne Roxbury in "New Suit."

and set up. The movie was edited in Final Cut Pro. Serge is planning several HD features in the near future and will be using the format whenever he can.

In previous years, digital productions including HD were not encouraged at AFM. Unfortunately some distributors confused DV with HD early on and a stigma was created that digital was unacceptable to many foreign markets. Since the advent of blockbuster HD pictures like George Lucas' *Attack of the Clones* and Robert Rodriguez's *Spy Kids II*, the worldwide acceptance of HD as a production format has spread.

The 2003 American Film Market succeeded in broadening its industry base while still attending to the details of the business of film as the number of industry attendees soared 21% and buying companies rose just over 1% compared to the previous year, announced Jonathan Wolf, managing director of the AFM. A wide spectrum of exhibiting companies also reported sales as being strong.

Companies selling films at 2003 AFM indicated an overall upbeat market. Patrick Wachsberger, CEO of I.S. Distribution which includes Intermedia and Summit Ims, reported sales were "….very healthy. We've been extremely busy." Alliance Atlantis' Charlotte Mickie said, "We're thrilled. This year's AFM has been very good for us."

And along with the success of AFM comes the attendant success of HD as a viable acquisition format. More producers have access to lower cost production so that the quality of films will increase overall – with more of the budget being spent on content and not as much on the technical aspects. HD

Dirt to Showroom

by John Palacio

John A. Palacio is a freelance DIT, Colorist and Technical Coordinator working out of Los Angeles. He can be reached at (818) 231-8971.

Why would anyone intentionally place an HD camera in a shower of 2800 degree molten steel? I was asking myself this exact question standing next to said camera as red-orange embers were dancing on the dirt. I watched in awe as tons of orange steel was being poured and mixed into a cauldron of liquid steel that would eventually become the cars we drive, that is, if you buy American cars.

The fact that early HD cameras were not known for their ability to handle heat made this shoot one of the most memorable to date. The night prior I barely slept thinking about how I might save the tape if we had a meltdown. Of course extracting the tape back in the safety of the camera truck was plan B. The reality was that this was going to be a once in a lifetime opportunity to see American steel workers forge cars out of earth made the experience surreal.

As the DIT on this project I was a bit concerned about the heat of the furnace. The French DP was always telling me not to 'wervy', "ve'll talk about it tonight." But tonight was always forgotten. We acquired a piece of asbestos to protect the camera as I realized that the lens, which would have to be hanging out alone gathering light and heat, would act like a magnifying glass and focus all this raw energy onto that tiny 2/3 inch imager.

The siren wailed above as the 60-ton crane

was about to dump its cauldron of orange steel into the oxygen furnace. It was cold outside. The huge sliding door allowing the transport trains to come into and out of the building was as wide open as it could have been yet we were all sweating alongside the thundering sound and power of the furnace. I curiously noted that we were alone other than the guy in the bright foil fire suit, except he was close to a firewall in which he could hide behind if things got nasty (look closely at picture). 2800 degree molten steel cascading across our shot was anything but vicious.

We were prepped in the shortest safety meeting in the history of production; 'if it aint filthy, it's hot. It's pretty obvious what will hurt you here. Any questions? Good, follow me.' Kind of refreshing to know that common sense still exists in this country.

Take two. We let the camera continue to roll as I did not want to risk stopping and starting the tape as the siren cried out once more as the scrap metal was dumped, or better put, recycled, into the molten steel merging the two into steel juice that was poured into the trains below.

The rouge Steel Mill in Dearborn is just one of many stories we shot for an upcoming big screen project in which I was signed to secrecy.

Hell hath no furry as a woman scorned, and Sony has made the camera to capture it. Other than the asbestos curtain protecting the crew the camera showed little damage other than a warped lens shade.

Of course the answer to the above mentioned question of why would you put a camera in such a precarious place is quite obvious. It is a picture that is well worth a thousand words, or a thousand and eighty lines. HD

AVID'S NONLINEAR REVOLUTION IN HD

by Matt Allard

The dramatic advance of HD mastering in the postproduction industry over the last several years has sparked the creation of HD nonlinear editing systems, particularly Avid|DS HD, and has had an impact on the use of linear tape-based editing as the primary method of conforming and finishing projects.

In the absence of viable nonlinear HD editing systems in the late 1990's, HD linear suites provided a comfortable, time-tested environment where HD projects could be completed.

However, at the same time, editors working with standard-definition media were rapidly embracing the nonlinear revolution and becoming accustomed to the flexibility and creative freedom that are inherent in the kind of digital nonlinear workflows that Avid had pioneered.

Development of a nonlinear HD system required basic advances in computing technology. Storage capacities had to increase, and prices needed to drop, as HD projects contain four to six times more data than similar duration SD projects. Workstation and CPU performance needed to improve to provide the minimal requirement of single-stream HD playback. By NAB 1999, these critical advancements were becoming available and Avid demonstrated a nascent technology prototype of a nonlinear editing system that would eventually be launched as Avid|DS HD.

The delivery of Avid|DS HD to the market two years later meant HD editing could now begin taking hold with customers who had been waiting for the nonlinear environment. While HD nonlinear editing today doesn't match all the performance characteristics we have come to take for granted in SD nonlinear systems, the ability for an editor to make changes up to the last minute can justify time spent processing effects. In fact, Avid|DS HD systems offer background rendering stations—Avid|DS RP—so that the editing system is not tied up with rendering, and the editor can continue to work on different parts of the project.

This year, a number of prime time television shows are being mastered on Avid|DS HD, including NBC's *Crossing Jordan* and CBS' *Guardian*. The entire concept of digital intermediate workflows for effects and color grading for film output are the next technology frontier for nonlinear workflows. HD

"Ghost" The Variable-Speed

by BRIAN CALI

Howie Day shoots and stars in his first music video in High Definition.

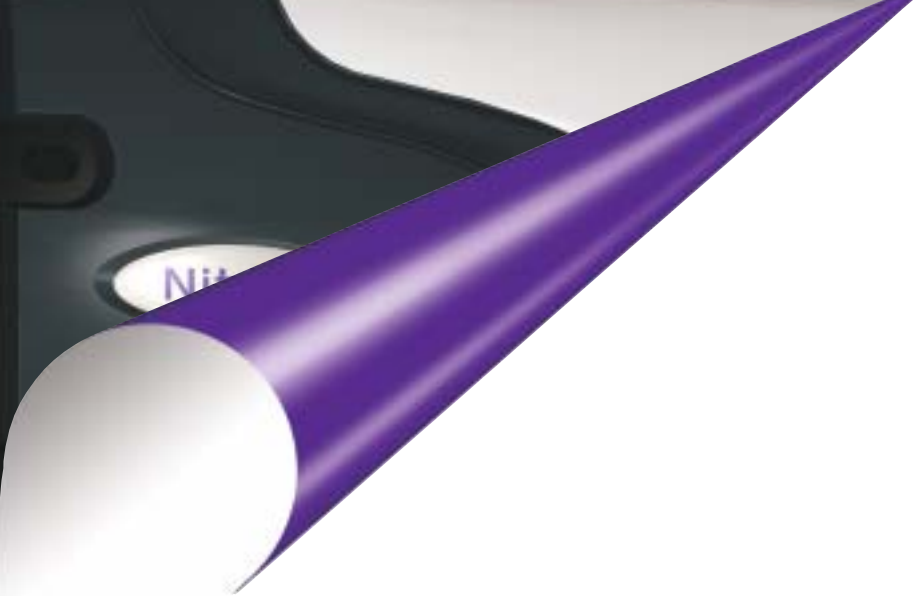
When San-Francisco-based The Orphanage, founded in 1999 by three visual effects veterans from Industrial Light + Magic, were handed the assignment to shoot up-and-coming Epic Records artist Howie Day's first music video, they chose the flexibility of Panasonic's AJ-HDC27 VariCam™ variable-frame-rate HD camera.

The music video of Day's single *Ghost*, was directed by Orphanage co-founder Scott Stewart, with technical oversight by a second co-founder, Stu Maschwitz; the cinematographer was Brian Agnew. The entire video was acquired off-speed on a 12-hour overnight shoot on location in Los Angeles. *Ghost* was shot making extensive use of 30- and 40-fps, as well as 60- and 4-fps.

"We position ourselves as a digital studio capable of taking original motion pictures from concept to distribution without traditional celluloid film, so naturally we were eager to use the VariCam," Stewart said. "Because of the extent of off-speed in music videos, it seemed a natural for the Howie Day project. We didn't want to acquire anything at 24p, and with the VariCam, we were able to shoot off-speed on a shot-by-shot basis and avoid jumping through a lot of hoops in post."

With its hushed guitar and brooding vocals, *Ghost* suggested the paintings of Edward Hopper to the production team, who were inspired to place the video in the iconic Johnnie's Diner, a setting familiar from several major features. Maschwitz noted, "We wanted to use a rich field of primary and secondary colors in bold contrast against one another. We were amazed at how beautiful the images looked on the set. Then, the images survived the all-important color-correction step to look even exponentially better in post."

Commenting on the economies of VariCam production, Stewart said, "Film costs would have skyrocketed, especially in view of the off-speed shooting. The 46-minute tape loads were a tremendous benefit, affording a lot more coverage for Howie's performance. I couldn't have run the camera as much with film. Howie became very comfortable on the set, and his resulting performance is emotional and strong." HD



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