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D E F I N I N G H I G H D E F I N I T I O N

## **THE EVOLUTION OF RED**

An Interview with Ted Schilowitz



**MARILYN,  
FOREVER BLONDE**  
by Karl Herrmann

**FILM COMMERCIALS  
TREND TOWARD 16X9**  
an article by Bob Fisher

**INHD'S MOJO**  
commentary by  
Ellen M. Cooper



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8

8

## FEATURE

**The Evolution of Red:  
An Interview with Ted Schilowitz**  
by Conrad Denke

14

**Going HD In The Womb!**  
by Dara Klatt

16

**HGTV HD Barkitecture**  
by Susan Robertson

18

**Marilyn, Forever Blonde**  
by Karl Herrmann, DOP

22

**HD Tips: Shooting HD on Location**  
by B. Sean Fairburn

23

**Dark Remains in HD**  
by Brian Avenet-Bradley

24

**HDTV Forum: HP Exits Projector Market**  
by Steve Sechrist

25

**Troika & Sunday Night Football**  
by Mark Bohman

26

**Film Commercials Trend Toward 16x9**  
by Bob Fisher

28

**Dismal in Virginia**  
by Brian Cali

29

**The Great Paris Flood**  
by Clint Stinchcomb

30

**HD Tech: Shooting HD with Post in Mind**  
by Lowell Kay

32

**INHD's MOJO**  
by Ellen M. Cooper

34

**Eyeplay Captures Living Legacy in HD**  
by Kevin P. Smith

36

**Horror Goes HD**  
by William Wheeler

38

**Capturing Grandeur**  
by David Heuring

18



26



32



34



Front Cover: Red One prototype courtesy of Red Digital Cinema.



**Reality check** - With 1080i, 720p, 24p and 25p capabilities, the HDX900 is perfect for long-form HD programming such as reality shows, documentaries, music videos, concerts, cable network shows and many more.



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# NEWS & PRODUCTS



## JVC GY-HD250U CAMCORDER

As part of its growing ProHD line, the GY-HD250U, a next generation full HD resolution camcorder is the first HDV model to offer studio capabilities, and features 720/60p capture and recording for electronic newsgathering. Responding to demand for an affordable studio-capable HD camera, JVC developed the extremely versatile and compact GY-HD250U to ease the transition from SD to HD allowing customers to utilize much of their existing infrastructure-including cabling-while providing robust performance in both standard and high definition. In addition to its studio capability, the GY-HD250U offers the comfort and stability of a shoulder-style camcorder with a full complement of features needed for Electronic News Gathering (ENG), and cinematography applications.



## HD ON A LAPTOP

AutumnWave, OnAir Solution's North American distributor announced The OnAir GT, s the first mobile device to allow consumers to receive high-definition and analog over-the-air and digital (QAM) and analog cable television broadcasts on laptops. The software package offers consumers novel and convenient options to access high-definition television, the most advanced option being that consumers can now potentially watch high-definition television wherever they are.

## KONA 3 FOR THE MEXICAN AMERICAN WAR

AJA Video's KONA 3 video capture card was used by Jim Lindsay Productions, Inc. on *The Mexican American War*, a two-hour televi-

sion special for The History Channel. The KONA 3 is AJA's top-of-the-line uncompressed capture card for SD, HD, and Dual Link 4:4:4 HD for PCI Express (PCIe) Apple G5 Power Macs and Mac Pro systems, and was an integral part of the film's Apple Final Cut Pro editing pipeline. The documentary is directed by Jim Lindsay and hosted by boxing legend Oscar De La Hoya. It premiered Friday, September 29th.

## BAND PRO HOSTS ONE WORLD ON HD '06

December 14, 2006 is the date for "One World on HD '06", Band Pro's annual open house dedicated to showcasing new HD technology. Industry professionals are invited to check out the next developments in High Definition and share ideas with leading artists, technicians and innovators in a casual atmosphere. Exhibiting their latest tools will be top equipment providers. Doors open from 1:00pm to 8:00pm. Band Pro's generous buffet and beverages will be served. The event is located at Band Pro Film & Digital, Inc., 3403 West Pacific Avenue, Burbank, CA. RSVP is requested by December 4, 2006. Call 818-841-9655 or email: [rsvp@bandpro.com](mailto:rsvp@bandpro.com).

## HD PERFORMANCES: NO ADDITIONAL CHARGE

iN DEMAND Networks, launched its *INHD Jukebox* on Comcast's signature ON DEMAND service. *INHD Jukebox* is the first free, all high-definition VOD offering featuring a selection of high-light concert performances from superstar musical artists. *INHD Jukebox* is a music-specific on-demand offering, broadcast in 1080i high definition and 5.1 Dolby Digital audio. Following a successful trial in Comcast's Richmond, VA, market, *INHD Jukebox* is now available to Comcast's Digital Cable customers nationwide as part of the company's industry-leading initiative offering more than 100 hours of high-definition video-on-demand (HD VOD) programs.

## WIDEVINE® AND IPTV

Widevine Technologies, provider of downloadable content protection, forensic watermarking and digital copy protection solutions, announced it has expanded its content security for SaskTel's HDTV over IP deployment, the first of its kind, available to SaskTel Max™ customers. SaskTel's new HDTV service is part of a complete broadcast

and VOD service offering comprised of 27 Max HD channels, one of the largest high definition line-ups available to IPTV subscribers anywhere.



## 0.75X WIDE CONVERTER FOR HVX200

16x9 Inc. has a cost-effective and convenient way to get wider angle images with the Panasonic HVX200 camera – the 0.75X Wide Converter. Using the 0.75X, operators can achieve a full 25% more extreme angle of view, with no sacrifice in zoom capability. Manufactured in Japan, the 16x9 Inc. 0.75X Wide Converter features a cutting-edge HD-quality design that employs four glass elements to reduce geometric distortion and improve off-axis performance, particularly chromatic aberrations and flatness of field.



## PANASONIC VARICAM SAMPLER DVD SHOWCASES HD CINEMA CAMERA'S EXTENSIVE COMMERCIAL WORK

Panasonic Broadcast announced the availability of a free DVD comprised of more than 25 commercial spots that highlight the commercial work shot with its Panasonic AJ-HDC27 VariCam® HD Cinema camera. The DVD is available free on-line at [www.panasonic.com/varicam](http://www.panasonic.com/varicam). The DVD includes a wide range of national and regional commercials for such leading brands as Izod, Converse, Wilson, PUMA, Subway, Sam Adams and Rocky Boots, as well as promos and public service announcements (PSAs), and alternative content. The work of prominent cinematographers such as Robert Primes, ACS, and Sion Michel, ACS are showcased.

## AVID ON-AIR GRAPHICS SYSTEMS THUNDER STATION

Avid Technology, Inc. is shipping the latest versions of its Avid(R) DekoCast(TM) and Thunder(R) on-air graphics systems. Version 4.0 of the DekoCast system offers powerful new configurations with enhanced high-definition (HD) and crawl capabilities; and version 7.0 of the Thunder system introduces a new HD configuration that combines the capabilities of a traditional video clip and still image store with advanced real-time DVE effects, on-board and remote database support, and graphics functionality. Avid also announced the immediate availability of its new Thunder Station system – an all-in-one news and graphics production package for broadcasters operating in small and mid-sized markets.



## CINEBAGS BACKPACK

CineBags, manufacture of professional motion picture and video equipment has released a new Camera backpack for the rest of us. Designed to accommodate the most popular HD/ DV video cameras such as Panasonics DVX100, HVX 200 and most Sony models, as well as SLR cameras, the new CB-20 HD/DV Backpack protects equipment on the beach, the mountain, your next outdoor adventure or sporting event.

## DIGITAL ANARCHY UPDATES RESIZER 2.1

Digital Anarchy has released ReSizer 2.1 update. ReSizer is a plug-in for high quality scaling of footage or up-converting Standard Definition (SD) to High Definition (HD). The plugin works in Adobe After Effects, Adobe Premiere Pro, and now natively in Apple's Final Cut Pro and Motion using Apple's FxPlug plugin architecture.

## HDTV ADOPTION BOOMING

USA Today says that about a sixth of all homes have at least one HDTV, up from 1-in-14 two years ago, according

to a Leightman Research Group study. But owners still average a household income of \$89,500 - 42% above the national average and unchanged in the last year, even as prices for plasma HDTVs fell 30%, and LCD models fell 15%.



## SKYNEWS9 W/ FUJINON HD ZOOM

Griffin Communications, L.L.C.'s Oklahoma City television station News 9 KWTV recently acquired a new state-of-the-art Bell 407 helicopter equipped with Fujinon's HA42x13.5BERD HDTV ENG-Style zoom lens. Mounted on the nose of this new helicopter called SKYNEWS9 HD, is a customized Flir Ultra Media HD camera enclosure, designed by Flir Systems, which houses a Sony HDC-F950 1080i HD ENG camera with the Fujinon HD zoom lens. "We chose Fujinon based on the positive experience we've had with our other 17 Fujinon SD ENG lenses, which are used daily in our news gathering operations," said Rob Krier, VP and GM for KWTV-TV.



## PIONEERING HD FOR NASHVILLE SYMPHONY

Noted producer/director Robert Swope brought the Nashville Symphony in clear focus and grand style during the historic PBS broadcast of the Schermerhorn Symphony Center's Gala Opening Night. Swope, President/CEO of Sunrise Entertainment, designed and built a completely remote High Definition aerial camera skate featuring a Sony HDC300 camera, Canon lens and 3-G

Wireless Systems transmitter to capture all the magical moments of the sold-out weekend celebration which aired September 9th, but was more than 2 years in the making. The hand made flying camera system, named the S-Cam, is controlled via a RF airplane controller from a remote location. A total of 18 cameras were used for the telecast, including 10 wired mini-medical cameras (only 12 exist worldwide). The program, titled "One Symphony Place: A World Premiere Live from Music City" is set to air nationwide on December 20<sup>th</sup>.

## NEW VERSION OF AVID STUDIO TOOLKIT

AVID released version 5.6 of Avid(R) Studio Toolkit, which delivers enhancements to a set of integrated, industry-leading software applications, including Avid 3D, Avid FX, and Avid DVD by Sonic(TM). Avid Studio Toolkit is the first multi-format solution for simultaneous DVD and Blu-ray Disc(TM) authoring, designed specifically for professional film and video editors looking to create and deliver projects in high-definition (HD).

## SONY LAUNCHES NEW HDV CAMCORDER

Sony added a new camcorder to its HDV product lineup, the HVR-V1U, featuring 24p progressive screen capture, and three of Sony's ClearVid CMOS Sensor chips combined with Sony's Enhanced Image Processor technology that uses a unique diamond-shaped design to provide greater sensitivity, higher resolution, lower noise and a wider dynamic range. The design consists of three 1/4-inch ClearVid CMOS sensor chips that capture images at native 24p, 30p or 60p at full 1080p resolution at reduced power consumption. The camera also introduces hard-disk recording to Sony's HDV camcorder line-up, using a recording unit that uses a 1.8-inch drive with a 60 GB capacity and offering up to 4.5 hours of recording time in either HDV or DVCAM/DV mode. The camcorder uses a Carl Zeiss Vario-Sonnar T lens with extra low dispersion glass and a 20x optical zoom lens with F2.8 at the telephoto end. Sony expects to begin shipping the HVR-V1U camcorder and an accompanying HVR-DR60 hard-disk recording unit in December at suggested list prices of \$4,800 and \$1,800 respectively. **HD**





# The Evolution of Red

## An Interview with Ted Schilowitz

by Conrad Denke

Ted Schilowitz' title is "Leader of the Rebellion" which gives you a glimpse at the approach Red is taking in developing a new camera for digital production. Jim Jannard, owner and founder of Oakley sunglasses is also the founder of RED. I connected with Ted after IBC this year to check on the progress of their ambitious project.

**CD:** Ted, what's your background?

**TS:** My background was production and post production for many years and I got into the tech side about six plus years ago in the early days of HD and then the last five years of my life were



Photo by Brian Ferguson

Ted Schilowitz introducing the 4k projection of Red footage at IBC.

with AJA Video Systems, doing desktop Mac stuff for them, being the conduit between AJA and Apple, working to bring Final Cut Pro to a new level of professional acceptance with the AJA Kona and Io hardware.

**CD:** How does Jim Jannard fit into the picture?

**TS:** Jim is the brainchild and vision behind the product. His passion is photography, both still and motion picture. You name the camera, he owns it. He was a very early adopter of digital stills and moved through the growing pains to its full blossoming which has overtaken anything



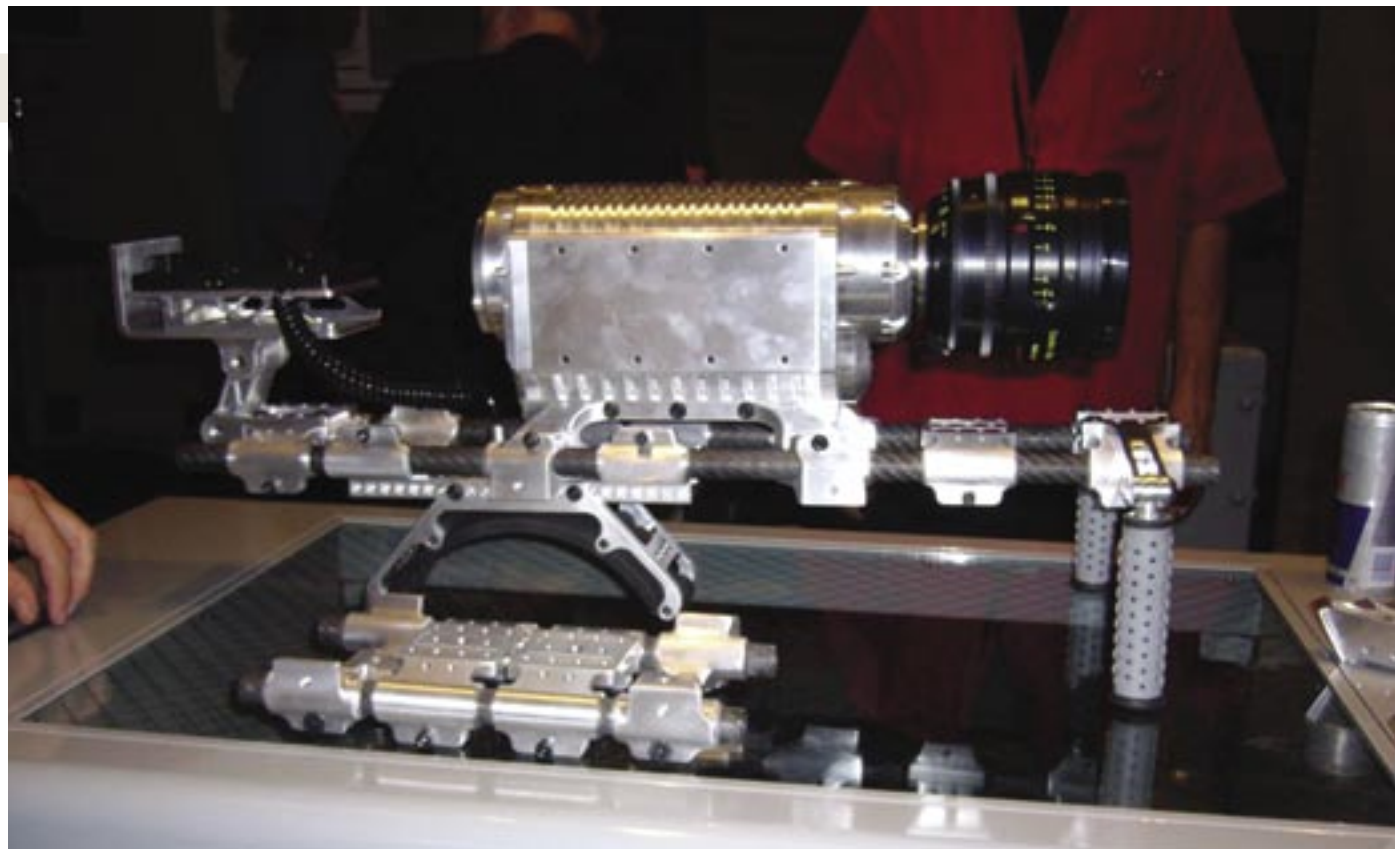


Photo by Brian Ferguson

Aluminum machined Red concept camera and rail system.

that you would do with film cameras for still photography now. We see this same logic applying to motion picture cameras. In the simplest terms, if you asked us what we were making and you said are you guys making the next generation video camera? I'd probably say no. I'd say we're building something that's much more akin to a next generation, super high-end digital still camera that happens to shoot 4K+ images at 60 frames a second, on down and 2K images at 120 frames a second, on down. When you start with that metaphor everything that we're doing really makes sense.

**CD:** So how did you start?

**TS:** We built our own sensor; we put together our own sensor team. This is not a sensor that exists in the market in any other place or in any other camera. It's our sensor for our camera. That is actually the start of the magic of what we're building here. You can't build a camera without an imaging device and you need to have a world-class imaging device if you plan on doing a world-class camera.

**CD:** Some have said that you've taken on too much?

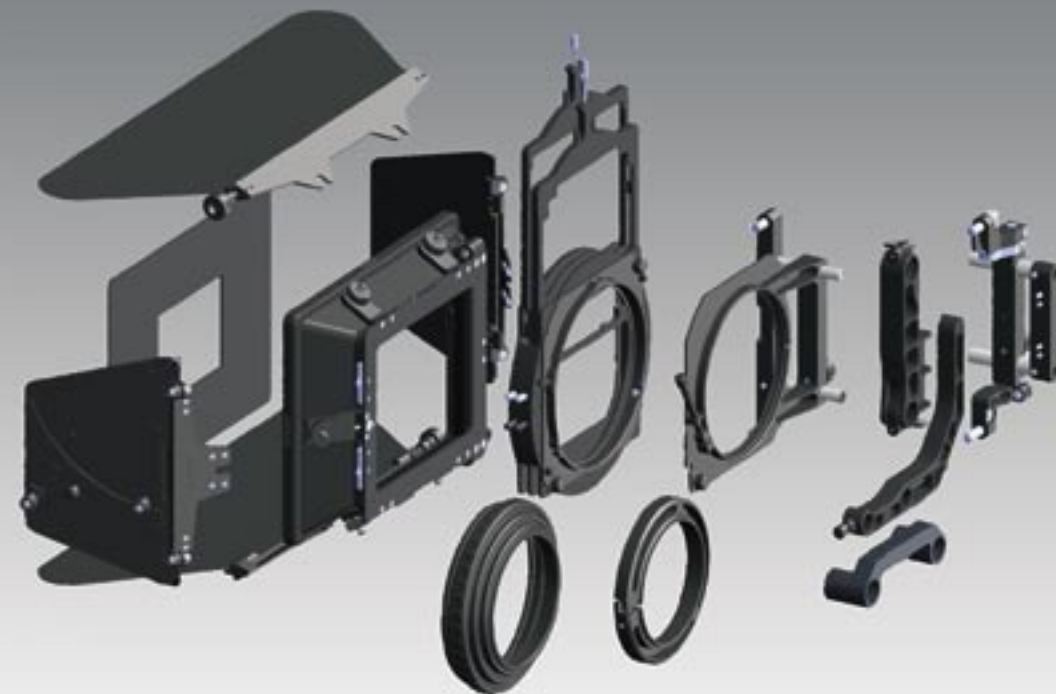
**TS:** They have seen some other camera companies make promises they can't deliver

on, pre-predict that they're going to hit a ship date and then don't hit it. So when we started the company we said, if we're going to change some rules, let's change a whole bunch of these rules. Let's let people know where we are, what we're doing, how we're doing it from a development standpoint and be candid and honest about it. And say, look guys we're truly a development company, we're developing this product, we developed a sensor, it works. We're developing industrial design, it keeps changing; it works. We have a massive engineering project ahead of us and so far we are on schedule and on target. And that's basically what we've been telling people and so far people are locked in to the tune of, I'm not exactly sure what the number is, because orders are streaming in so fast these days, but well over 900 orders for the camera and significant orders for the two lenses that we've announced. We're rocking, you know. We're on to something, as they say.

**CD:** So, how's it going so far?

**TS:** Well, here we are eight months after we pulled the trigger on the project, and just a few weeks ago we showed 4K motion images, at 24 frames to the world on the big 60-foot screen at IBC. We've seen a lot of skepticism

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Photo by Brian Ferguson

Red items in display case. From L-R, 300mm Red lens, camera prototype with Red Rail concept design, Red concept prototype camera body only.

and it's welcome, relished and healthy. There's a lot of positive skepticism that we think is good. There's a lot of negative skepticism that tends to have a negative energy around it and that's kind of okay too. I tend to try and keep it out of my line of sight for the most part and focus on the comments that people have that might be valid as opposed to just, they'll never get this done, kind of stuff. We are going to get this done, and if you ask the people that have seen the first images from our sensor, they will most likely tell you we've exceeded expectations by a considerable amount. If you put a whole bunch of smart people in a room and asked, where do you think the next major seismic change in camera technology is coming from? Not a lot of people would say, the guy that started Oakley and his buddy the digital video guy, but it's guys like us, that are not afraid to put it all on the line and be truly brave, that are the kind of guys that will make this happen.

**CD:** Tell us about your sensor.

**TS:** The sensor actually compares very closely to a 35mm motion picture image, which is the design thought in how we built it. So if you look at the specs on the website you can get the exact specs of the sensor. ([www.red.com](http://www.red.com)) If I remember off the top of my head, it's 24.4 X 13.7 mm. It's essentially 3 perf Super35mm. 3 perf is about the same size of what our sensor is, which is why you can use 35mm PL

mount lenses on it. Now this is not completely novel, obviously there have been a couple of digital motion picture cameras, what we like to sort of call the early science project space, that have tied into that logic, saying there's this great breadth of wonderful PL mount lenses out there and why not use that 100+ years of technology and artistry to tap into the world's best lenses. We're building a production line camera that's *designed* to take 35mm PL mount lenses.

**CD:** What's the pricing going to look like?

**TS:** The body is \$17,500. That's what we announced at NAB, that's holding tight right now and so far continues to hold tight and like we've always said, if anything changes we'll let people know. The goal we aim to achieve is to have people to be able to buy and own this tool. We wanted to price it in a way that you could look at the differences and clearly compare the RED ONE 4K camera to the HDV entry level category for HD acquisition tools and by the time you accessorize them and try and make them into professional tools, even though they're sort of crippled from the outset, you're starting to approach what our camera costs anyway. So why not jump way past HDV and even past the "high end" HD cameras that cost significantly more than our camera and get firmly into 4K with 2K and HD down sampled from our 12 Megapixel sensor instead of uprezing to HD using much smaller relatively low rez chips. This isn't just evolution, its revolution.

**CD:** What about accessories, viewfinder, etcetera?

**TS:** All the other accessories and pieces and parts will be priced in line with the \$17,500 body cost. There is no complete list of all the accessories and what they're going to cost. We've shown the various stages of evolution, so at NAB we showed the first idea of this cage rig that goes around the camera, so it has all these mounting points, we showed some different ideas, some of them went away and some of them stayed and evolved. We showed at IBC 6 months later how the cage evolved, a modular rail system that we call Red Rail so that you can actually mount the magazine that holds the media, the battery and use it as a counter-balance weight to the lens and the rail either shrinks or expands

depending on the type of lenses and the type of configuration you're using.

**CD:** How much is this going to weigh?

**TS:** We're targeting 8 pounds or less, probably 7 pounds or something like that for the camera body.

**CD:** What about a viewfinder?

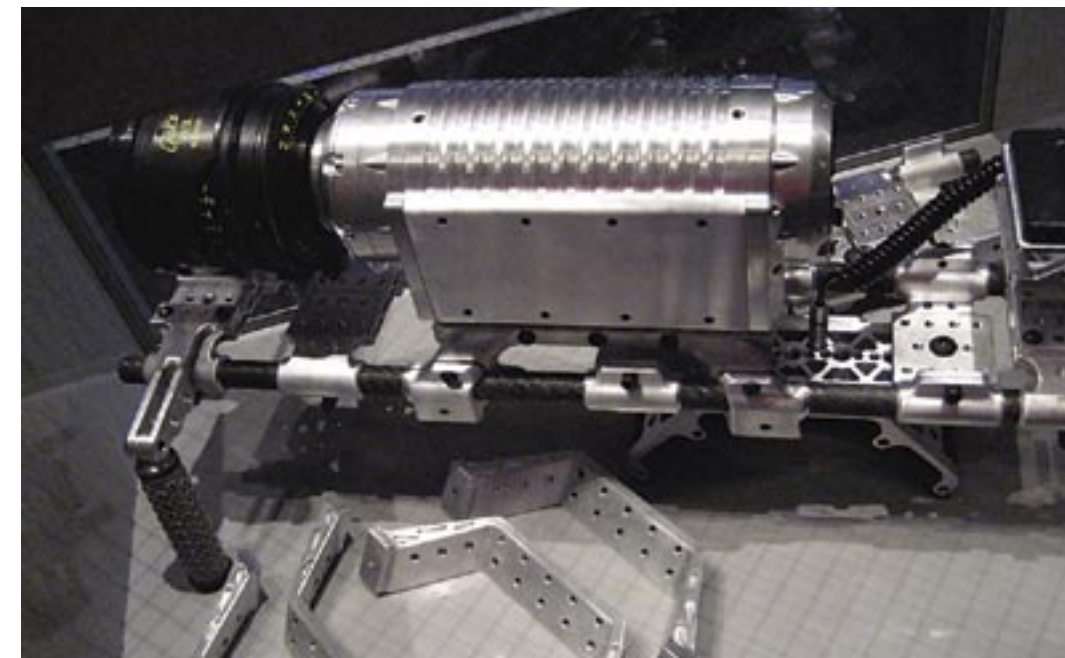
**TS:** There is a 1280 panel, electronic viewfinder, so it's a very high resolution, high accuracy, full color. You can focus with it. It's a really advanced piece of hardware. It's not a big long tube. You can see it best on the website. It's a small, about 6-inch rig that mounts on the side of the camera. It fills up the field of vision of your eye, a true professional tool, just like the rest of our program.

**CD:** What about recording the image?

**TS:** There is the option via HDSDI out to record 1080p, to an existing HD recorder. But our idea, as we push forward is to take this into tapeless acquisition, where we see the future is going. There are two ways to record. On the actual camera body itself there's a digital flash area that will hold either 32 or 64 gig of flash memory. We anticipate that the 32 gig will be under \$1,000.00. We have an advanced compression engine inside the camera that takes the 4K raw or 2K RGB on down and applies a wavelet compression that's visually at roughly 10 or 12:1. To give you an example, the raw 4K at 24 frames per second is 325 megabites a second. And

when you go to 60 frames, obviously, you double that and a little more, so you're talking 900 and something megabites a second. Essentially what you have is you have a couple ways to kick this data out. You can go out a raw port on the camera which we are still working on defining what the final interface will be. It will essentially record to a giant data recorder, essentially a refrigerator's worth of drives. That's okay for a small part of the market that wants to maintain a full uncompressed workflow as they shoot. But we don't see that as the end all, be all. What we're doing in response to that is coming up with a codec scheme that applies in-camera, which is called red code. That's this wavelet-based compression. So you choose to record either onboard to this flash memory or slightly offboard to a digital magazine, that mounts to the back of the camera or the RED-RAIL system. If you look at the pictures on the website you can see the rail system and an area for something that looks suspiciously like a little firewire drive that you might attach to a Mac or a PC and that has a spinning drive and it may also hold other types of memory down the road, but right now it's a spinning drive. We would make the enclosure that holds all of this, including the flash memory and the drive itself. The first build that we are doing will hold essentially up to whatever the max capacity, either 160 or 200 gig, whatever is proving to be the most reliable.

**CD:** We can't wait! **HD**





# Going HD In The Womb!

by Dara Klatt



Photo by Fluid Pictures/NGC

Shadowy black-and-white 2D ultrasound pictures have for years shown expectant mothers pictures in the womb. Now, groundbreaking 4-D ultrasound imagery technology is allowing television viewers across the globe into the extraordinary world of both human multiple and animal pregnancies.

Building on the success of its 2005 critically acclaimed special, *In the Womb*, the National Geographic Channel is following up with two world premiere HD specials: *In the Womb: Animals*, premiering December 10, 2006 at 8 pm ET/ 7:00 pm PT, and *In the Womb: Multiples*, premiering Sunday, January 14, 2007, at 9 p.m. ET/PT.

*Animals* traces the vastly different paths of three mammals – elephant, dolphin, and dog – from conception to birth, and *Multiples* sheds light on how human twins, triplets and quadruplets develop in utero and engage in their first interactions with each other.

“HD really enhances the shows. Seeing the intricate details of the fetuses developing over time is incredible.” said John Ford, National Geographic Channel’s executive vice

president of programming, and the executive-in-charge of production for *In the Womb*.

For *In the Womb: Multiples* director Lorne Townend, the most difficult part of filming in HD was trying to convey the movement and growth of the multiple fetuses in the womb. Some of these movements included multiples holding hands and pushing each other in the womb. The sequences of models had to be shot on 35 mm film because lenses allowing such filming needed in the cramped space of the artificial uterus he designed don’t exist yet for HD cameras.

However, Townend believed HD was a more compelling way to present the cutting edge 4D ultrasound technology because filming the ultrasound scans required low lighting – much more suitable for HD. And as far as conveying the necessary emotion of a new birth the way traditional film is able to, Townend was pleased. “Because HD films better in low light conditions, we were able to get better quality pictures in the dimly lit birthing suite.” **HD**

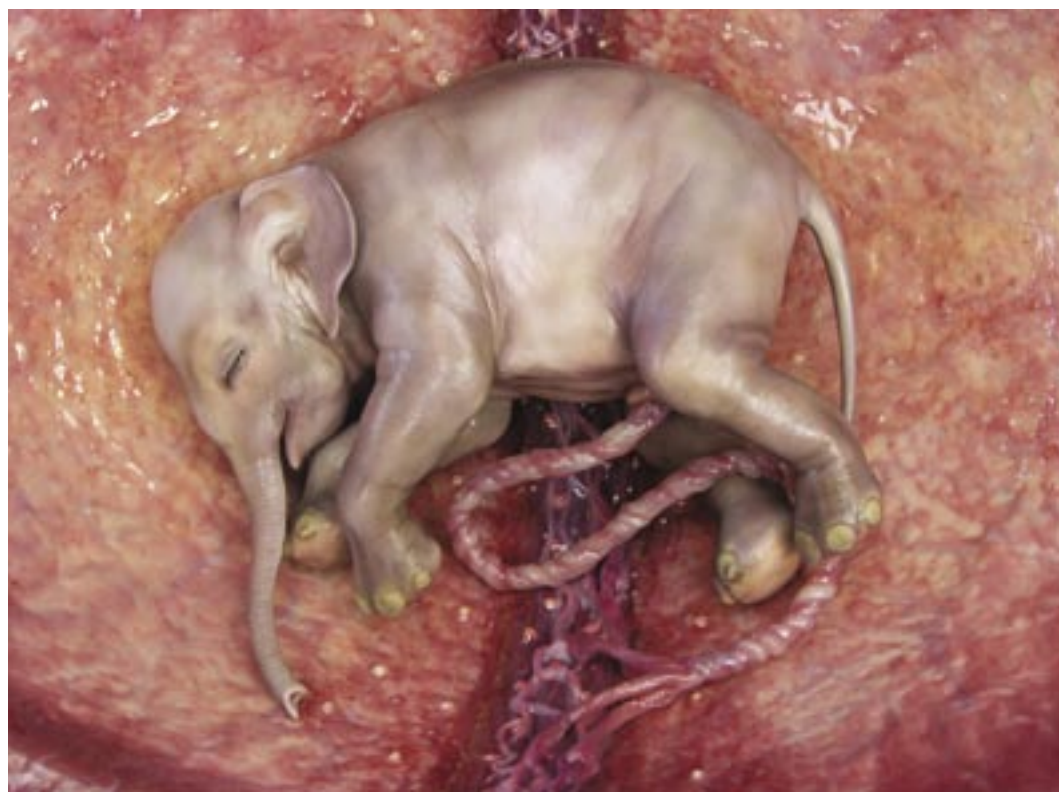


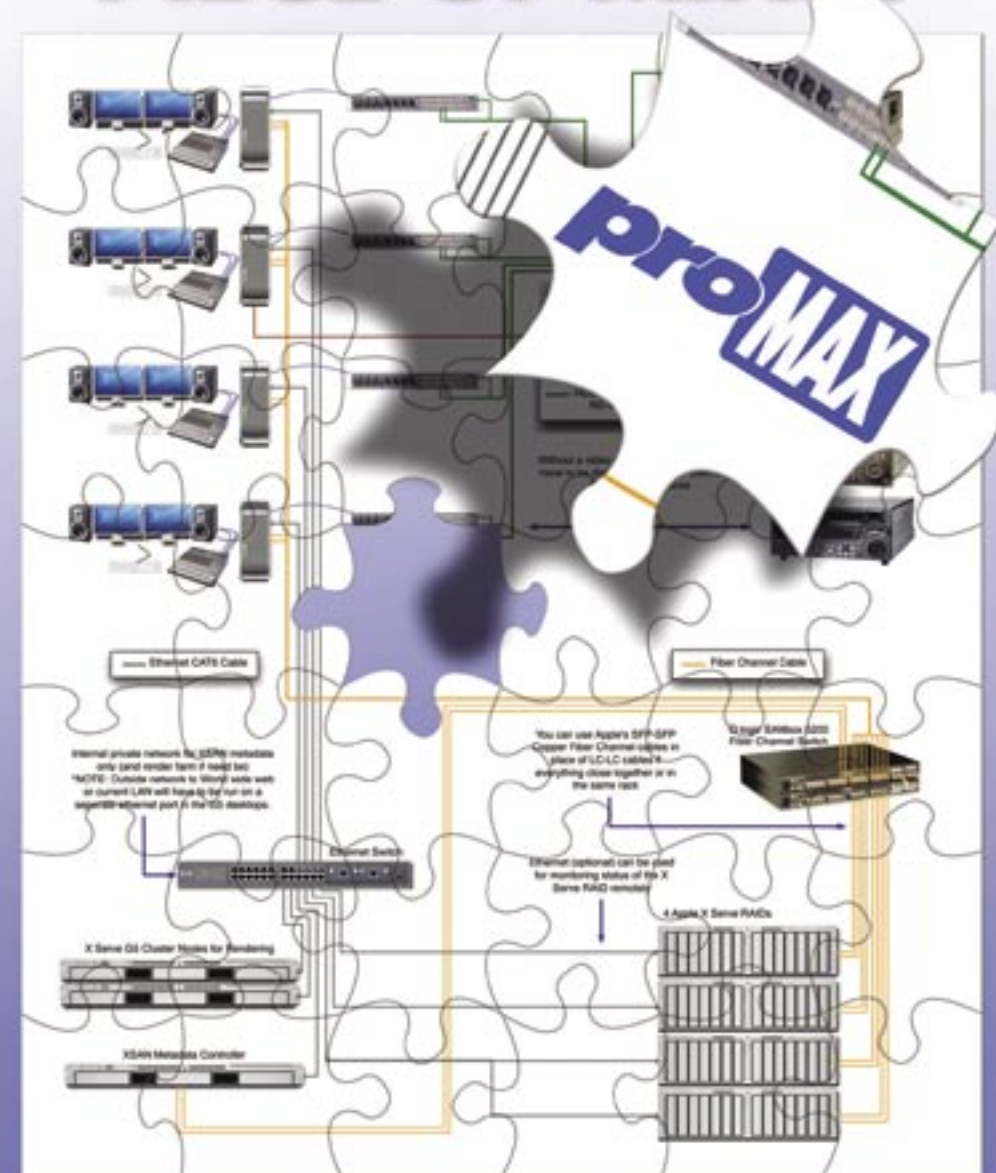
Photo by Pioneer Productions

Above: Two babies cramped.

At Right: Elephant fetus.

proMAX Systems

## PIECE OF MIND.

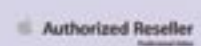
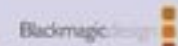


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# HGTV HD

## Barkitecture

by Susan Robertson

Matthew Klarich and Jeff Woods had to overcome the industry creed "never work with kids or animals." The fact that they did has led to the hit series *Barkitecture*, which airs on DIY Network and HGTV HD.

Each episode of *Barkitecture* is the rags to riches story of a wayward dog finding a permanent home, and the family who welcomes the new pet into their lives. Hosts Dr. Karen Tobias and Kenny Alfonso walk the family through the adoption process and help them prepare for the dog's homecoming. Dr. Tobias uses her experience as a veterinarian to give the family tips on how to care for their new friend and teaches them how to pick out the best supplies. Alfonso designs and builds a stylish, custom doghouse that's safe and functional.

Klarich and Woods, both executive producers with Field of Vision Entertainment, produced their first episode of *Barkitecture* in August 2004. The series was shot in high definition from day one, even though it airs on DIY Network in standard def.

To produce the series, Klarich and Woods take advantage of the Panasonic Varicam and Apple's Final Cut Pro editing system.

"We brought in an editor to work in the field," Klarich said. The Final Cut Pro system allows the executive producers to capture their work from the camera through an HD deck linked

by firewire to an external hard drive. From there, the field editor places the good takes into Final Cut on the show's timeline. "With this system we can see a rough cut as the show is created, and at the end of the day we have a fully realized A-cut. We now have about a seven-day turnaround for delivery of a rough cut to the network, which

is about one-third of a normal turnaround."

**Barkitecture Marathon:** Beginning the week of Dec. 4, HGTV HD will be airing *Barkitecture* special premieres. In January, the network will feature a Family Dog event with ongoing episodes of *Barkitecture* and *Doggone Design*. **HD**



Kenny Alfonso and Dr. Karen Tobias, co-hosts of DIY's *Barkitecture*.

Photo by Jack Parker. © 2005, DIY Network

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# Marilyn, Forever Blonde

by Karl Herrmann, DOP



Photo by David Thompson

Karl Herrmann currently lives in Vancouver, Canada. He spent 25 years living in Los Angeles. His numerous credits include, *Touched By An Angel*, *Dawson's Creek*, and *The Sentinel*. He recently shot the 2<sup>nd</sup> Unit and Visual Effects for *I, ROBOT* and *The Fog*.  
kherrmann@telus.net

As a freelance DOP one never knows what will come with the next phone call. In this instance, it was a call to photograph a one-woman stage play called "Marilyn, Forever Blonde". Hmm, interesting, tell me more. As it turns out, the play had been produced and run in New York about 15 years ago to rave reviews. Various broadcast entities had optioned it, but never produced it. Now, the play was re-surfacing to open in Los Angeles and there was interest in filming it. Hmm. Marilyn Monroe. One-woman play. Hollywood icon. Sounds interesting.

My initial instinct on what they were looking for was to run the play "x" number of times and shoot it from various angles, cut it together like a music video and "viola!" Bzzzz. Wrong.

In actuality, there was a different plan afoot. Production rented studio space from

Victory Studios in Seattle. They had a 3-sided white cyc stage on which the 3 "sets" - bedroom, bathroom and living room - for the actual play were all placed. The sets, I might add, were also white, because that's what was being used in the stage play. Great, white on white...and the cameras were Sony 900's, version 1. Hmm. Okay.

A quick discussion with the producer, Kelly Johnston and writer, Greg Thompson, produced some wonderful custom-made sheer curtains to cover all three sides of the background cyc. Behind the sheers and lighting up the wall, gaffer Doug Jordan placed 1K nook lights on the floor with 3 layers of full magenta to give a pink aura to Marilyn's early life. As the play unfolded, "Marilyn" went from set to set stopping here, there and everywhere to deliver dialog. So how to light it?

Inspiration came from the great



Photo by David Thompson

HD production crew shooting the recreation of Marilyn Monroe and her last photo session before her tragic death in 1962, portrayed by Sunny Thompson at Victory Studios, Seattle.



Photo by Howard Petrella

Hollywood glamour still photographer of that era, George Hurrell. Back light, always. This was provided and contained to specific areas by wonderful and powerful "Butterfly" lights with hard honeycomb crates. These units are a 4 bulb, individually switched fixture capable of 2000 watts. Hard, spotty, front light, usually in the "Paramount Loop" configuration was accomplished with "Tweenies" operating at full spot, then wired down to the appropriate

output. All lighting was run thru a dimmer board for final tuning and dramatic effect.

The look was right, but now we were confronted with the world of HD and not the long tonal range black and white negative. Enter my associate and terrific DIT, Enrique del Rio. He got the 2 Sony 900's up and running thru a Sony 750 MSU and patched thru various monitors on set. We had a huge 40" Sony CRT, which made imaging and focus checking

Sunny Thompson is Marilyn Monroe in *Marilyn: Forever Blonde*.





Photo by David Thompson

## A D.I.T.'s perspective

By Enrique Del Rio

A D.I.T faces the challenge to use whatever tools are provided, but plays a delicate balancing act between the production and cinematographer. On the one side you can't get all the toys you want because of the budget, yet on the other side, you need to be able to offer the cinematographer as many options as possible.

We convinced production that an M.S.U., or master set up unit, would be most handy since we were shooting with two cameras. HD became a very practical tool since some shots would last very long and since this project had a mixed feeling of a feature, documentary and docudrama, allowing the director to let the actress reach emotional levels with no constraints of time or re-loads. Shooting HD saves a lot of time, most especially production time, when a change of T-stop, manipulation of the knee curve or even gain or shutter is right at your finger tips.

Having the MSU also allowed us to de-saturate the entire color palette once Marilyn's life started to crumble. This was a big creative challenge and opportunity that Karl Herrmann threw at me. Thankfully, I kept the notes from a class that I took with Mike Condon, HD guru from Clairmont camera. A great tool that the people from Victory Studios in Seattle let us use was a giant (at least 40") HD CRT monitor, which made judging focus way easier. I am a big fan of CRT's, especially when it comes to color calibration and focus.

Enrique Del Rio moved to Vancouver eight years ago where he works as a camera assistant and DIT on television series and MOW's.

great. It was so good, that eventually everyone left video village and was hovering over our shoulders as we manipulated the image.

Sunny Thompson who IS Marilyn was astounding. She made possible our impossible schedule of 16 pages a day. She could simply back up the dialog to anywhere in the script! We used various camera movement styles. At times the camera was absolutely static and other times Robin Buerki was doing his magic with the Steadicam to facilitate the mood of the play. Marilyn would go from one end of the stage on set one all the way to the other end of the stage and set three all in one shot, all the while running dialog! We had Robin "cabled up" while on the Steadicam so we could see everything in terrific HD (1080p/23.98) resolution on the large monitor.

Now was the time to do two classic Hollywood 30's dance numbers like "Diamonds Are A Girl's Best Friend". To stay true to the era we used dolly and crane moves exclusively on these sections of the show. The sets were all pure white so we used vibrant colored gels to paint life into them. It was remarkable how well HD picked up the intense colors.

As Marilyn goes thru her life and the story begins to wind down, we changed out the triple magenta gels on the background cyc lights to a deep purple. This brought down the mood and the camera movement settled down with it. At this point, I asked Enrique to go into the Sony 750 MSU and create a de-saturated, faded look and match it to both cameras. Here the MSU was invaluable as everyone could see the image

on our huge monitor and we could instantly switch from our normal look to the new de-saturated version.

When Marilyn goes into a rant about her life, the camera stays totally static as she paces thru the frame and right off camera only to come back on again like a locomotive and right off frame in the other direction. Exhausted, she finally crawls up to her bed and Doug brought down the lighting on the dimmer board to full silhouette while she drops all her clothes and lays down one final time. On her last close up we set an eye light that was so subtle it just seemed to flicker with life. As she dies, the eyelight simply dwindles out and she is left, alone, in silhouette, and in our memories forever.

The project was amazing on numerous levels. Sunny's portrayal of Marilyn is riveting, in part due to her talent, but also to Stephanie Shine's direction. The two have the Marilyn character completely wired, which made our shooting schedule possible. Is it a stage play? Is it a movie? Is it a period piece based on the look, lighting and character? Is it a modern show utilizing all the technical brilliance of the HD format? I don't have the answer as I feel it was all of these mixed together to produce a very unique shooting experience. **HD**

*Kelly Johnston, Executive Producer and CEO of Blonde Blonde Girl Entertainment currently resides in Vancouver, Canada. Having more than 300 productions to her credit in the past twenty years, this is her company's first foray into a Feature Film production. [kellyjohnston@marilynforeverblonde.tv](mailto:kellyjohnston@marilynforeverblonde.tv)*



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Both HD-SDI x 2 Channels, YPbPr and Composite are supported.

It supports all popular HDTV formats.

Ultra Lightweight and Compact in Size, 3U half-size.

Marker Identification (center, frame, 4:3, 13:9, 14:9, 2.35:1, 1.75:1, 1.66:1)

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Audio status identification



# Tips HD

by B. SEAN FAIRBURN SOC

## Shooting HD on Location

**Location shooting in HD** can be very difficult if you are not fully prepared for the needs of the equipment and the location.

As many of you may know, I moved my family back home to Louisiana to raise my kids closer to their grandfather. It's a great location for hunting and fishing and is commonly known as a sportsman's paradise. The same traits that make it a paradise, can also sometimes make it a place that's difficult to shoot in. In other words, it's one thing to lay on a beach and get some rays, and another to be on the beach for a shoot.

When shooting on location first start with the requirements of the show, what format, what lenses, what cameras and how will you record image, audio and monitor the shots?

Ask how you intend to move the camera and how ambitious will be your shooting days. Having TRIPLE the necessary batteries for every device along with backup cables and tapes is a requirement.

Weather considerations are important including temperature both day and night. Knowing what kind of natural light you're dealing with is also critical. Where is the sun throughout the day? When is

sunrise and sunset? Are there shadows that will cause a problem?

Adapting vehicles to accommodate your needs is easier than finding one that is built for the task.

I recently shot a Sony F900 job, recording 10 bit 4:2:2 to an HDCAM-SR deck. We had a lot of ground to cover and gear to haul, a small crew and little time. I decided to strap the working parts of the deck and monitor to the front of a Quad and put my camera operator with camera and sticks strapped to the back. He could shoot hand held from the Quad and quickly deploy the tripod and

camera for long lens shots as needed. We had batteries cable, tapes, chow and water all on the mobile camera platform. I could record and monitor on the fly making sure we were rolling and quickly taking the camera into the best positions to get the shots as I was driving the machine. Being able to quickly and effectively Move, Shoot, and Communicate helps production get their money's worth from shooting HD.

Every location shoot is different and really knowing the details of your location ahead is critical. Prepare for the worst and you might be ready when it happens. **HD**



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B. Sean Fairburn  
prepares to capture  
HighDef in a difficult  
environment.



Photo by Benjamin Ranzinger



Photo by Laurence Avenet-Bradley

# Dark Remains in HD

by Brian Avenet-Bradley

When it came time to shoot my latest feature, *Dark Remains*, there was a key format decision to be made - 35mm or HD? 35mm would have been an incredible strain on the budget, mainly because of the cost of doing an HD transfer. So my DP, Laurence Avenet-Bradley, did extensive tests with the 1080i HD Sony Cine Alta to see if she could pull off her high contrast lighting style. Being a film die hard at that time, I had my doubts; then I saw the results of her tests. By creating her own settings, Laurence showed me what HD could look like if you pushed it to the max and shot it like film. She "rated" the HD at 320ASA on her light meter, shot wide open to minimize depth of field, let the shadows go dark and let highlights go to the edge and completely blow out in high contrast scenes such as when the characters are carrying flashlights. It was a very gutsy way of shooting and left little

latitude for adjusting in post, but it retained the style we had developed for our previous horror films shot on 16mm.

The movie was down-converted to DVCAM and off-lined on the Avid Express then it was conformed on an Avid DS Nitrus by Alfonso Sanchez at Raycom Post in L.A. While still in off-line, the film played two festivals: L.A.'s Shriekfest and the Rhode Island Film Festival, winning Best Horror Feature at both. When the HD master was complete, the film was digitally projected; it was amazing the amount of detail on the screen and how much it looked like a 35mm print. Since then, it's played 13 more festivals.

*Dark Remains* has already been sold to multiple countries, and Monarch Home Video is releasing it on DVD in North America on December 19<sup>th</sup>. **HD**

Brian Avenet-Bradley, Director/writer,  
Brian@darkremains.com, www.darkremains.com

Julie (Cheri Christian)  
is haunted by one of  
the mountain's entities  
(Karla Droege).



# Forum hdtv

by STEVE SECHRIST

## HP Exits Projector Market

According to David Edwards, an HP Image and Print Group spokesperson, the company has decided to “shift focus” of its commercial projector business from projection to display solutions. He went on to say this would be a global move and the company will sell off the projector inventory until depleted.

Time was that even projector heavyweights were shaking in their boots when HP decided to take the plunge into the front projection space. The company had recently merged with Compaq who already had a healthy inventory of front projectors for the lucrative mobile business professional space with a plan to grow the laptop/projector attach rate.

The thinking on the street was that HP could build on this model and expand it into the enterprise space. HP had (still has) the power to dominate the enterprise projector space by leveraging its ubiquitous printer business. The company penetrated the network enterprise early on with its OpenView printer management software and analysts saw this fact, combined with the growing trend in projection networking for remote support as winning synergies. HP could simply add projector nodes on to their popular enterprise management software and sell conference room projectors along with its printer lines.

The rationale was, with HP's huge printer hardware and OpenView software install base, even a modest attach rate would push projector penetration a full order of magnitude beyond current enterprise projector market levels.

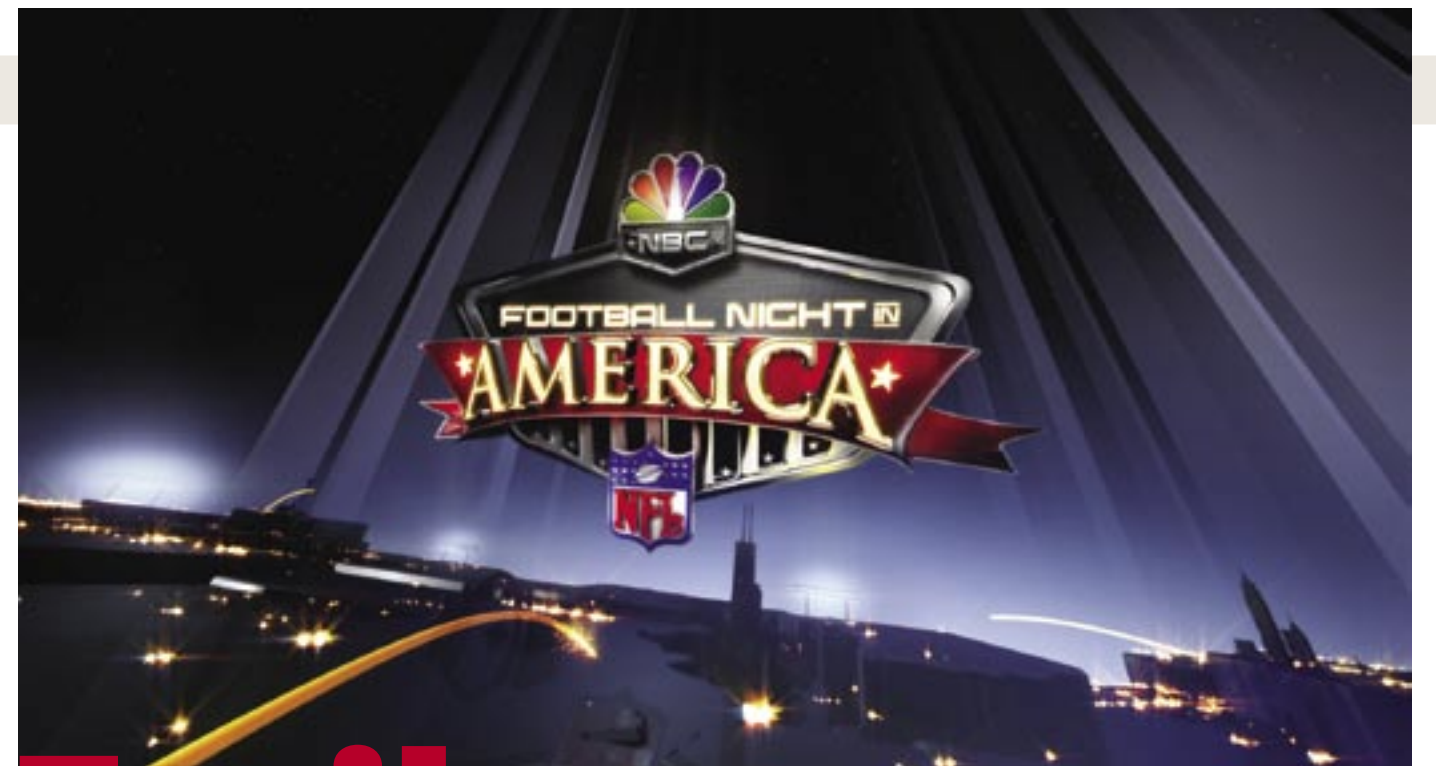
In addition, we have no word on HP's RPTV business that undoubtedly leverages technology from this now abandoned group.



The company sells three DLP models ranging from 58- to 65-inch and retail from \$2699 to \$4199.

What went wrong is a topic for discussion another day. But suffice it to say that what looks good on paper does not always pan out in real life. HP and Compaq combined to launch over 37 front projector models—some with cutting-edge ideas that reshaped the industry. “Wobulation” for example, was first introduced in 2004 by HP and adopted by TI to give small format microdisplays the ability to double resolution using the wobulation mirror. HP was also one of the first to market with a dual color wheel design.

While HP's exit from front projection is a disappointment for the industry in general, this has to be bittersweet news for the likes of mainstay projector companies like InFocus and other new entrants like Planar. For what may have looked like the validation of the industry with HP's entrance into the market has simply lapsed into yet another failed attempt at market domination in a space that proves to be not easily understood - let alone dominated. **HD**



# Troika & Sunday Night Football

by Mark Bohman

This fall, the National Football League (NFL) returned as an NBC Sports partner after an eight-year absence, moving its broadcast showcase to Sunday nights. To help usher in this new American tradition, NBC Sports turned to Troika Design Group to develop its overarching branding and design language.

Troika created the HD graphics package in 1080i for NBC's entire Sunday Night NFL block: the studio program *Football Night in America*, and the game broadcast, *NBC Sunday Night Football*. The company designed and animated logos, bumpers, team transitions, scoreboards, a signature skyline of America and key elements used throughout the game, including player

line-ups and bios, a scoreboard system, replay wipes and team match-ups.

NBC Sports came to Troika largely because of their expertise in developing sports identities and campaigns such as ESPN's *College Football and Basketball* franchises, FOX Sports Net's *Final Score*, and NFL Network's *Total Access*. In 2003, Troika created *SportsCenter* for ESPN, a package that consisted of 500-plus HD elements.

It was fantastic creating the identity for this iconic slice of American culture, and to be associated with a franchise that includes such legends as Bob Costas, Al Michaels, John Madden, and Oscar Award-winning composer John Williams. And while Troika does a lot of work for non-

sports clients—such as launching the new CW network—it's always great collaborating with sports broadcasters because they really are at the forefront of HD.

Troika's production toolset for the NBC Sunday Night Football block was comprised of 2GB Power Mac G5 systems with Apple 23" Cinema displays running Apple Final Cut Pro HD 4.5, Autodesk Maya 7.0, Adobe After Effects 6.5, Maxon Cinema 4D 9.5, In Design CS, San MP, Photoshop CS, and Illustrator CS. The network is supported by an X Server, with X Raids, ATDX Raids, and a Q-Logic (Fiber Switch). **HD**

Mark Bohman is Partner and Executive Creative Director, Troika Design Group.



Above: The NBC Sunday Night Football logo.

At top: The Football Night in America logo is illuminated above the skyline of the NFL nation.





Photo by Dan McFadden

# Film Commercials Trend Toward 16x9

by Bob Fisher

A fisheye lens captures cinematographer Wally Pfister, ASC (L) and director Rupert Sanders (R) on a half-scale set used in filming a commercial for Sony's new PlayStation 3.

Wally Pfister, ASC has earned some 30 feature film credits since the early 1990s, including *The Italian Job*. The main character in that picture drives a Mini Cooper car. Those images caught the attention of advertising creatives and executives when the film was released in 2003. Pfister began getting calls with offers for him to shoot automobile commercials. He estimates that two-thirds of the spots that he is currently shooting, and sometimes directing, are framed in widescreen (16:9) aspect ratio, anticipating that they will air in HD and/or letterboxed format on traditional television screens.

Pfister cites a series of Nike commercials that he filmed for MJZ in collaboration with director Rupert Sanders. Sanders wanted a cinéma vérité, handheld look for the ads, which have a fantasy theme featuring football

stars. They shot the spots in documentary style with a handheld Super 16 camera and 10:1 zoom lens.

The ads were composed in 16:9, transferred and timed in HD format. "It's all about how you expose the negative," Pfister says. "If you record rich images, you can transfer to HD and get stunning results with Super 16 film."

Pfister also recently directed and shot a four-spot campaign for Genworth Financial. Each spot was about a real person who was at least 100 years old and living an active life. They ran concurrently with print ads featuring black-and-white portraiture. One spot focuses on Rosy, a 100-year-old man who drives himself to an Arizona nightclub every Friday night, where he plays a jazz trumpet and flirts with women.

"They gave me tremendous creative free-

dom," Pfister says. "We shot the four commercials at practical locations in documentary style. I used a handheld ARRI 435 camera with a Panavision 2:1 zoom lens, and recorded the images on color negative film. We timed the spots and desaturated colors with Billy Gabor at Company 3 (in New York), who did a wonderful job of helping us make them look like beautiful black-and-white portraiture."

Pfister recently shot another series of commercials introducing PlayStation® 3 that is designed for the Blu-ray HD DVD format. Sanders directed the spots for MJZ. The commercials were produced in 35 mm format and composed in 16:9. Stefan Sonnenfeld of Company 3 did the high definition transfer.

One spot features the new PlayStation in a room with the pieces of a Rubik's Cube lying on the floor. The computer entertainment system is pure black and the room is stark white. In 30 seconds, the PlayStation turns on, the pieces mysteriously rise into the air and frantically assemble themselves into a Rubik's Cube, which explodes and splashes the floor and walls with vivid colors. To gain more detail in the blackest tones, the walls

were gray paint toned down one to two stops, resulting in slightly less contrast.

"Rupert (Sanders) likes to shoot these types of spots in practical ways," Pfister says. "We shot elements of the cube being assembled by an off-camera individual as a reference. The visual effects team recreated the cube with CGI animation, so it appears to be assembling itself. We also filmed a plate of a small explosion. That shot was composed with the cube, which appears to burst from within, sending streams of paint flying through the air, coloring the floor and walls like a surrealistic Dali painting."

Pfister shot the spot with a PanArri camera and Primo 4:1 zoom lens, and recorded images on KODAK VISION2 5218, a 500-speed film balance for 3,200K tungsten light.

"The film was my can of paint," he says. "I overexposed it a bit, which gave us more latitude to create a feeling of depth with white walls, a black PlayStation with detailed features, and the streams of colors splashed on the floor and walls. The 5218 film is designed to faithfully transfer images to digital video files in telecine." **HD**



Photo by Dan McFadden

Cinematographer Wally Pfister, ASC (L) and director Rupert Sanders (R) filming a commercial for Sony's new PlayStation 3.



# Dismal in Virginia

by Brian Cali

**D**ismal, a thriller that plunks two suburbanites down in the middle of 100,000 acres of murky swampland recently wrapped post-production. Shot with the Panasonic AJ-HDC27 VariCam camera and directed by industry veteran Ray Brown for 1944 Films, *Dismal* introduces a pair of executives, Bill and Matt, looking for some R&R and good fishing in the vast Great Dismal Swamp of Virginia. Squabbles between the two turns into something far worse, as their abrupt departure is thwarted by a criminal survivalist named Croaker.

"I'd shot in HD before, and was convinced that HD acquisition was right for this project," Brown explained. "We had less than three weeks to shoot, we had to move briskly. HD would let us be stealthier, lighter and quicker, while at the same time achieving a quality picture."

"We were able to do a ton of dollies and cranes, as well as hand-held and some aerial

work," said DP Jean-Guy Bureau. "We utilized hostess trays and hood mounts for car work. When we were on the ground, we were in mud, in and around water constantly. I was glad I didn't have to worry about dirt in the gate as with film."

"With one exterior, we were doing a nighttime dolly move through very thick trees, and I could barely see the silhouette of Croaker," he added. "But because we were shooting HD and not film, I knew that we had the shot immediately. The camera also works beautifully with skin tones — 720p looks gorgeous on the skin, very pleasing on the eye. The two actresses looked beautiful and, for that matter, the guys looked great as well."

The on-line and color timing were completed at Metro Productions in Hampton, Virginia, which was also the source of the camera rental. **HD**

Visit [www.dismalthemovie.com](http://www.dismalthemovie.com).

Panasonic's VariCam performed steadily despite extreme temperatures and weather, with the heat index surging to 100 degrees during the 18-day shoot.



Photo by Frank Boone



Photo by Discovery HD Theater

## The Great Paris Flood

by Clint Stinchcomb

**F**or our first ever production with Bonne Pioche, the Paris-based independent production company known for *March of the Penguins*, Discovery is going back to the future with a 90-minute feature on the great flood predicted to hit Paris in 2008. With Discovery's legacy for chronicling history and the science behind natural disasters from the last days of Pompeii to tsunamis and Bonne Pioche's renowned ability to create original and meaningful stories, the chance to bring to life an event that has yet to happen seemed fascinating to us both.

Part documentary and part scientific thriller, *2010: The Great Paris Flood* is based on historical record and the prognostications of the scientific community. In 1908, the river Seine burst its banks, flooding large parts of Paris for two weeks and causing severe damage to buildings including museums and cathedrals and killing hundreds. Scientists believe this phenomenon to be part of a 100-year cycle, predicting that a major flood will occur sometime in 2008.

Our story begins two years after the flood, giving viewers a look back at the events as they unfolded. Told through eyewitness accounts of six different people who are in the city at the time of the flood, the program chronicles the evolution of the true protagonist, the flood itself as it pours through Paris and how the habitants respond to save both their city and their lives.

To simulate events that have not yet occurred, the film uses CGI and special effects to create 3D models of the water rushing through the city and the electrical networks underground, as well as electronic maps, digital zoom, and typography to track the place of action, time, and rising flood level.

High-definition technology not only adds to the visual clarity and beauty of the production, but is a key factor in stirring the emotion of the story. *2010: The Great Paris Flood* airs on Discovery HD Theater this coming February. **HD**

Clint Stinchcomb is Executive VP, HDTV and New Media, Discovery Communications.

*2010: The Great Paris Flood* uses CGI technology to look back on the path and devastation of the centennial flooding of Paris predicted to occur in 2008.



# Tech hd

by Lowell Kay



Lowell Kay is the founder and president of Hollywood's top post-production and motion picture film servicing company, The DR Group. [www.thedrgroup.com](http://www.thedrgroup.com) 323-960-1781

## Shooting HD with Post in Mind

**Every successful offline and online starts** in the pre-production process. By looking at your procedures in the field while capturing material, you can reduce the amount of time and confusion while digitizing for offline and online.

Here are some tips to follow that will make your edit process much easier.

**Time Code Issues with HD Cameras:** Unless in record-run with no power down between takes, HD cameras (HDC-F950 or 900) don't lay down continuous time code when you start and stop tape. This can create a problem when digitizing the material into a Non Linear Edit System (NLE) because there is not enough pre-roll for the tape deck to lock up, and for the NLE to capture the shot with the appropriate handles. The inexpensive way to get around this is to pass a minimum of 10 seconds of tape before yelling action. This allows the servos to lock on the camera, and this pre-roll will also allow the tape deck in post to lock up easily in your online saving time and money.

**Part 2:** A more expensive solution to deal with time code breaks is to create a new digital master by cloning your media to a new tape with new continuous time code. This new tape becomes your master, eliminating potential problems caused by time code breaks.

**HDV Cameras:** If you are using an HDV camera, pass a minimum of 60 seconds at the head of the tape and 10 seconds each time if you turn off the camera. This allows an NLE system to understand the GOP structure and bring in your media with the least amount of time code breaks.

**Take Notes on Set:** If you shoot HD on set, you will not have a Flex file from a post house prepared for you like you would with film. Instead, you are going to have to rely upon the Script Supervisor's notes which should correspond to time code. Impress upon the production team how vital this is to the post process. You can even make an Excel file from this information to create a batch capture list.

**Slate Everything:** When possible, in order to remain consistent with what is on the Script Supervisor's notes, slate each take. Sometimes it's difficult to determine when a scene begins or ends because there is neither a video or audio indication. A slate is the perfect solution. If a slate is not available, at least wave your hand in front of the lens to signal that the shot has ended.

**Penmanship Counts:** Make sure that your slates are readable. Many times our clients have missed shots based upon non-readable slates. Make sure you have a flashlight ready for dark scenes, that the slates are in focus and that you capture at least 5 seconds of slates prior to saying action. **HD**

*Since launching The DR Group over 12 years ago, the business has grown into one of the industry's most important and respected resources for motion picture film, post-production services, and digital video solutions. With over a decade of hands-on, "in-the-trenches" experience, Lowell has become a sought after guest speaker for film festivals, written technology articles for film and video related publications, and has been featured on CNN as an expert on HD.*

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# INHD's MOJO

by Ellen M. Cooper

**Dr. Danger (Dr. Bob Arnot) with Dr. Jill John from the International Medical Corps at Riyahd Camp for Internally Displaced Persons on the Chad/Darfur border.**

IN DEMAND Networks recently launched MOJO, a branded block of original prime-time series airing on its INHD network. With the HD market exploding, the network wanted to take INHD to the next level. According to iN DEMAND President & CEO Robert D. Jacobson, "MOJO is dedicated to being an exhilarating resource for men who live accomplished and adventurous lives, and who have an insatiable appetite for exploration of new worlds, new ideas and new achievements."

Both the name MOJO and the program genres that populate it emerged out of comprehensive research with thousands of HDTV viewers over several years, via numerous online surveys, dozens of focus groups, a national survey by Frank Magid Assoc. and a multifaceted brand-research project. This research identified a distinct group of active, success-oriented men who

represent HD's most passionate viewer base and a group that largely feels ignored by traditional television programming. The MOJO man is 25-49 years old, affluent (\$75K +), confident, driven, curious and open-minded. INHD's research repeatedly confirmed that this highly desirable audience wants to see intelligent male-oriented programming - beyond sports - that reflects their interests.

INHD has thus far produced *After Hours with Daniel*, a peek into the rarified late night world of top chefs hosted by James Beard winner Daniel Boulud; *London Live!* concerts from London, *Doctor Danger*, about the intrepid world travels of Dr. Bob Arnot, longtime NBC news correspondent, thrill-seeker and humanitarian, *Three Sheets*, an unconventional exploration of foreign cultures' drinking customs, *Wall Street Warriors*, about the intense lives of Wall Street

traders, *Decades* concerts of music legends paired with today's artists and *Beer Nutz* about America's beer capitals. In December INHD will premiere a new series about the coolest tech toys.

Each of these shows presented interesting HD production challenges and captivating visual and sound benefits.

For instance, the Dr. Danger team had to deal with extreme danger when capturing life in Africa, with Dr. Bob Arnot traveling to the wilds of Somalia, Kenya, South Africa, Botswana and Sudan. The production company, Essex Television Group, is known for extreme High-definition productions and they knew that careful logistics and the right gear were essential. "The plan was to send Dr. Bob Arnot and a cameraman into some of the most dangerous countries and situations in Africa," says Jim Astrausky, producer and co-owner of Essex. "Mogadishu was our first stop. A journalist and a cameraman had recently been killed there in separate incidents. It's what the UN calls a black zone. In the midst of a civil war there is no time for retakes. We needed gear that we could count on; Sony's HDV and Panasonic's P2 formats were ruled out because of the network's quality demands. We chose a Sony F-900 Cine Alta." Gordy Waterman, DP on the production was a little nervous about not having a backup camera. "I had to go minimalist. I decided to take the Sony, one lens, a Fuji 13 X 4.5, sticks and no monitor in case we had to bug out in a hurry. "This was probably the most difficult and risky program to pull the trigger on," said Dan Carey, the other partner at Essex. The



Sandra Navidi of MOJO on INHD's Wall Street Warriors.

hour premier of *Dr. Danger* highlighted that filming in HD can give the images equal billing to story. "The footage is intense," adds Hannah Lintner, a producer and writer on the series, "Filming in locations as extreme as Somalia, you are bound to come back with amazing material, but shooting in high def takes it to the next level." **HD**

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# Eyeplay

## Captures Living Legacy in HD

by Kevin P. Smith

An opportunity like this comes along every 150 years or so. Eyeplay recently had the bounty of creating a mini-documentary to commemorate and celebrate the legacy of an incredible group of women. The piece was to be shot and edited in HD, then projected in its native form to its intended audience. High Definition, start-to-finish. The result – and the response – was stunning.

But first, a little history. The Sisters of Providence began their work in Montreal, Quebec in the mid-1800s. One of their early leaders, a young woman named Esther Periseau, was chosen to lead a mission to the West. She was anointed Mother Joseph of the Sacred Heart as she led a group of five French-Canadian Sisters to the rough and tumble Pacific Northwest. After a month-long mid-winter journey by ship, Mother Joseph and the Sisters arrived at Fort Vancouver, Washington Territory in December, 1856 – 150

years ago. With meager resources and little experience, the Sisters formed the region's first hospitals and schools. Their work soon spread across six states and British Columbia. Their legacy of providing healthcare, education and spiritual nurturing continues today, and has forever changed the quality of life for an entire region. From this rich story tapestry came our production: *Sisters of Providence, 150 Years in the West*.

My co-director, Dan Monaghan, and I knew the core of the story should come from the Sisters themselves. So we set about interviewing dozens of Sisters to gather anecdotes and insight into lives spent in service to others. Many of these women are now quite elderly, so it was not practical to have multiple interview locations. Instead, we adapted two central locations (large conference rooms) into quasi-studio space. Interview DP Chris Bell created beautiful backgrounds consisting



Rebecca Berghoff, SP

Photo by Chris Bell



Photo by Chris Towey

of primary color patterns projected through diffused plexi-glass, reminiscent of stained glass. We shot the interviews at 24p using a Panasonic Varicam. The camera's superior 4:2:2 color space in 720p DVCPRO HD gave us the true color look we were after, and the film-mimicking frame rate provided the desired cinematic feel.

Knowing our B-roll shoot days were quite limited, we chose to shoot buildings and locations central to the Sisters' story. Those included Montreal's Notre Dame Cathedral, where we could only use available light, as well as Providence Academy – formerly a girl's boarding school – and Fort Vancouver, both in Vancouver, Washington. B-roll DP Chris Towey used a 30 foot jib arm – with Mike Jensen at the helm – to fly the Varicam, again at 24p, to capture compelling architectural detail and sweeping church interiors.

We also had unfettered access to a treasure trove of historical photographs, relics and icons from the Providence archives. Designer Barry Thompson did extensive 3D-like photo manipulation to bring images to life, all in HD resolution. A table top jib shoot

of relics and icons yielded rich background plates for text graphics.

Composer Nick Denke from Victory Studios created a hauntingly beautiful score using a variety of instruments – both real and electronic – as well as a soprano vocalist to bring an appropriate angelic feel to specific scenes.

The final product was seen in a series of showings using Panasonic PT-D7700U HD projectors and large screens. It was pure joy to see our work displayed in all its High Definition glory, before very appreciative audiences. The combination of high resolution imagery, large-scale projection and, most importantly, a compelling story, made for a moving and powerful audience experience. One of the Sisters described the piece as "a stunningly beautiful film that truly captured the essence of what it means to us to be Sisters of Providence." **HD**

Kevin P. Smith is President & Creative Director of Eyeplay, Inc. The first few minutes of *Sisters of Providence, 150 Years in the West* can be seen on Eyeplay's Web site: [www.eyeplay.tv](http://www.eyeplay.tv).

Notre Dame Cathedral,  
Montreal.



# Horror Goes HD

by William Wheeler

When Jake Schmidt, Producer and CEO of The Film Fund, greenlighted the feature film, *El Mascarado Massacre*, first time writer/director, Jesse Baget, planned to shoot it indoors, on HD, over three weeks. "The decision to use the Sony F-900 turned out to be the best choice in more ways than one," Baget says. "A day before shooting, the set was shut down, due to a bureaucratic error and I had only a few days to rewrite the film, changing the setting from a mental asylum to a ghost town."

The film stars famous Mexican wrestler, Rey Misterio and veteran horror actor Irwin Keyes. "In order to make the new location fit within our budget and gel with everyone's work schedules, we had to cut production to thirteen days," Schmidt says. "This is where HD rules over film", Baget says.

"I decided to shoot almost entirely with a Steadicam," Baget says. "To me, fluid movements help achieve a closer-to-film look. Too much handheld camera seems to scream video."

According to cinematographer, Tabbert Fiiller, shooting at night also helped create the look of a grainier, horror film. "I knew the F-900 would look great for our night scenes" Fiiller says. "But I was concerned about the day shoots. To compensate, we underexposed a bit and the end result had the dark atmosphere we were looking for."

Baget, who also edited the feature, chose to cut in Final Cut Pro. "We downconverted the footage to mini DV and uprezzed at Victory Studios where the final edit was done. We did our color timing in Final Cut, too. It was a great choice because we were able to spend much more time tweaking than if we had gone with a Da Vinci."

Schmidt and Baget agree that "Those of us who aren't shooting Spider Man 3 have to love the way HD lends itself to gorilla low-budget filmmaking." **HD**

For more information, contact Jake Schmidt at [jake@filmfund.com](mailto:jake@filmfund.com)



"El Mascarado" Rey Misterio.

Photo credit by Sylvia Vidaurri

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Photo courtesy of Back Country Pictures

# Capturing Grandeur

by David Heuring

Crew used a crane to capture footage of a moose crossing Snake River for the Grand Teton National Park visitors' center film, directed by David Vassar and shot by DP Christopher Tufty.

David Vassar specializes in directing films that capture and communicate the delicate beauty of nature. He is currently completing an extraordinary project for the visitors' center at the Grand Teton National Park in northwestern Wyoming. The film will be presented to park visitors in a unique presentation format called a "video river."

High definition projectors will beam the images up from below onto multiple 4-by-15 foot pieces of glass that form part of the floor in the center. Rear projection material sandwiched in the glass will catch and display the projected images.

The images will be seen in an ultra-wide 3.75:1 aspect ratio. "Given the aspect ratio, and the fact that the images must pass through a thick piece of glass, we decided that 35 mm film was required," Vassar says. "We needed the highest image quality with as many pixels as possible."

Vassar envisioned the unusual design of the "theater" in devising his visual strategy. "If the audience is going to be standing on

the film, it changes the way you frame the film," he says. "As often as possible, we wanted to replicate the point of view of the audience – so we decided to shoot the majority of the film looking straight down."

Vassar and cinematographer Christopher Tufty shot with Kodak VISION2 50D 5201 film, which has an ultra-fine grain. Airplane footage was usually shot at 60 frames per second to smooth out the images. At times they filmed at 100 frames per second at a lower altitude.

The film was converted to video for editing on an Avid system. After editing, the selects were scanned and assembled at 2K resolution, and then output to the unique aspect ratio for HD projection. The HD post-production is being handled at LaserPacific in Los Angeles.

"We find that when it's working, the images start to become impressionistic and abstract," says Vassar. "You're not always sure which way is up or down. The presentation format is so unusual, and the images become more arresting, drawing the viewer in." **HD**

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– Rodney Charters, ASC, CSC  
Cinematographer for "24"  
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