4 CINEMATOGRAPHERS SHARE REINS ON LUCK

BOBBY BUKOWSKI
RAMPART

DANTE SPINOTTI, ASC, AIC
LIFETIME ACHIEVEMENT AWARD

American Cinematographer

The International Motion Imaging

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BIG MIRACLE

JOHN BAILEY, ASC FILMS IN ALASKA

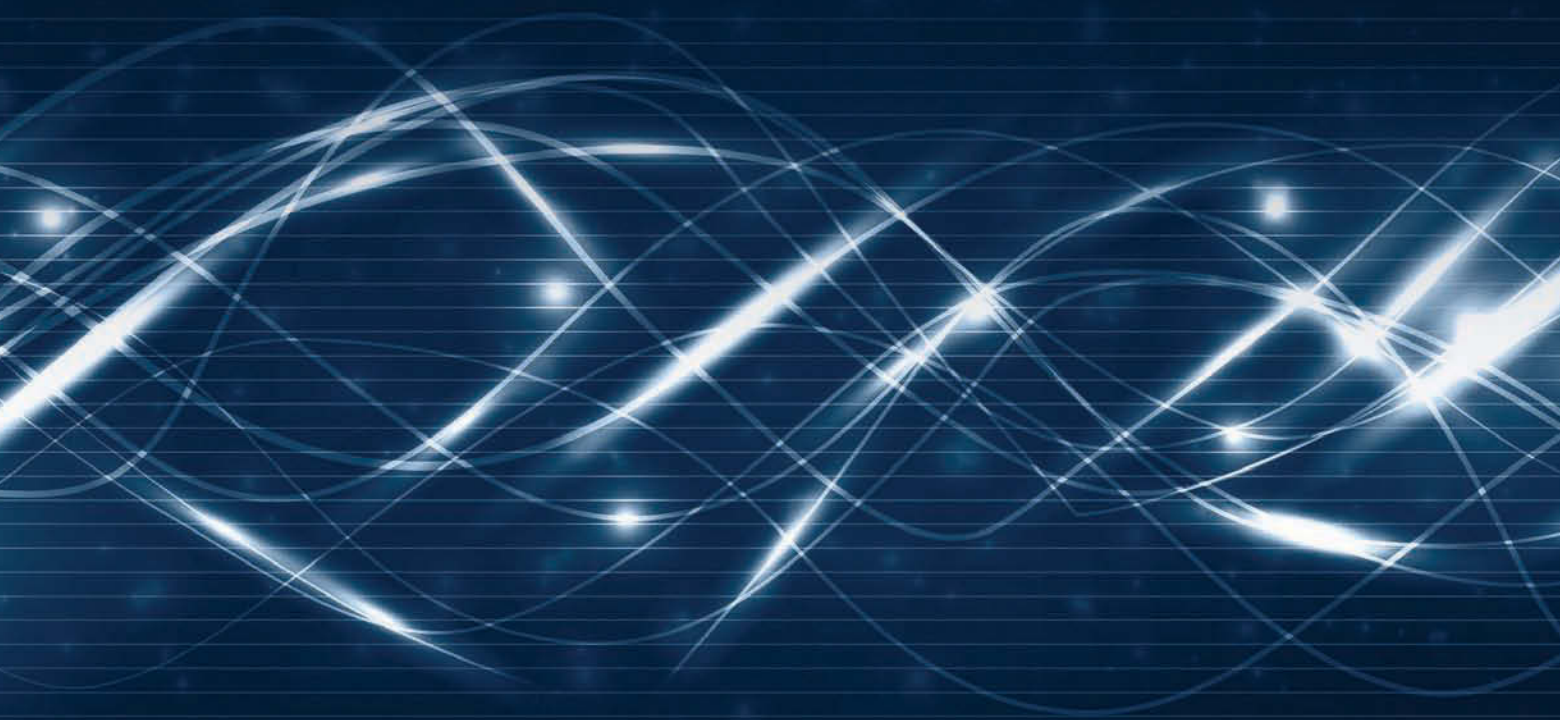
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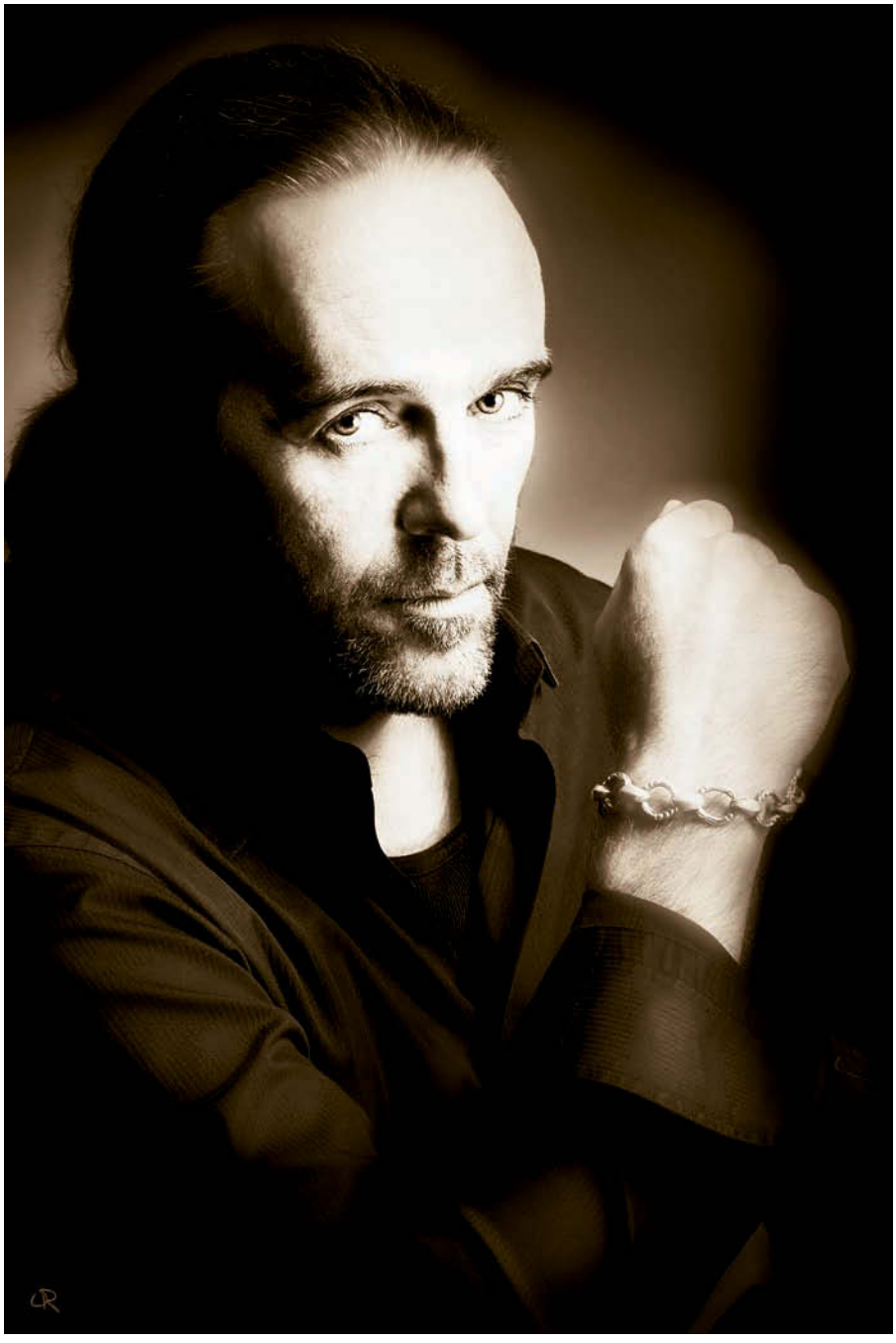
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Schmidt Takes Schneider on Location

Cinematographer Eric Schmidt was nominated for an ASC Award for his work on *Cold Case* and has shot several features, including *The Mechanic* and *I Melt With You*. He has created striking imagery for music videos for everyone from Bruce Springsteen to Foo Fighters and shot over 500 commercials including the distinctive *The World's Most Interesting Man* spots for Dos Equis.



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American Cinematographer
The International Journal of Motion Imaging

On Our Cover: A television reporter (John Krasinski) and a Greenpeace volunteer (Drew Barrymore) rekindle their relationship while saving trapped whales in *Big Miracle*, shot by John Bailey, ASC. (Photo by Darren Michaels, SMPSP, courtesy of Universal Pictures.)

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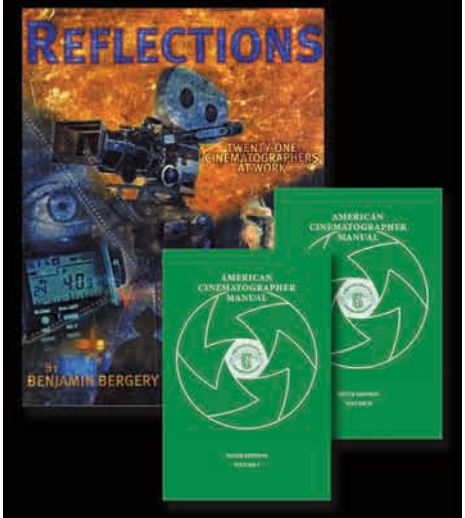
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February 2012 Vol. 93, No. 2
The International Journal of Motion Imaging

American Cinematographer

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American Cinematographer (ISSN 0002-7928), established 1920 and in its 92nd year of publication, is published monthly in Hollywood by ASC Holding Corp., 1782 N. Orange Dr., Hollywood, CA 90028, U.S.A., **(800) 448-0145, (323) 969-4333, Fax (323) 876-4973, direct line for subscription inquiries (323) 969-4344. Subscriptions:** U.S. $50; Canada/Mexico $70; all other foreign countries $95 a year (remit international Money Order or other exchange payable in U.S. $). **Advertising:** Rate card upon request from Hollywood office. **Article Reprints:** Requests for high-quality article reprints (or electronic reprints) should be made to **Sheridan Reprints** at (**800) 635-7181 ext. 8065** or by e-mail **hrobinson@tsp.sheridan.com.**
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BEST CINEMATOGRAPHY

PHEDON PAPAMICHAEL, ASC

USA TODAY

"Throughout this beautifully textured portrait of a family at a crucial juncture, we're swept up and buoyed along, as if riding a series of waves in Hawaii, the setting for the film. The 50th state emerges as more than landscape, actually closer to a character in its own right."

Claudia Puig

Los Angeles Times

"The film unfolds across the islands, with veteran cinematographer Phedon Papamichael reuniting with Payne for the first time since their 'Sideways' collaboration seven years ago to give us a glimpse of what it's like to live in, not just visit, a tropical paradise. Yes, there are the unsullied outbacks, ukulele bars, crazy locals, coral reefs, endless beaches and laid-back vibe that you'd expect. But also rush-hour traffic jams, late nights at the office, suburban subdivisions with their cookie-cutter houses, parent-teacher conferences and the rest of what constitutes everyday life."

Betsy Sharkey

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the Descendants

THIS MONTH'S CONTRIBUTORS

John Calhoun
is a New York correspondent for the magazine ("A Very Bad Cop," p. 54).

David Heuring
is a freelance writer and a former editor of *AC* ("Saving the Whales," p. 30).

Mark Hope-Jones
works for Arri Cine Technik and is the London correspondent for the magazine (Production Slate, p. 18).

Ken Kwapis
is a filmmaker ("Kwapis Reflects," p. 36).

Hiro Narita, ASC
has been a member of the Society since 1992 (Filmmakers' Forum, p. 72).

Jean Oppenheimer
is a Los Angeles correspondent for the magazine ("Cinema, Italian Style," p. 62).

Iain Stasukevich
is a filmmaker and a New York correspondent for the magazine (Short Takes, p. 12).

Patricia Thomson
is a New York correspondent for the magazine ("High Stakes," p. 42).

Jon D. Witmer
is the associate editor (Production Slate, p. 24).

Editor's Note



Photo by Owen Roizman, ASC.

Any movie shot on location offers its share of difficulties, but the logistics of *Big Miracle* might have caused even Shackleton to think twice. The project reteamed cinematographer John Bailey, ASC with director Ken Kwapis, who set out to fictionalize the true story of three gray whales that inspired a media sensation — and a massive rescue effort — when they became trapped beneath rapidly thickening ice in Barrow, Alaska, in 1988. Kwapis wryly outlined the challenges in an e-mail exchange with *AC*: "There's always a certain amount of denial required to embark upon a feature film. You have to look squarely at the challenges you face and say, 'Nah, it won't be so bad.' In this case, the challenges included bitter cold, a large ensemble cast (some of whom had never worked in front of a camera before), three robotic whales, a dearth of daylight (we lost three minutes of daylight each day), and absurdly unpredictable weather. (On a moment's notice, a beautiful overcast sky would give way to the harshest sun.) Oh, it's worth saying a second time: it was damn cold." Bailey adds his own perspective in an informative Q&A with David Heuring ("Saving the Whales," page 30).

Thankfully, the makers of *Big Miracle* did not have to wrangle real whales, but the cinematography team on HBO's horseracing series, *Luck* (Lukas Strebel, Russell Lee Fine, John Grillo and ASC member Stuart Dryburgh), found itself right on the track as thundering hooves flew by. A variety of tools were employed to capture all the action, including handheld DSLR cameras, a snorkel-lens system, "polecams," a customized pickup truck and wireless zoom controls. Pat Thomson gleaned all of the tips from the cinematographers and executive producer/pilot director Michael Mann ("High Stakes," page 42).

The police drama *Rampart* uses abstract imagery to profile a crooked Los Angeles cop (Woody Harrelson) who uses guile and brutality to impose his will on a corrupt system. Cinematographer Bobby Bukowski and director Oren Moverman set out to lend the drama an existential edge. The filmmakers kept the camera close to Harrelson throughout the picture, providing an intimate encounter with a compelling character who embraces his dark side. "The idea Oren is playing with is, how is evil allowed to persist in a society?" Bukowski tells John Calhoun ("A Very Bad Cop," page 54). "It is often through people who have this very charismatic way of presenting themselves. We're actually sitting there liking a character who is doing some really egregiously nasty things to people all around him."

Capping this issue is an entertaining tribute to a true icon of cinematography, Dante Spinotti, ASC, AIC ("Cinema, Italian Style," page 62). Jean Oppenheimer interviewed the maestro and many of his collaborators to create a colorful profile that illustrates all of the reasons the ASC is honoring Spinotti with its Lifetime Achievement Award on Feb. 12. If you'd like to personally congratulate Dante, you'll undoubtedly find him savoring one of his favorite cigars during the Society's annual Open House, which takes place at the Clubhouse on Feb. 11 from 11 a.m.-3 p.m.

Stephen Pizzello
Executive Editor

FOR YOUR CONSIDERATION

BEST CINEMATOGRAPHY

EMMANUEL LUBEZKI ASC, AMC



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A.O. Scott, The New York Times

"A slice of earthly reality rendered in exquisite detail by the Production Designer and the Cinematographer. Their evident devotion to Mr. Malick's exacting, idiosyncratic vision — the care with which they help coax his ideas into vivid cinematic reality — is in its way as moving as the images themselves… The sheer beauty of this film is almost overwhelming."

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President's Desk



The ASC Awards weekend kicks into high gear this month. A dinner for the nominees and honorees on Feb. 10 will give everyone a chance to relax before things get crazy. Our annual Open House on Feb. 11 will, for the second consecutive year, be preceded by a breakfast for the Friends of the ASC, an opportunity for subscribers to spend some casual, one-on-one face time with ASC cinematographers prior to the public open house. Our black-tie awards ceremony on Feb. 12 at Hollywood & Highland's Grand Ballroom will be the culmination of more than six months of planning.

The ASC Awards for Outstanding Achievement in Cinematography was the passion project of Michael Margulies, ASC, who wanted the world to recognize the incredible work performed by cinematographers. Only one award was presented that first year, and it went to Jordan Cronenweth, ASC, for the feature film *Peggy Sue Got Married* (1987). Gregory Peck was our sole presenter. The entire ceremony lasted an hour and was held at the Clubhouse. From such humble beginnings came the 1,600-person industry event we enjoy today.

Those who attend the ASC Awards for the first time are always surprised at how intimate and casual the evening feels. There is a definite lack of formality to the speeches, especially those given by some of the celebrity presenters. This is undoubtedly helped by the fact that our event is not televised or streamed online. This occasionally leads to some drawn-out speeches, but overall the intimacy that this freedom generates is the reason we have a sold-out crowd every year. I recall Warren Beatty regaling the audience with his recollections of working with many ASC members on various films over the years. His stories were so humorous and personal that nobody cared how long he chose to be at the microphone. He conveyed the humanity of the relationship between the director of photography and the director, and even poked fun at his own reputation as a lothario when he said he wished cinematographers weren't so attractive to his wife, Annette Bening. About her working relationship with Conrad Hall, ASC, Beatty remarked, "Every day on *American Beauty*, Annette would come home and say, 'Oh, you should see the lighting Connie did today!' Every day it was, 'Connie did this, Connie did that,' and, 'Oh, isn't Connie wonderful!'"

But it is the cinematographers who are the heart of the evening. Braving the disorientation of having to don a tuxedo and, worse, speak onstage in front of hundreds of people, these normally reserved artists truly make the event memorable. From heartfelt expressions of gratitude to funny recollections of past foibles, they make it an evening to remember. Michael Chapman, ASC, in his Lifetime Achievement Award acceptance speech, said, "I don't know what they were smoking when they decided to include me with Haskell Wexler, Billy Fraker and other immortals, but if I could get my hands on some of it, I'm sure I'd love it." When Vilmos Zsigmond, ASC, received the same honor, he said, "I feel like Laszlo [Kovacs, ASC] and I really earned this together, so I don't know how we're going to split it," and made a sawing motion with his hand through the award. A few years later, when Laszlo received the honor himself, he repeated the gesture, saying, "Vilmos, I'm giving you the other half!"

In a speech that opened our inaugural awards ceremony, Woody Omens, ASC stated, "If this award could speak, if there were a way to listen to its soul, to hear it express itself, it would tell you that the silent language of cinema belongs to the cinematographer. For it is the cinematographer who speaks silently with light, space, motion and color. Light speaks and shadows answer. Tonight we do not look at cinematography; we look *into* it. The 21st century begins tonight, here at the ASC, where the language of vision lives. With these awards, we open the door to the future."

Perhaps the comment that sums up the ASC Awards best came from Conrad Hall, ASC, when he received his Lifetime Achievement honor. He simply said, "I'm overwhelmed with gratitude for being a cinematographer."

Michael Goi, ASC
President

Photo by Owen Roizman, ASC.

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Short Takes



This still, part of a time-lapse sequence taken aboard the International Space Station during Expedition 29, dramatically revea ls the lights of Aurora Australis as the ISS makes an ascending pass over the Indian Ocean from south of Madagascar to just southwest of Austral ia.

Photos courtesy of the Image Science & Analysis Laboratory, NASA Johnson Space Center.

Otherworldly Views of Earth

By Iain Stasukevich

Some of the earliest issues of *American Cinematographer* feature a cover illustration of a cameraman standing in a bank of clouds, training his camera on the Earth below. At the foot of the image is the motto: "Give us a place to stand, and we will film the universe."

Since then we've seen all manner of cinematic portrayals of what it might be like to actually float above the Earth, looking down as the Pale Blue Dot spins beneath us. Filmmakers have even sent cameras into space. Between December 1998 and August 2001, two Imax 3-D cameras were used to document the construction of the International Space Station, and in 2009 an Imax camera photographed the Hubble Telescope repair mission.

"Ever since the Gemini Program started, in 1962, all missions to space have included some form of film or video documentation," says Sue Runco, the principal investigator for Crew Earth Observations at NASA's Johnson Space Center.

Part of Crew Earth Observations' current mission is working with the astronauts aboard the International Space Station to photograph natural and man-made events on Earth, including surface changes in urban and agricultural environments over time, and geological and meteoric events. There are HD camcorders — specifically Canon XH G1s — aboard the ISS, but until recently the crews have focused almost entirely on still photography. When astronaut Ron Garan expressed an interest in capturing different imagery during Expeditions 28 and 29, NASA's Photo/TV increment lead, Katrina Willoughby, suggested he experiment with the built-in intervalometers on the station's Nikon D3S and Nikon D2XS DSLRs.

The time-lapse tests were initially intended to offer scientists sequential photographic data pertaining to their areas of interest. "We have a list of sites for each expedition," says Runco. "Each day we run some programs that will tell us the track of the ISS, and after we look at weather conditions, cloud cover and lighting conditions, we pick the most ideal sites."

The cameras are rigged with a modified Bogen arm to the seat-track along the windows of the Cupola, the space station's

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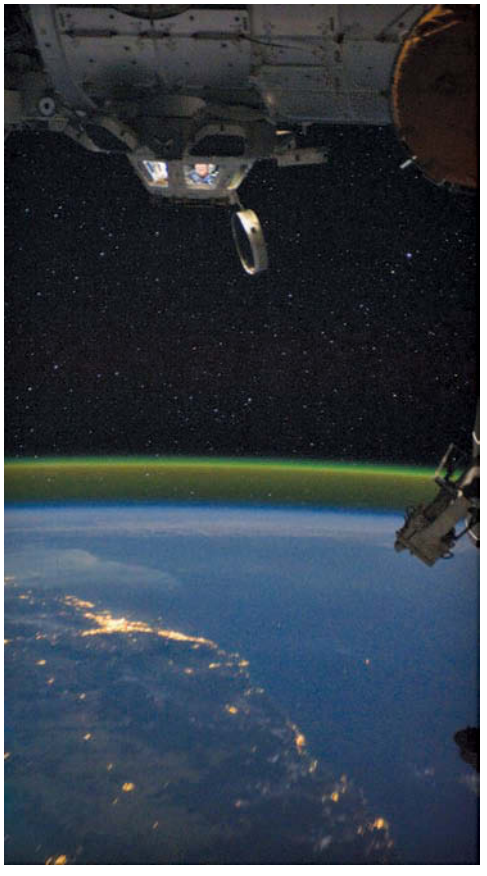
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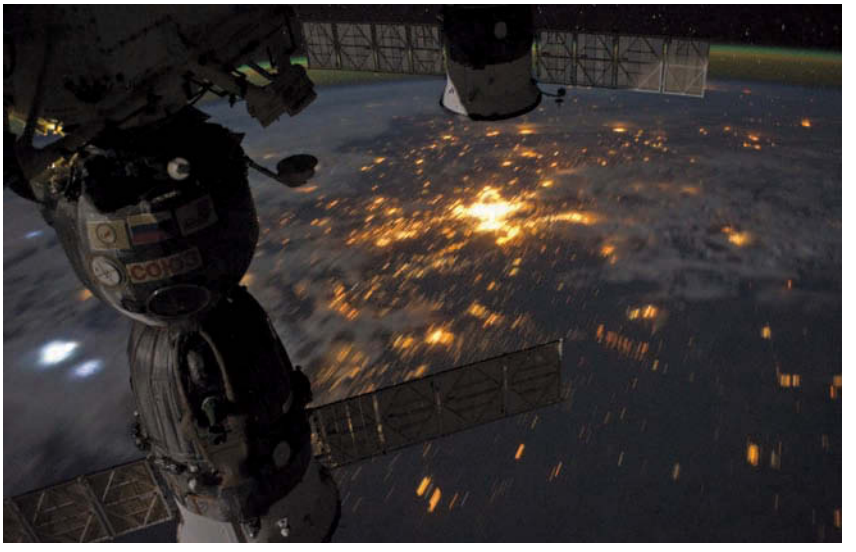
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Left: The time-lapse sequences were taken from the Cupola, the primary observatory aboard the ISS, visible at the top of this frame. Above: A Russian Soyuz vehicle is docked to the ISS, which makes a pass from South Africa to southern Pakistan. The bright lights of Johannesburg are visible, as are lightning storms (far left).

primary observatory module. The Cupola's seven borosilicate windows are arranged in a hexagonal dome, with six sides and a circular porthole looking directly down at the Earth.

A Nikon D3S was chosen for most of the photography because of its light sensitivity. At night, the ISO was usually set to 12,800, half of the camera's maximum. After some experimentation, the team decided a shutter speed of 1 second and aperture of f/2.8 did the best job of capturing the undulating glow of Aurora Australis and the constellations of dense urban sprawl. During the day, the ISO was dropped to 200, the shutter speed was increased to 1/640, and the aperture stopped down to f/11. (The astronauts also used the Nikon D2XS for daytime photography.)

When Garan assembled his first time-lapse sequence, from Europe to the Indian Ocean, "it blew my mind to be able to see all the stars and the constellations moving in the background," he says. His fellow crewmembers, particularly Mike Fossum, were likewise inspired to experiment with the cameras. "Mike has since elevated time-lapse photography from space into an art form," notes Garan.

When the first images were sent to Johnson Space Center, they caused quite a stir. "The cameras' sensitivity is so high that the photos capture subtle lighting and shadow details that are invisible to the unaided astronaut's eye," says Willoughby. The Crew Earth Observations team adds descriptive captions to the images and determines the images' geographic location and look-angle metadata, then adds that to the metadata generated by the camera.

The images immediately caught the eye of Melissa Dawson, an earth scientist with the Crew Earth Observations team. "I decided to use Adobe Flash to produce these short films," she says. "Everyone was so ecstatic about it. It's a whole new way to see the world."

The astronauts initially captured images at 5 fps, but the sequences often flew by too quickly when Dawson — who transitioned into working with Adobe After-Effects — played them back at speeds fast enough to render smooth motion. A shooting speed of 3 fps and playback rate of 12 fps were eventually agreed upon, but "when you watch the videos, they're still moving faster than the ISS is actually traveling," notes Dawson.

Garan and Fossum had a variety of lenses at their disposal, including Nikkor 14-24mm, 17-35mm and 28-70mm lenses. Garan spent much of his downtime angling for the best camera position and focal lengths. He found that a wide, horizon-oriented angle was best for capturing motion and provided the best view of the Earth's curvature.

"Some things that aren't readily apparent in the still photographs are visible in the videos," says Runco. "Auroras are one of the first things that jumped out to me. You actually get a sense of how fluid and dynamic they are. Their motion and the way they change shape are really amazing."

The video "Progress 42P Re-entering Earth's Atmosphere" provides another example. In the clip, the Earth rotates toward the bottom of the frame as the sun begins to crest the horizon. In the center of the frame, a comet-like object ignites as it de-orbits. "If it were just a still image, you wouldn't be able to see anything moving through the shot," she notes.

With every tweak of the process, more and more data is revealed to the cameramen. "We've recently observed airglow, a phenomenon wherein the molecules in Earth's atmosphere are stimulated by ultraviolet rays during the day," says Will Stefanov, chief scientist for contractor Jacobs Technology and contributor to the Crew Earth Observations team's work. "During the night, those molecules give off

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Top left: The ISS passes over central Africa, moving northeastward toward Egypt and the Nile River Delta. Bottom left: A wide shot of the ISS taken from the space shuttle *Endeavour*. Top right: Astronaut Ron Garan mans the cameras in the Cupola as the ISS passes over Australia.

absorbed energy in the form of photons. It produces different visible light colors of a yellow-gold or greenish color. There's also a red component, depending on your altitude."

Stefanov's colleagues noticed a reddish haze floating in and out of the video clips. "We discovered it was a phenomenon that the ISS is passing through as it orbits over the earth," he says. "It was suggested that what we're seeing is the red component of the airglow, which has been measured using spectroscopic methods but has never been seen from this unique vantage point before."

Time-lapse photography has become part of the Crew Earth Observations team's training curriculum for astronauts traveling to the ISS, but it still represents just a small portion of the photographic documentation conducted by NASA and other space agencies.

"There are always video cameras up there, and they're always changing as the technology evolves," says Runco. Astronaut Donald Pettit will soon return to the space station to record additional time-lapse sequences, and the European Space Agency recently sent up Italian astronaut Paolo Nespoli with a 720p 3-D camera, an Erasmus Recording Binocular-2, to record a visual map of the ISS interior.

Scientific and technical applications aside, NASA releases a large amount of astronaut photography into the public domain (http://eol.jsc.nasa.gov), and some citizens have responded by remixing and repurposing the astronauts' photos and videos into different media, including music videos. Meanwhile, Garan has founded the website FragileOasis.org, where he and other "bloggernauts" share their photos and videos. "I feel a very strong obligation to share with as many people as I can the experience of living and working in space, and the time-lapse sequences turned out to be a good medium with which to tell our story," he says.

What is that story?

"It's the orbital perspective. I hope to inspire people to improve life on our planet, because we're all in this together on the Spaceship Earth." ●

Clarification

Chan Kam Chuen took last month's ASC Close-Up photo of Rodrigo Prieto. This credit was omitted from the article.

Garan photo by Mike Fossum.

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Production Slate



Oskar Schell (Thomas Horn) mourns his late father, who died in the September 2001 terrorist attacks, in *Extremely Loud and Incredibly Close*, directed by Stephen Daldry and shot by Chris Menges, ASC, BSC.

9/11's Impact

By Mark Hope-Jones

Based on a novel by Jonathan Safran Foer, *Extremely Loud and Incredibly Close* follows 9-year-old New Yorker Oskar Schell (Thomas Horn) as he embarks on a quest to find the lock that fits a key he found among the possessions of his late father (Tom Hanks), who died in the September 2001 terrorist attacks. The quest takes the boy all over the city, where he encounters not only the still-grieving wider community, but also bitter, hidden rifts within his own family.

When Chris Menges, ASC, BSC got the call from director Stephen Daldry about shooting the picture, it was only a few weeks before principal photography was set to begin. Harris Savides, ASC had to depart the production for personal reasons, and Daldry needed a replacement on short notice. He had worked with Menges on *The Reader* (2008).

Menges arrived in New York with just three weeks to prepare, and he immediately began working with 1st AC Gregor Tavenner, who had been testing the Arri Alexa and ArriRaw recording format at Savides' request. "When they first talked about hiring Chris, [production] was leaning toward shooting 35mm, but I told Chris that if he had any interest in going with the Alexa, then we'd make it work for him," says Tavenner. "I had worked with the Alexa on *Hugo* [shot by Robert Richardson, ASC; *AC* Dec. '11], but it was a bit of a leap of faith for Chris. His response was, 'Good. It sounds exciting.'"

Comprehensive tests were rapidly shot to establish the camera's image characteristics, and Tavenner brought on digital-imaging technician Abby Levine to help coordinate the data workflow and manage the Codex recorders.

Menges was excited by the possibilities afforded by the new technology, but focused firmly on how it, and he, could best serve the story, the director and the actors. "The big issues for me were all about the sensibilities of the boy, Thomas, who had never acted before," he says. "I wanted to try to shoot with no lights on the floor and no marks to give him freedom, because I knew that if we could capture his performance, then we had the movie.

"Working that way will always involve photographic compromises — for instance, getting light in the eyes is difficult when you haven't got any lamps on the floor," he continues. "You have to be quite skillful in how you light a scene in order to be ready to catch the moment of performance."

One of the key sets was Oskar's apartment, which was constructed at JC Studios in Brooklyn. "A great deal of the film takes place in that set, and it was all built by the time I arrived," says Menges. "Under the circumstances, there were many things I had to be happy to accept, and one of them was the apartment, because they couldn't possibly rebuild it in three weeks. We made a few changes, but on the whole I just picked things up and got on with it. I think the main [change] I made was to take out a lot of the overhead lights and put the ceilings back in place, just to try and create the feel of a real apartment. If you have lights in the ceiling, it feels different."

Gaffer Bill O'Leary notes, "Chris' approach drove us to be more naturalistic in the sense that we treated the set as a location. With Chris, logic and reality rule, so where the light was coming from had to make sense. For day work, we installed a 12-by-80-foot Ultrabounce outside the set and had 24 5Ks and 12 Arri T-12s as sources. Three 20Ks on travelers were moved along the length of the set as needed; these lamps came in steeply and hit the floor close to the window to create a sunlight effect. Bounce boards inside the set provided fill, with the occasional small lamp used to augment."

The same philosophy extended to night scenes. "I tried to light with practicals whenever possible to create a natural and organic space in which the light would be logical to the actors," says Menges. Practicals held 60-watt or 100-watt bulbs and were gently supplemented by small, soft units just out of frame above them. O'Leary explains, "These units were custom-built lamps that contained multiple bulbs to soften the effect. We never worked off a grid or had lamps working unless we could explain why. Chris wanted it to look as it would if you just walked into the room. His work is beautiful and always drives the story." ➢







Top: Oskar enjoys a moment with his father (Tom Hanks) before the fateful day in September. Middle: Linda Schell (Sandra Bullock) consoles her son after the attack. Bottom: Menges frames up the production's Arri Alexa camera inside the Schells' apartment, a set constructed at JC Studios in Brooklyn.

Extremely Loud and Incredibly Close photos by François Duhamel, SMPSP, courtesy of Warner Bros.







When Oskar finds a mysterious key among his late father's possessions (top), he charts a course of action to find its corresponding lock (middle). Along the way, Oskar's quest introduces him to his estranged grandfather (Max von Sydow, bottom).

Lighting in this way and maximizing the actors' freedom required a close and communicative working relationship between Tavenner and Menges, who does his own operating. "Gregor was an absolutely ace focus puller," says the cinematographer. "When he had to leave, we got Andy Harris, who also did a wonderful job. I believe that a film like this can only be shot when you have a focus puller who is what I call a 'space man,' someone who is able to judge distances without using tape measures. I tried to shoot at around T2.8 to give the guys a chance, but sometimes we couldn't, so Gregor and Andy's abilities to judge space were uniquely important."

Menges used the new Cooke 5/i primes in combination with Angenieux Optimo zoom lenses. "On the whole, we'd shoot with primes on interiors and with the Optimos on exteriors," he says. "That's not an aperture thing; it's just that when you're outside and you've got depth, you can pick out shots with a zoom as you go along instead of stopping to change lenses. Also, the rooms in Oskar's apartment were tiny, so it wasn't really possible to use the Optimos [there] because they're huge!"

The importance of Horn's performance dictated everything Menges did with the camera. "That was the challenge of the film, and that's why I needed to operate: so I could understand what we were shooting and how we were constructing things by actually looking through the viewfinder," says the cinematographer. "Unfortunately, the optical viewfinder [on the Alexa Studio model] wasn't available at that time; that would have been much better for me. My training was that what you see on that etched ground glass is how you define the development of a scene, and it was a bit harder with an electronic finder. The only way I could deal with it was to take my eye from the camera as often as I could and look with the naked eye at what I was shooting."

More than any other aspect of digital acquisition, Menges appreciated the long takes made possible by the Codex recorders. "I loved how rich the Alexa was in its capture of tonal color, but probably the most important thing the system gave us was the ability to shoot for 50 minutes without reloading, which, if you're dealing



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To light Hanks and Bullock at the dining-room table, Menges and his crew affixed a custom-built, 4'-diameter ring light above the practical lamp. "I tried to light with practicals whenever possible to create a natural and organic space in which the light would be logical to the actors," says Menges.

with a first-time actor and trying to live in the moment, is a huge benefit. We could keep going for additional takes without all the paraphernalia of starting and stopping the camera. It kept everybody on his toes; there's nothing like turning the camera off to make people stop concentrating!"

During the course of the story, Oskar comes to realize that the old man (Max von Sydow) renting a room in his grandmother's apartment is, in fact, his paternal grandfather, who abandoned his young family many years before and never repaired the broken relationship with Oskar's father. "One of the most powerful scenes, a night scene, shows the grandfather leaving the grandmother's house, and Oskar is watching from the window of his own apartment across the street," says Menges. "He runs down as his grandfather is getting into a taxi, and their confrontation is very resonant."

"That scene was shot on the Upper West Side, on 101st Street just east of Broadway," says O'Leary. "We rigged 5Ks on the third floor terraces to provide backlight; we lit several storefronts and apartments; Par cans were rigged to scrape buildings and trees in the background; and one Condor was used to light the block looking west as the grandfather drives off. In the cab, we used commercially available rope lights that were powered by a battery and an inverter, along with a few small accent lamps. Again, it was all naturalistic."

In general, the EI 800 base sensitivity of the Alexa proved helpful for low-light situations. "The camera is exceptionally good at using its sensitivity to capture night scenes better than film does," says Menges. "For instance, it can photograph the sky at night without light, which film cannot do. We occasionally went to higher ASA ratings than 800, but this isn't really a night movie."

Most of the picture was shot and graded to look as naturalistic as possible, but the filmmakers wanted a slightly different look for occasional shots of skyscrapers and airplanes to suggest Oskar's lingering horror at the imagery associated with 9/11. "There is a nightmarish quality to some of the shots when Oskar goes out to search for the lock," says Menges. "He has become quite freaked out by what happened, and there are a few moments that reveal his anguish. We had [New York cinematographer] Pat Capone shoot a lot of that material. The look was a combination of what Pat did and what we did later in the digital grade."

Colorist Stefan Sonnenfeld, with whom Menges sat for several weeks of grading at Company 3, notes, "We did apply a look to those shots, but only very subtly, by pushing certain colors."

Menges' readiness to sacrifice eyelight on set in order to help the young lead actor inhabit his character led to some of the more detailed work in the final grade. "On a different kind of film, we might have had someone dancing around with a China ball or the like, but that would have been distracting for Thomas, so part of our work with Stefan has been about giving the characters a bit more life in the eyes," says Menges.

"Thomas has great eyes, as does Max von Sydow," adds Sonnenfeld. "We did complement the image by doing [power] windows on eyes, but I have to stress that these are things 99 percent of the audience wouldn't see. Chris is very critical of himself, but his lighting is beautiful, and the images in this movie are about as good as you can get. It was an easy film to grade. We just finessed and slightly embellished what Chris had already done."

TECHNICAL SPECS

2.40:1
Digital Capture
Arri Alexa
Cooke 5/i, Angenieux Optimo

Bottom photo by Bill O'Leary.

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Navy SEALs take fire during a rescue mission in *Act of Valor*, which cinematographer Shane Hurlbut, ASC shot primarily with Canon DSLR cameras.

Redefining Run-and-Gun

By Jon D. Witmer

Since buying his first Canon EOS 5D Mark II DSLR in early 2009, cinematographer Shane Hurlbut, ASC has been a vocal proponent of the immersive filmmaking style facilitated by the camera's low profile and large imaging sensor. "The minute I held that camera, I thought, 'This is going to change everything,'" he recalls.

He first put the 5D through its paces on a series of Webisodes he shot and directed that tied into the release of *Terminator Salvation* (*AC* June '09 and Jan. '10). While posting the project at Los Angeles production company Bandito Brothers, Hurlbut met directors Scott Waugh and Mike "Mouse" McCoy, who were prepping the feature *Act of Valor*. The movie would follow real Navy SEALs on a series of training exercises and tie that material to a narrative about a terrorist plot. The project would require location work in Kiev, Ukraine; Phnom Penh, Cambodia; Costa Rica; and the Horn of Africa, among other sites.

"I read the script and liked the idea, but I didn't know if I wanted to shoot another action picture at that time," says Hurlbut. "However, I was quickly sucked in by Scotty and Mouse's outside-the-box vision for the film. If we could use the DSLR platform to immerse the audience in the SEALs' missions and show the story through the soldiers' eyes, we could reinvent the action genre."

Working with a crew he refers to as the "Elite Team," Hurlbut carried 15 DSLRs into production, rolling as many as eight at once to capture the soldiers' operations in real time. Hurlbut recently sat down with *AC* to describe some of his work on the feature.

***American Cinematographer*: What were some of the things you focused on in prep?**

Shane Hurlbut, ASC: The part we prepped the most was the first sequence we shot, when the SEALs board and take over a terrorist sympathizer's yacht. We prepped that with the SEALs for two weeks, working out the operation and getting everything together. Otherwise, we typically had about a week to prep followed by a week to shoot. We used shot lists, but we didn't have time to storyboard. The SEALs always told us how many times they would repeat an exercise and how much time we would have, but until we actually saw the op go down, we couldn't know exactly where we needed to put the cameras. We would react to what we saw and try to find the essential storytelling points. When the SEALs took down the yacht, we had eight operators, and each one had a shot list on a dog tag around his neck. We had an operator on each boat, on the deck of the yacht and in the helicopters, and they followed the operation as it played out. On round two, they looked at their shot lists and saw what else they had to get. By the fourth round, we'd done 90 shots for a three-minute action sequence — all in six hours.

How did you keep tabs on all the cameras to make sure the material would cut together?

Hurlbut: We had camera-etiquette meetings with everyone who would have a camera in his hands. For day exteriors, we set the cameras to 5,200°K. For exposure, we checked the [camera's] internal meter and then underexposed by a half stop. We never shot an action sequence above a T4/5.6 split, and we were usually at T2.8 1/2 to take advantage of the camera's shallow depth of field. For composition, our 'rules of engagement' were simple: think outside the box, immerse the camera, and keep the point of view through the SEALs' eyes. This recipe never failed us.

How did you approach the sequences that didn't involve action, like the scenes showing the SEALs in their downtime and the terrorists planning their attack?

Hurlbut: We were willing to blaze a trail, but we wanted to do it with a plan that made sense for the story. The 5D was still fairly new and untested, so we decided to use it for the SEAL ops and shoot the other scenes on film. For night exteriors I used [Kodak Vision3 500T] 5219; for day exteriors I used [Vision2 50D] 5201; and for dawn and dusk I used [Vision3 250D] 5207. But later, as I developed a better understanding of the 5D, we started to use it more frequently. Ultimately, we shot everything with the bad guys in Kiev and Cambodia with the 5D.

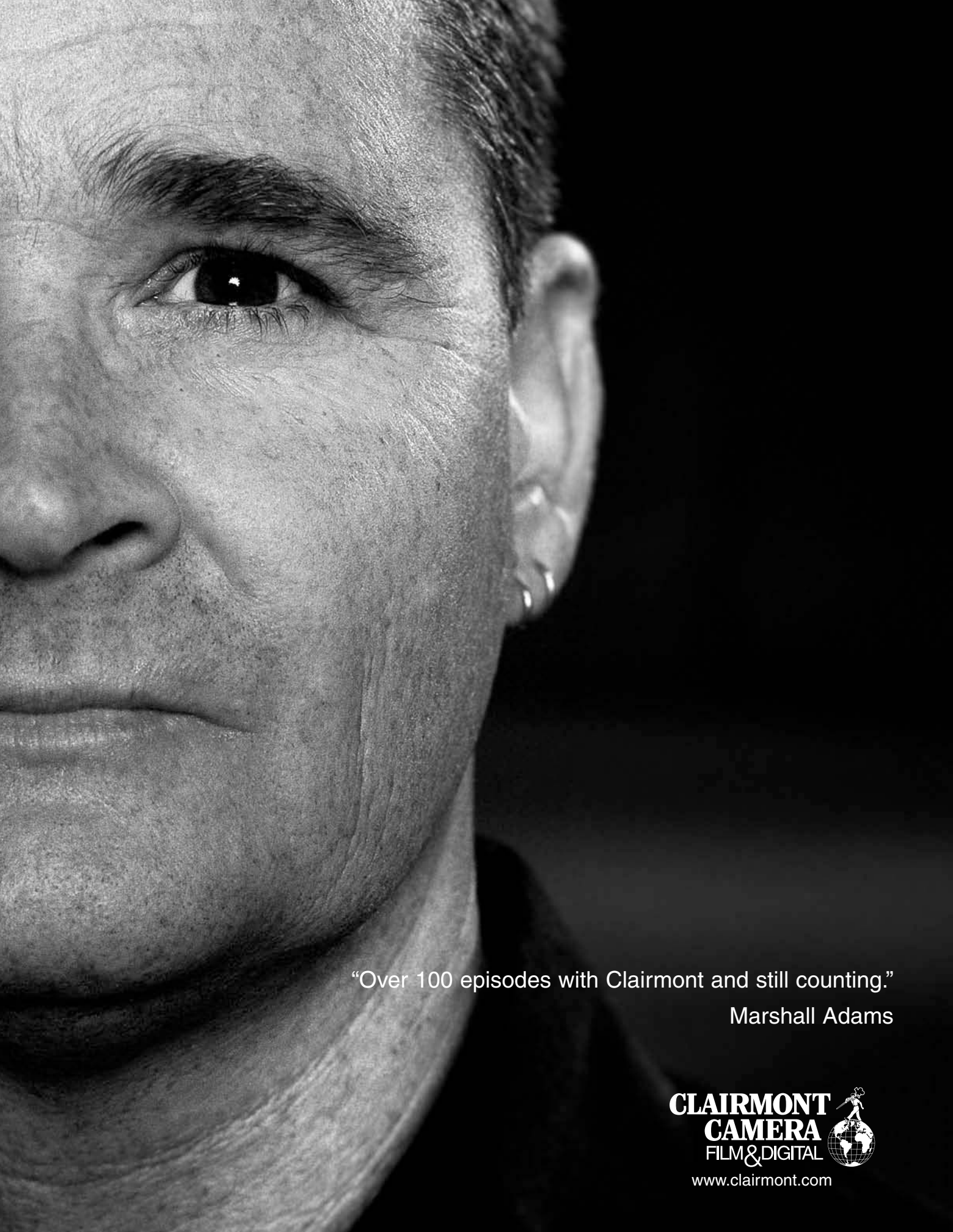
The action sequences are frequently punctuated by slow motion. Were you capturing those bits with film, too?

Hurlbut: We put some 5D footage through [Vision Effects' motion-estimation software] Twixtor to make it slow motion, and we also had an Arri 435 on hand at all times. Once the [Canon EOS] 7D became available, we used that camera, too. It records 60 frames at 720p, so I boosted the shutter to 1/125, and that sharpened the image and made it look more like 1080p.

Did you use any other Canon DSLRs?

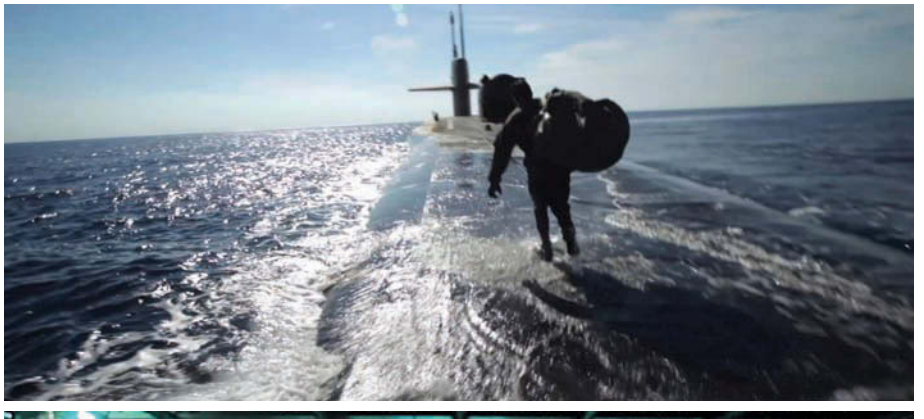
Hurlbut: I used the 1D Mark IV inside the nuclear submarine. It's not my first choice, because I think it looks a little

Act of Valor photos and frame grabs courtesy of IATM LLC and Relativity Media, LLC.


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From top: Hurlbut backlit the SEALs at the John C. Stennis Space Center's live-fire range with a Nine-Light Maxi on an 80' Condor; Hurlbut and production designer John Zachary designed practical lighting around the hooch compound at Stennis; the production also filmed aboard an operational nuclear submarine; two SEALs converse aboard the *USS Bon Homme Richard*.

plasticky, but the 5D would have been too noisy at 3,200 [ASA], and we needed the 1D Mark IV's hyper-sensitive imager to really bring the sub to life.

How did you decide on the widescreen aspect ratio?

Hurlbut: This is an epic tale, and we didn't want anybody wondering if they were watching a documentary! Widescreen just felt right. It was hard doing the helmet cam in 2.35:1, though, because you could lose the part of the frame that includes the soldiers' hands. In general, I didn't go wider than a 24mm, but we used an 18mm for the helmet cam so we could see the gun and hands. We used Zeiss ZF lenses on the helmet cams and action-cam rig. For the other material, we Panavised the cameras and shot with Primos, because we had a lot of trouble pulling focus with the still lenses on the first few days of the shoot. I also used neutral-density glass, and over the course of the shoot I zeroed in on Tiffen Water White NDs, which seemed to be the cleanest for the 5D's particular color space.

You call your crew the 'Elite Team.' How were their roles defined?

Hurlbut: We were a platoon, and we patterned our shooting style after the SEALs: go in with a small footprint and deliver a big vision. With that approach, multi-tasking is absolutely essential. Mike Svitak, Derek Edwards, Marc Margulies, Rudy Harbon, Bodie Orman, Jon Guerra, Dave Knudson and Darin Necessary were the core of the Elite Team and worked on most of the movie. They did everything from pulling focus to downloading the UDMA Compact Flash cards to operating cameras; they did two scales above their pay grade and six scales below. They were so powerful as an entity. Once I knew they could take the responsibility, I just kept giving them more.

Did they travel with you everywhere, or did you hire local crew?

Hurlbut: We brought two to four of them, depending on how intensive the sequences were, and then we picked up local crew. The Ukrainian crew was amazing. The warehouse we used in Kiev had all these fluorescents in the ceiling, none of them worked, and the place was half a football field long. I wanted every other fluorescent working, 18Ks blasting through

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Left: Hurlbut takes a handheld 5D Mark II into the fray. Above: Hurlbut prepares to shoot with a shoulder-rig configuration. "The 5D was the only camera that could keep up with the SEALs," he says.

the skylights, and some 6Ks streaming in for backlight. When I showed up at 5 in the morning [on the shoot day], the gaffer, Sergey Svetnoy,and his crew had everything rigged exactly where I wanted it!

When the SEALs rescue Morales [Roselyn Sanchez], they hit the ground at night, and the action is mostly played in silhouette.

Hurlbut: That was at the John C. Stennis Space Center's live-fire range. I wanted the lighting to be as minimal as possible, so I backlit the soldiers with one Nine-Light Maxi on an 80-foot Condor; we splayed the bulbs and shot at 1,600 ASA. For a little tickle of fill light, we used a mini Nine-Light bounced into a 12-by-12 Ultra-Bounce on the other side of the stream. [Production Designer] John Zachary and I designed practical lighting around the hooch [where Morales is held captive]. We wanted to illuminate the compound with an array of light, so we talked about metal halides outside and warm practicals inside. About 90 percent of the lights I used on this movie were from Home Depot and the Grainger catalogue!

Once the sun rises, the sequence kicks into full gear, and it looks like you captured the action from some truly precarious angles.

Hurlbut: Well, the camera only costs $2,500, so we didn't hesitate to put it in harm's way! We steel-plated our crash boxes, and we put a ¼-inch piece of steel right in front of the CF card. Even if the camera got shot, the card was all right. I think we only lost six cameras [over the entire production]. We only had six and a half days to do the 28-page sequence at Stennis, so we divided into three units: Scotty did all the shots in the SEALs' pickup truck, Mouse did all the action shots on the river and I did all the shots in the bad guys' vehicles.

The SEALs eventually trace the terrorist plot to a Mexican village, where you cut between a normal night look and a night-vision look. How did you create the night-vision effect?

Hurlbut: John Zachary built that village at the [Basic Underwater Demolition/SEAL] training facility on San Clemente Island. We got night-vision adapters for the 5Ds, but we had to shoot in both regular mode and night-vision mode [at the same time], and in terms of their response to light, those two modes don't mix. When we put on the adapters, it was like an old video camera — all of the light sources would burn in. So we decided to set the cameras at 6,400 ASA, embrace all the video noise, and then dial in the monochromatic greenish tone in the final color correction.

Where did you do that work?

Hurlbut: All of the visual-effects work was done at Bandito Post, with Jacob Rosenberg at the helm. Our budget was tight, so once the picture was locked, I asked [ASC associate and colorist] Stefan Sonnenfeld at Company 3 to do me a big favor, and he delivered in spades. Later, when Relativity purchased the film, I asked [ASC associate and colorist] David Cole at LaserPacific to do the final color correction. We also worked with a company in Albuquerque called Cinnafilm, which has an algorithm that strips the noise off the footage and then allows you to layer in whatever grain you want. We used that technology for the entire movie, even the pieces we shot on film, and it's seamless. After many tests at Company 3, we found that the best recipe was to color-correct the whole movie and then texture it. When we tried texturing the files beforehand, they would look too plasticky.

Was there a particular film-stock grain you wanted to emulate?

Hurlbut: Kodak [Vision2 200T] 5217. You see it, but it's not too intense. For some of the noisier scenes, when we were shooting at 1,600 [ASA], we went more for 5219 pushed one stop, and it looks really good. As a cinematographer, you use the tool that best tells the story. If the audience is immersed in the film and it takes them to a place they've never been before, then we have succeeded. The 5D was the only camera that could keep up with the SEALs. I think this would have been just another action movie if we'd shot it on film or a high-end digital camera.

TECHNICAL SPECS

2.40:1

Digital Capture; 3-perf and 4-perf Super 35mm

Canon EOS 5D, EOS 7D, 1D Mark IV; Arri 435 Xtreme

Panavision Primo, Zeiss ZF, Canon L Series

Kodak Vision2 50D 5201; Vision3 250D 5207, 500T 5219

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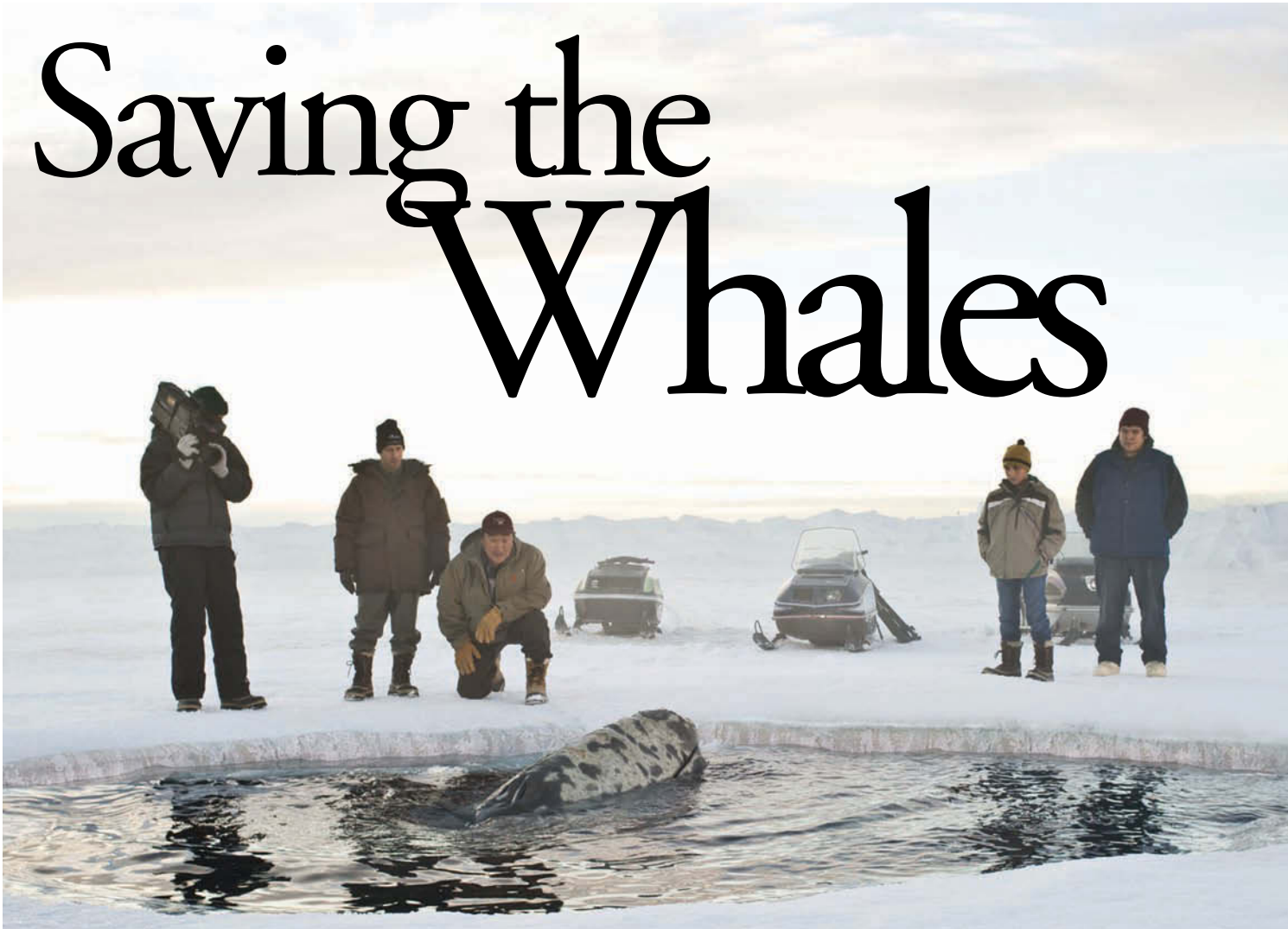


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Saving the Whales



John Bailey, ASC goes on location in Alaska to shoot *Big Miracle*, a scenic drama based on a true story.

By David Heuring

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When three whales became trapped by rapidly thickening winter ice near Barrow, Alaska, in 1988, an unlikely coalition that included Greenpeace, oil companies looking for positive publicity, and the indigenous Iñupiat people sprung up to assist them. Eventually, a series of holes was cut in the ice so the whales could breathe as they traveled toward a potential escape route, and a Soviet icebreaker provided the final breakthrough to save the day.

This story is told in the new film *Big Miracle*, directed by Ken Kwapis and shot by John Bailey, ASC. Principal photography took place in the autumn of 2010 in and around Anchorage, Alaska; a second unit led by Peter Collister, ASC captured material in Barrow. "The extreme weather made for an arduous experience that pulled everyone together into one of the best ensembles I have ever worked with," says Bailey. "I was fortunate to have three fabulous camera operators, Matt Moriarty, Andy Shuttlesworth and Jim McConkey, who rotated duties, and camera assistants Steve Cueva, Jozo Zovko, Dennis Seawright and Haydn Pazanti. My longtime gaffer and friend, Michael Moyer, key grip Art Bartels and their crew shone even under the most trying conditions."



Unit photography by Darren Michaels, SMPSP, courtesy of Universal Pictures. Bottom photo on page 31 by Jehad Nga. Visual-effects shots courtesy of Rhythm & Hues.

He recently spoke to *AC* about his work on the project.

***American Cinematographer*: How was the decision made to shoot in Anchorage?**

John Bailey, ASC: Ken felt strongly that the native faces in the film should be real North Slope Alaskan Iñupiat. Also, Alaska's generous tax incentives for film production helped. My big concern was that we choose an area where the sun, if it were out, would be available to us most of the time. I figured that shooting west with a southern light would give us less of a sense of light change than if we were shooting frontal light or changing crosslight. The sun rose in the southeast, never exceeded 30 degrees in the sky, and set in the southwest. That made lighting continuity fairly easy to maintain. The only problem was that as the shoot progressed, the sun's position moved so low that it was intermittently blocked



Opposite page: Three whales trapped beneath ice in Alaska draw the attention of the locals and the media in *Big Miracle*. This page, top: Greenpeace activist Rachel Kramer (Drew Barrymore) examines the dilemma with a state wildlife official (Tim Blake Nelson) and an Iñupiat leader, Malik (John Pingayak). Bottom: Director Ken Kwapis (left) enjoys a light moment on location with cinematographer John Bailey, ASC.

Saving the Whales

by office buildings in downtown Anchorage. It's an odd thing to be out in the middle of what is supposed to be the North Slope, above the Arctic Circle, and have a skyscraper shadow fall across your set.

Your previous movies with Ken were shot in the anamorphic format, but you chose to shoot this in 3-perf Super 35mm. Why?

Bailey: Ken and I both love anamorphic, but I was a little concerned about using it on this picture given the severity of the weather and the long equipment trail back to Panavision in Woodland Hills. If ever a film I have done cried out for the 2.40:1 aspect ratio, this was it — the ice fields are enormous. I was a camera assistant on a 16mm shoot in Barrow 40 years ago, and I had always dreamed of going up there again. It's an infinite horizon where you can stand at the end of the earth and see nothing but white for 360 degrees. I thought widescreen would be best for capturing that. Also, the film dramatizes a collective effort, and the wide aspect ratio gave us the opportunity to shoot medium close-ups and still have three or four people in the frame. Out on the ice, we spread people fully across the frame, and we also reached into deeper space within the frame. That staggered depth required the greater depth-of-field of spherical lenses.



Was the need to capture subtle gradations of white in all the snow and ice the main reason you chose to shoot on film?

Bailey: I love film very much, but we decided to shoot film for a number of reasons. Yes, whites were crucial, and I felt that the [exposure] curve, especially the response of film in the white area, would be more delicate and nuanced than it would appear in any digital format. I also expected to be in situations where I might have more contrasty light than I might like, with limited opportunities to fill it in, because



Top: Local news reporter Adam Carlson (John Krasinski) stumbles onto the story while shooting skimobile footage with his friend Nathan (Ahmaogak Sweeney). Bottom: When national news crews arrive in Barrow, some of the locals try to make a quick buck by selling them pricey pieces of cardboard to keep their feet from freezing on the ice. Production designer Nelson Coates and his crew constructed the town set in Anchorage at a site that offered comparatively milder temperatures and a partially unobstructed horizon.



Top: Malik and Nathan listen for signs of the whales' distress. Bottom: One of the whales breaks for the surface.



the open spaces were so wide. I knew we'd have very little ability to bring in huge supplemental lighting or fly large silks to control the contrast. I knew film would be more congenial in those situations. Another concern was the dependability of digital equipment in very wet conditions. Any problems I've had with video cameras in the past were often the result of dampness. The weather on this project was a formidable opponent; we would arrive [on set] in pitch black, the temperatures were often in the teens, and sometimes there were 40-mph and 50-mph winds. Everything had to be de-iced, thawed out and heated up in the morning. It took a long time to get the equipment up and running. We had a lot of freezing rain, and everything that was electronic was affected — we even had trouble pumping up the dolly.

What were your considerations when it came to the Arctic sunlight?

Bailey: The sun was never very high. It was almost always a beautiful, raking light, but it disappeared fast in the late afternoon. We didn't have an extended magic hour. We lost more than 3½ minutes of light every day, and by the last few weeks of our shoot we were getting less than six hours of usable daylight each day. Once the sun was down, we did have a pure, albeit brief, magic hour, with the sun below the horizon and open skylight, but most of our scenes were day or night scenes, so we didn't have much chance to use magic-hour effects. Also, the light was very unstable. Most of the time it was filtered sunlight or overcast, and when the sun did come out, it was hard and clear, and we'd have to try to match it. We flew one 40-by-60 silk from a big construction crane, and we had a bunch of 20-by-20 silks on rolling stands that we could move around. But it was hard to put up a lot of silks because of the wind coming up the Cook Inlet from the ocean, and because there was nothing to which we could tether large silks. Everything had to be guyed from overhead.

To maintain continuity, we used three or four 18Ks banked up and coming through a silk. Sometimes, to give a little feeling of sunlight, I used the 18Ks spotted down with warm gels. Because the sun never got very high or intense, I was often shooting at a T4 or T4.5. That made it easy to counter the ambience or subtly suggest a sense of source with an 18K. The snow-covered ice gave us free fill light bouncing up. Around the ice hole, where many scenes take place, a soft wash of filtered sunlight helped break up the monotony of the ice. But there were a couple of scenes that I just let go without any attempt to add light. The sky was white, the ice was white and there was no sense of horizon. It was like shooting on a

Saving the Whales

Top: The two adult whales and their baby swim toward the ice hole. Many of the movie's whale shots were created digitally by a visual-effects team at Rhythm & Hues, led by visual-effects supervisor John Heller and visual-effects producer David James. Bottom photos: Ignoring the danger of approaching the huge creatures, Rachel makes a valiant dive to free the baby's fluke from some netting.







limbo stage by creating a disorienting space.

How did you re-create Barrow in Anchorage?

Bailey: The ice field was a completely constructed set. We shot at the harbor, with the high-rise buildings of Anchorage behind us. The production designer, Nelson Coates, and his team dug a 17-foot-deep hole and lined it with concrete to keep the seawater from seeping in. That was for our mechanical whales. All the angles you see there suggesting 360 degrees were actually shot within about a 90-to-120-degree radius at that hole. We did what I call 'Jack Webb Overs,' where you keep the actors in the same place and just swap them to the other side of the frame for a complementary over-the-shoulder. I learned this technique when I operated for Ric Waite [ASC] on the TV show *Emergency!* in the 1970s. If there was any sense of the source, I'd have to scrim the light off and bring in an 18K on the other side. But Ken is great at logistics, and we plotted our coverage carefully.

Tell us more about how you work with Ken. Isn't this your fifth film together? ➢


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Saving the Whales

Kwapis Reflects

There's always a certain amount of denial required to embark upon a feature film. You have to look squarely at the challenges you face and say, "Nah, it won't be so bad." In this case, the challenges included bitter cold, a large ensemble cast (some of whom had never worked in front of a camera before), three robotic whales, a dearth of daylight (we lost three minutes of daylight each day), and absurdly unpredictable weather. (On a moment's notice, a beautiful overcast sky would give way to the harshest sun.) Oh, it's worth saying a second time: it was damn cold.

As I arrived in Barrow for our first scout, our guide informed us that two days earlier, the local whale hunters had bagged a 60-foot bowhead. As is the custom, the whale was harvested as soon as the hunters pulled it ashore. From the window of our nine-seat plane, I could see what remained: a bright red imprint of the whale against the snow. Imagine a gigantic crime scene outline … of a whale. When I saw that, I knew I'd reached the edge of the world.

John and I wanted *Big Miracle* to be both sweeping and intimate. We discussed David Lean's shooting style, in particular the way Lean moved boldly between extreme wide shots and close-ups. John and I also wanted to create a sense of reportage, the feeling that the action was 'captured' as opposed to choreographed. To that end, we studied the trio of neo-realist films made by Roberto Rossellini after World War II, in order to develop a style in which the camera 'eavesdrops' on the scene. One result is that framing feels less precious, the compositions less manicured.

It was crucial to John that we never anthropomorphize the whales. On the set, he appointed himself a sort of whale monitor, and would occasionally pull me aside if he felt that one of our marine mammals was 'overacting.' His concern was not unfounded. Once, in a meeting, a certain executive asked if I could do a shot in which the whales waved good-bye. I replied, in as serious a tone as I could muster, "Whales don't wave."

— Ken Kwapis





Top: The crew gathers around the frigid ice-hole set, which was constructed with the help of special-effects coordinator John Cazin and his crew. Bottom: Riding a Chapman crane, Matt Moriarty captures a shot of the stars interacting with one of the whales. A number of the creatures' close-ups were accomplished with three animatronic gray whales created for the show by Justin Buckingham and Glasshammer Visual Effects, a company based in Auckland, New Zealand; another effects expert, Mike Latham, designed the animatronics, robotics and hydraulics used to manipulate the whales.

Bailey: Yes. We are very close friends, and sometimes that helps us communicate better when we're talking about a film. For example, we both love classical music, and when we're talking about a movie, we sometimes talk about music. We might talk about how Beethoven, unlike Mozart or the Romantics, was noted not for his endless flow of melody, but for his motivic development — short bursts of theme that he would rework and integrate over and over with variations. Ken and I, in talking about how to do a scene, might approach it in a similar way. Rather than making a shot list, we might find the fragments that highlight what's important and build from there. In music you might call them motifs, and in drama you'd call them beats. So our common love of music helps us find ways to think about and communicate

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Saving the Whales





Top: In a desperate bid to save the whales, the Iñupiat dig a series of holes that lead to the ocean. Bottom: A crane-mounted lighting rig allowed the crew to illuminate the ice holes for night shots.

about filmmaking.

This movie presents realistic situations, but there was extensive visual-effects work. How did you collaborate with [Rhythm & Hues visual-effects supervisor] John Heller?

Bailey: This was the fullest immersion I've ever had in the world of visual effects. There are hundreds of effects that are all meant to be 'invisible,' including background replacement, sky replacement, CG extensions of our ice field, and many CG holes in the ice, and the work the visual-effects team did is amazing. Incidentally, that's another reason we chose to shoot Super 35mm: we knew that with so many digital effects, everything would have to be scanned and finished digitally, anyway. The mechanical whales were created by Glasshammer Visual Effects. All of them were on hydraulics, and the [puppeteers] had to don scuba gear and get into the water to reconfigure them. We did extensive storyboards; it was necessary for the logistics, for the whale puppeteers and for the visual-effects team. I was amazed when John Heller said to me, 'Give me protection when you can, but do whatever you want.' We'd put a greenscreen in wherever we could, but there were some scenes with very extensive camera moves, even handheld, that required background and sky replacement. In addition to Rhythm & Hues and Glasshammer, we worked with three other effects facilities: Modus, Gradient and Kerner Optical. The underwater whales are all CGI. The icebreaker is a 20-foot model shot on a model stage. We also used some old aerial footage of an icebreaker and incorporated extensive news footage of the event from 1988. I prefer to shoot a monitor live with the material if I can, but there wasn't enough time in preproduction to gather the footage, so that was added after the fact.

How did you accomplish Drew Barrymore's underwater scenes?

Bailey: We shot her getting into and out of the water with scuba gear on, but for some shots of her in the tank it wasn't possible to get enough supple-

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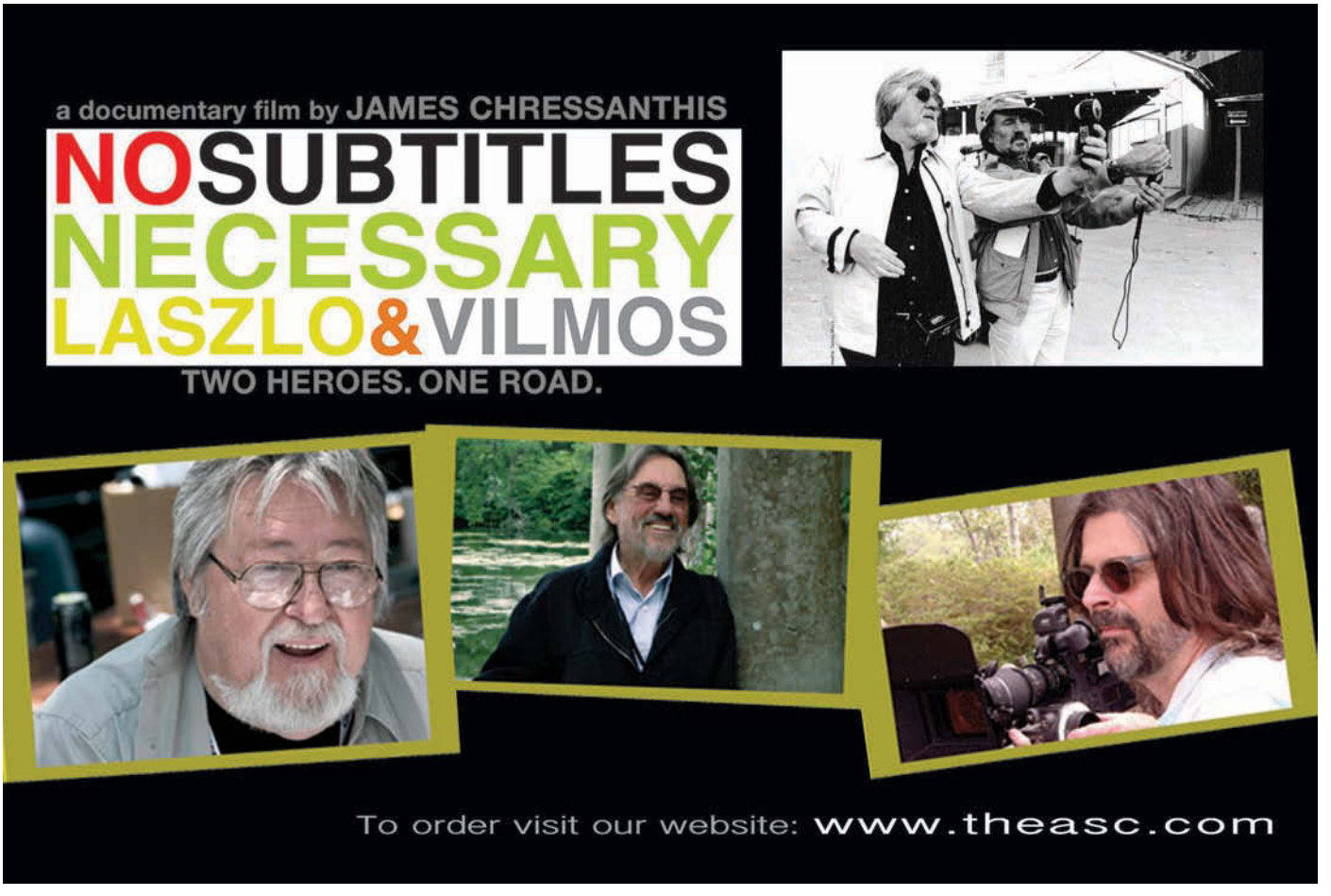


Left: A Russian icebreaker attempts to open a path to freedom by slamming repeatedly into an imposing barrier at increasingly p erilous speeds. The ship was actually a 20' model shot on a stage. Right: Interior views of the icebreaker's control room were also shot on a soundstage .

mental lighting to see that it was she in the mask. We needed to get more coverage, so I remembered a trick I did once that I thought might work again. We bought a 50-inch home aquarium and filled it with water, and we put the camera in front of it and Drew behind it, wet down with her mask on. Behind her was a greenscreen so we could add the background later. I lit the tank with some raw lights coming in from above, creating light waves in the water. I had frontlight on her, and although it was tough getting light in through the mask, we did it. The bubbles were CGI.

That's an example of experience saving the day — and probably a lot of money as well.

Bailey: That's one of those things. When you have a career as an assistant and a camera operator, and



you've seen one of the old masters do something like this, it registers. When I talk to film students, I tell them they can buy a DSLR and some business cards and call themselves a director of photography — I know some people who have done that successfully — but there is an argument to be made for going slow and learning and studying what other people have done.

You have said you prefer to do photochemical color timing instead of digital timing whenever possible, but it seems like a digital grade was particularly useful on this film in terms of achieving the look you and Ken had in mind. Would you agree?

Bailey: Rhythm & Hues did a very good job of making visual-effects shots [look] consistent, but once I started to see the cut scenes, I felt there were elements that needed to be worked on even more in order to get them to match, and also to create a sense of our location's ever-changing light and austere beauty. Adrian Seery, our colorist at Technicolor Hollywood, was very good at going in and isolating parts of the sky and creating a darker band of clouds, or adding a streak of soft sunlight. We did a tremendous amount of work on the skies and the ice field; we added more texture and contrast to the ice, introduced a little more blue in the shadow areas, and built in a soft shadow or penumbra to help lead the eye to the area of interest — something that was challenging to create in a pure limbo environment. [Our work was] much like shading in a pencil drawing to give a sense of texture and depth. In some scenes, the icebreaker looked a little flat instead of fully dimensional, so we isolated parts of the ship, created false shadows or painted in stronger highlights and reflections. This was the first time I'd worked with the DaVinci Resolve, and I was astonished by the quantum leap the technology has made, and the ease with which you can dial in contrast mattes or color or density mattes without having to laboriously track multiple positions. Four years ago, we couldn't do this so readily. Frankly, you get tempted to overwork the frame, but I try to resist it. In the DI suite, it's all too easy to override the decisions you made on set, and those are often truer to your creative intent. ●

TECHNICAL SPECS

2.40:1

3-perf Super 35mm

Panaflex Platinum, Millennium

Panavision Primo

Kodak Vision3 500T 5219, 250D 5207

Digital Intermediate





High Stakes

Michael Mann and a team of cinematographers place their bets on *Luck*, a horseracing drama filled with colorful characters.

By Patricia Thomson

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Luck, the new HBO series about horseracing, combines the writing chops of creator David Milch, a former thoroughbred owner, and the storytelling prowess of executive producer Michael Mann, the drama's guiding light. Four cinematographers contributed to the first season, which comprises nine episodes: Stuart Dryburgh, ASC shot the pilot, directed by Mann, and the first two episodes; Lukas Strebel shot four episodes, making his U.S. debut after shooting numerous programs for British television; Russell Lee Fine shot one episode and additional racetrack footage for two others; and Mann regular John Grillo, who served as the A-camera operator on most of the production, took up the reins as director of photography for one episode.

The filmmakers agree that it was quite demanding to stage and photograph horseraces on a TV-series production schedule. Each episode contains at least one race, and every race advances multiple storylines — for jockeys, trainers, owners and even the horses. The races were made more challenging by Mann's aesthetic, which favors handheld camerawork; remote cranes and gyrostabilized heads might have made life easier on the camera crew, but they were off limits.

In his first meeting with Mann, an early adopter of digital cinematography, Dryburgh was surprised to hear the director say he wanted to shoot the pilot on film. "Michael's reasoning, which was very sensible, was that the pilot would be mostly day exteriors, and he wanted to capture all the details in the bright California sunlight, harsh white skies and white clouds, mountains in the background and shadows in the [racetrack] stands," says Dryburgh. "He felt film would do a better job."

Mann wanted a strong signature look built on what he

calls "native lighting." He explains, "I wanted to evoke the way light floods Southern California, particularly around the San Gabriel Mountains. That meant being fairly chromatic and having an extended mid-range, pushing the gamma a bit. There's a lushness and beauty to that light. We could do this only because many of our characters are kind of [Charles] Bukowski degenerate gamblers. The surface of the people is very rough, their language is very rough, and that enabled us to be more lyrical with the visuals."

During his first day on the job, Dryburgh went to the track in Santa Anita for a pre-dawn scout with his Canon EOS 5D. "Early in the morning, the air is cold, and the horses' breath is steaming as they come off the track. There's a whole society there — all the trainers and handicappers are hanging around a café with good Mexican food and bad coffee. As the sun comes up, there's golden backlight. And the jockeys are wearing great colors. I came away from that first morning knowing that all I needed to do was to keep it looking as good as it did in reality, and we'd have a beautiful picture."

Dryburgh reports that in the final weeks of prep, Mann started having second thoughts about shooting film, and the team paused to conduct a side-by-side comparison of 35mm and Sony's F35. "Both looked great when we were inside, and both looked great in early-morning trackside light," says the cinematographer, "but when we set up high in the grandstands in the middle of the day and had a big wide shot with people in shadow in front of us, horses racing on the track and mountains and sky in the background, we couldn't get the detail and range out of digital that we could with film. That sealed the deal." Dryburgh subsequently chose three Kodak stocks for the pilot, Vision2 50D 5201 and Vision3 250D 5207 and 500T 5219.

However, Mann did decide to capture most of the racing footage digitally, mainly with Canon DSLR







Opposite page: Camera operator Roberto De Angelis captures race action with a handheld DSLR camera. This page, top to bottom: Four gambling "degenerates" (Ian Hart, Richie Coster, Kevin Dunn and Jason Gedrick) cheer on their horse; crime kingpin Chester "Ace" Bernstein (Dustin Hoffman, right) and his trusted associate, Gus Demitriou (Dennis Farina), use their wiles to gain inside position at the track; director Michael Mann scopes out an angle with one of the show's cinematographers, ASC member Stuart Dryburgh (in white cap).

Unit photography by Gusmano Cesaretti, courtesy of HBO. Bottom photo on page 50 by Lukas Strebel.

High Stakes



Top: Jerry's addiction to poker makes him his own worst enemy. Bottom: An ambitious "exercise girl" (Kerry Condon) presses a veteran trainer (Nick Nolte) to give her a shot as a race jockey.



cameras mounted with Canon's 24-105mm IS zoom lens. (An F35 was also used for some of this material in the pilot, and an Arri 435 was used for high-speed racetrack footage.) "We chose the 24-105mm IS not only for its zoom range, but also for its image stabilization," notes 1st AC Craig Grossmueller, who worked on the show from prep through the last episode. "We couldn't use a big stabilized head in close with the horses, so the lens's image stabilization was a great way to minimize camera vibration."

Panavision provided the camera package for the pilot, which included a Panaflex Platinum and two Panaflex Millennium XLs; an Arri 435; Primo prime lenses; Primo 14.5-50mm, 11:1 (24-275mm), 4:1 (17.5-75mm) and 3:1 (135-420mm) zoom lenses; and PCZ 19-90mm, STZ 70-200mm, LWZ1 17.5-34mm and LWZ2 27-68mm zoom lenses.

The filmmakers transitioned to mostly digital capture for the episodic work, retaining the Arri 435 for shots captured at speeds higher than 60 fps. "The theory was that as we were primarily shooting digital for the racing sequences, we should stay digital," says Dryburgh. After testing the F35 and Arri's Alexa, which had just become available, Mann opted for the Alexa. He observes, "At that time, it was more flexible and more ergonomically designed than the F35."

Dryburgh was impressed from day one. "Straight out of the box, I simply liked the way the Alexa image looked," he says. "It had a photographic quality that didn't feel 'digital' in the pejorative sense. The Rec 709 color space looked nice to my eye. As I got deeper into it, I discovered the camera handles highlights very well."

When he commenced shooting episodes, Dryburgh found the Alexa changed the way he lit the primary locations. For example, when scouting the horses' stalls, he'd set his Canon 5D at "a ridiculously high ASA" in order to capture the small practicals and soft morning sunlight washing into the dark



Top: The trainer and his protégé discuss her future while sitting outside the stall of a very promising racehorse. Bottom: The "old man" (as Nolte's character is known) bonds with his horse.

shed rows, which were punctuated by shafts of sunlight. To get the same look on film, his crew positioned 18K HMIs and large diffusion frames outside each opening. "We spent a lot of time on the pilot, relatively speaking, lighting those things," he notes. With the Alexa, "we were able to shoot the shed rows in natural light. We just lit the actors when we moved in for close work, using little lights in the ceiling and occasionally bigger sources. That not only saved time, but also opened up a lot more camera angles." This was particularly important because the filmmakers routinely ran three cameras, even on straightforward dialogue scenes.

Grillo, too, felt liberated by the Alexa's dynamic range. "On a heavily backlit daylight exterior, with the California sun low on the horizon, you'd normally need to bring in a little fill for faces in the grandstands," he says. "But with the Alexa, there was no need. It captures natural light the way your eye sees it. On night exteriors in the episode I shot, I pulled my meter out and discovered the Alexa was doing things I didn't think were possible! So I just worked from the monitor."



After conducting several comparison tests recording to Sony SRW decks, Codex recorders and solid-state cards, the filmmakers decided to record to SxS cards, which offered about 15 minutes of recording time. (Most of the show was captured in ProRes 4:4:4 HQ, with 4:2:2 used for 60-fps work.) "The pace and style of the show demanded we keep the camera small and modular, and using the cards eliminated the need for an external recording device," says Grossmueller. Dryburgh adds, "This was a tightly scripted show, so we didn't need to run the camera endlessly."

Working with digital-imaging technician Greg Gabrio, the cinematographers created various look-up tables using Technicolor's DP Lights system.

Once the series work commenced, Clairmont Camera provided

High Stakes



Cajun jockey Leon Micheaux (Tom Payne) struggles with his weight and other issues while trying to make his name on the track.

the production with the Alexas; the Arri 435; a full set of Cooke S4 primes; Angenieux Optimo 15-40mm, 17-80mm, 28-76mm and 24-290mm zoom lenses; and an Isco 120-420mm zoom. "About 90 percent of the series was shot on the Optimos, and the 15-40mm and 28-76mm were the workhorses," Grillo reports. "That worked really well with our time constraints and three cameras; they're fast, and we could adjust the frame without changing lenses."

In addition, everyone carried a P+S Technik Skater Scope, a snorkel-lens system that combines macro and periscope capabilities — something of a Mann trademark. "I've always had a desire for being in that close," says Mann, who has used various versions of the system since his first feature, *Thief* (1980). On that film, he says, "I wanted to be the drill that penetrated the wall of the safe."

"With the Skater Scope, you can get the lens into places that you couldn't otherwise," says Dryburgh. "You can change the angle and literally see around corners. As crazy as that may seem, it's sometimes very useful."This was particularly true in tight quarters such as car interiors. The macro extender provided extreme close-ups of card games, horses at the starting gate, and telling details like the religious statuette tucked inside a jockey's locker. "We'd often use it handheld or on the Steadicam, then open out into a wider shot," says Dryburgh.

Luck's stationary handheld shots were often executed with another of Mann's favorite tools: shot bags. "You take a very long lens and put it on a sandbag instead of a regular camera mount, then try to hold it as steady as you can," says Dryburgh. "The idea is not to create movement, but to create a shiftiness in the frame. The camera operator tries to keep the frame still, but he's fighting the equipment to do it."

Grillo recalls doing this for the first time on *Ali* (*AC* Nov. '01), where shot bags were sandwiched between the camera and fluid head. "You just let it balance, so you're keeping that frame but it's not as bumpy as it would be on your shoulder," he says. "It's from Michael's love of cinema vérité."

On *Luck*, this technique was well suited for scenes involving the "degenerates," four low-life gamblers who buy a horse together after winning a big bet. As Dryburgh notes, "They're a very off-balance bunch."

By contrast, only smooth camerawork is used for the main character, Ace (Dustin Hoffman). In the pilot, Ace is released from prison after serving three years for taking the fall for some former partners-in-crime. He plots his revenge with the patience of a spider, and in his orderly domain, the camera moves on a dolly or Steadicam. The Skater Scope came into play as well, providing macro shots that suggest Ace's calculating, observational behavior. "In the scene between him and his parole officer, you can see him clocking all the things in this guy's office — the photographs, the sports memorabilia," says Dryburgh. "He's analyzing this guy, building a profile."

Camerawork of a whole different order had to be developed for the horseracing sequences. Restrictions were stipulated by two parties: the Humane Society and Mann. To avoid spooking the thoroughbreds, movie

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High Stakes

Top: The degenerates hole up in a motel room after hitting it big on a very fortuitous bet. Bottom: The quartet works through a scene set in a diner.





lights, flags and reflectors were banned from trackside areas, except for the uppermost reaches of the grandstand. The Humane Society also prohibited camera cars from following directly behind horses while they were running.

Mann's first directive was that the camera had to put viewers inside the visceral swirl of jockeys and horses. His second directive: no cranes. "[Crane arms] are too clumsy," he observes. "On the track, you can't get that kind of an arm where you want it, and you can't move it spontaneously enough. There's no second take on any of this stuff, so being facile, light and low-tech was absolutely the way to go."

"Michael is very low-tech in that he doesn't like remote heads or cranes," says Grillo. "On all the movies I've done with him, we've rarely used a Technocrane, and only when absolutely necessary. He's always searching for a way to get a shot that feels organic and not so highly polished."

The solution evolved step by step. First, Mann and Dryburgh studied some renowned horseracing features. From *Seabiscuit* (*AC* Aug. '03)they borrowed the animatronic horse used to film jockey dialogue during the races. This legless steed was mounted on a platform that could also hold a second jockey straddling a saddled-up dolly. "We'd use long lenses tight on the actors, handholding the camera to give those shots a lot of movement," says Grillo.

Key grip Charles Bukey also consulted Kim Heath, the rigging grip on *Secretariat* (*AC* Nov. '10) who was instrumental in developing that film's "polecam" system: an Olympus E-P1 attached to the end of a 12' pole. "We very much embraced the polecam concept," says Dryburgh. This enabled the crew to drop the camera an inch over the jockey's shoulder.

Next, the filmmakers tested lipstick and lightweight digital cameras. "A lot of them tested well in static situations but didn't perform very well when vibrations and speed were added to the



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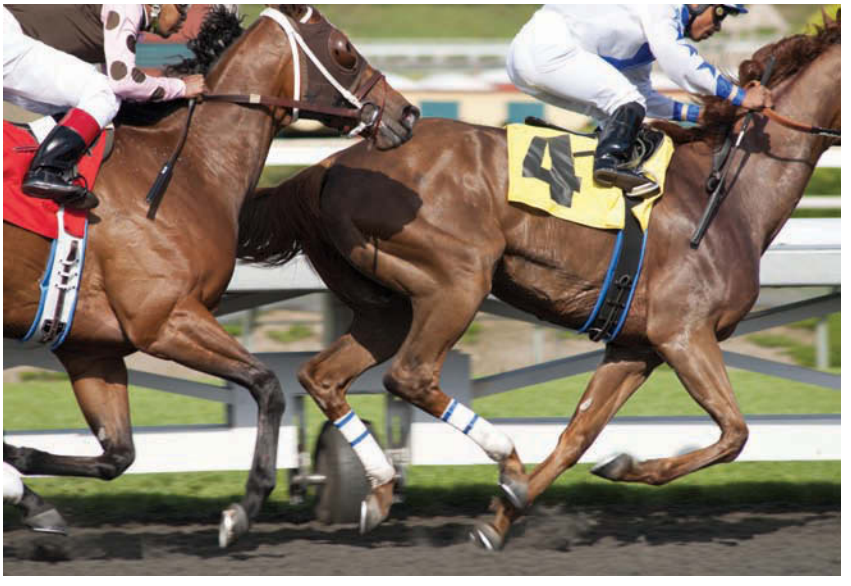
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High Stakes



To capture full-speed racing action, the crew customized a pickup truck by adding a platform framed with speedrail and bungee supports to help stabilize pole-mounted cameras. Among those pictured in bottom photo, from left, are B-camera operator/1st AC Peter Geraghty, C-camera operator Chris Cuevas (hooded) and B-camera/Steadicam operator Roberto De Angelis (lying down).





mix," says Dryburgh. They eventually chose Canon's 5D and 7D and, for a small amount of work, its consumer Rebel T2i.

The polecam's workhorse lens was a Canon L Series 24-105mm. To enable remote zooms, the crew rigged a wireless Preston Cinema Systems Motor Driver to the camera's gear strips, which rotated on command. However, the Canon cameras proved too heavy for the lightweight heads Bukey had developed. "Eventually, we got our best results from placing a hard-mounted Canon on the end of a carbon-fiber pole," says Dryburgh. "We couldn't pan or tilt but were still able to get very dynamic shots."

This technique worked for the pilot, but the team knew it wasn't a long-term solution. For starters, the camera was locked down, so lifting the pole could result in an off-kilter horizon. Also, there were some human limitations: the technique required the operators to hold a 12' pole with a 5-pound weight while standing in the back of a pickup that was fishtailing around a dirt track at 40 mph.

The second phase of R&D began during the gap between the pilot and the episodic work. To the camera car, a customized pickup whose flatbed had been replaced by a platform framed with speed rail, the crew added a bungee system to help support the polecams. "We built simple goal posts from which we could hang these bungeed polecams,



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Marek Żydowicz - Plus Camerimage Festival Director

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High Stakes

so we could at least get some control and not use all our energy just lifting the load in the air," says Grillo. Eventually, rollers and a type of oarlock were added for speedy and safe retraction of the poles.

"Around the fourth episode, I got a little bold and asked [key grip] John Januseck if he could build a jib arm with whatever he had available, and he designed an 18-foot jib made of speed rail," Grillo says. Cables kept the steel tubing taut and stabilized the jib "like a hanging bridge," preventing the camera from wobbling in the air. "The difference was night and day," adds Grillo, who operated the jib. "We could actually go from the horse's feet up to the jockey's face and maintain a level horizon."

The jib could also swing quickly out of the way. This enabled the camera-men to get safely behind the horses, permitting shots like one that shows a jockey falling off his mount mid-race and tumbling toward the camera. "The jib arm allowed me to get an angle low to the ground, and then, when the jockey fell off, I was able to lift up and go right over him," says Grillo.

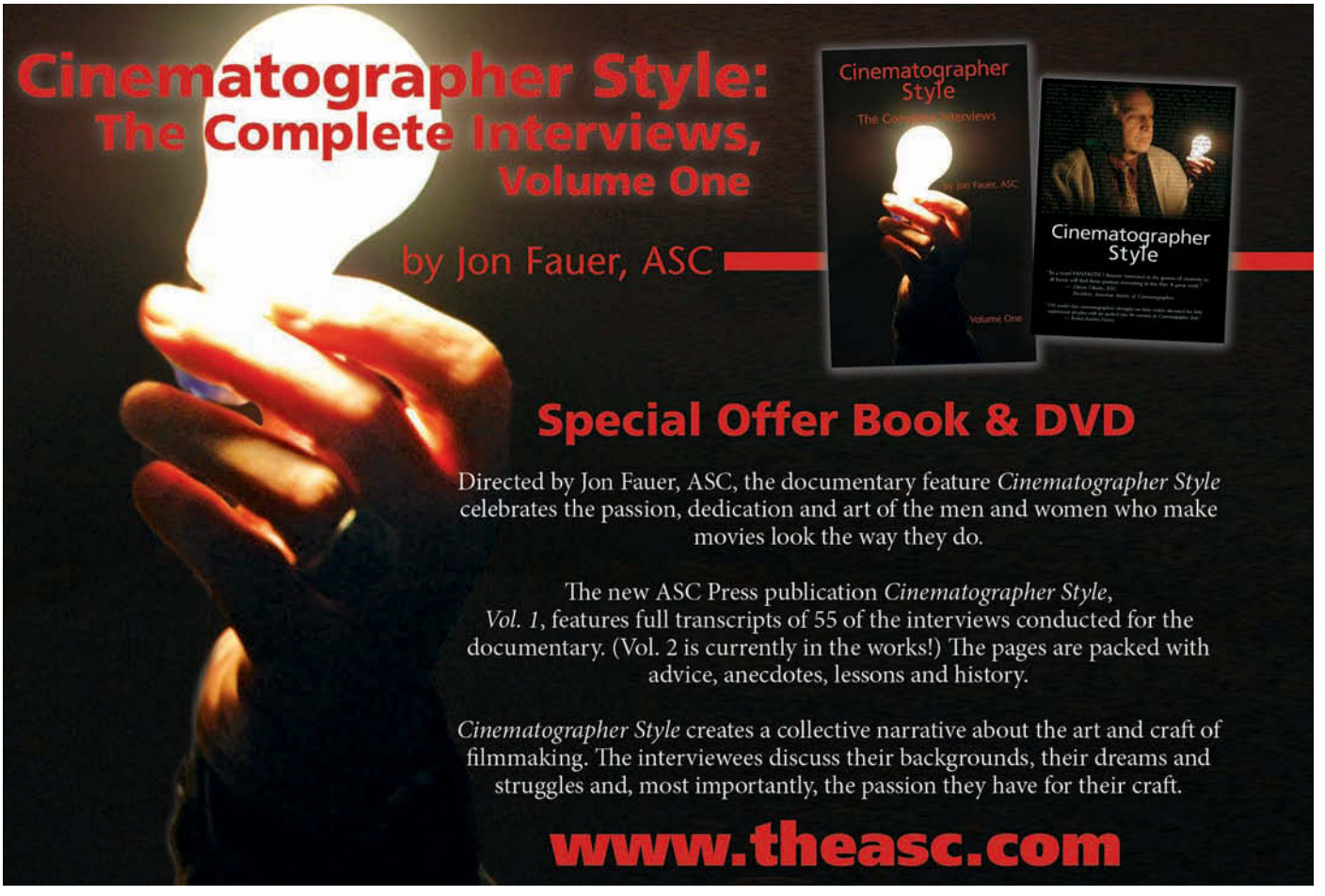
Pan-and-tilt capabilities were still missing, however. "Eventually we were able to get a very lightweight remote head made by VariZoom, and we used it on the jib arm for the last three episodes," says Grillo. "It worked as a sort of handheld remote head, so I like to think it fell within Michael's aesthetic directive."

Three to six cameras rode in the crowded camera car. Typically, Grillo operated the jib, Chris Cuevas operated a polecam, and the cinematographer handheld a DSLR or Alexa from the pickup's backseat. In addition, low platforms were added to the vehicle's front and rear. Camera operator Roberto De Angelis lay facedown, operating a DSLR while whizzing around the track. "He loves danger — he's very Italian!" says Grillo.

To achieve shooting speeds higher than 60 fps from behind a horse, an outrigger was added that extended 5' to the side. This could carry the Arri 435, enabling some eye-catching shots, including the background plate of an accident during which a horseshoe comes off mid-race, flies toward the camera and clips another horse's leg.

It fell to Fine to mesh all the parts that grew out of the continuing R&D. "My contribution was to take all these incredible tools and design a way to tell the story in which everything was covered in an elegant way," he says. "The assignments were always divvied up. I might say, 'Okay, one polecam will move from the hoof to the horse's mouth, shooting past him. My camera will shoot a tight handheld profile of the rider. The other polecam should be low on the horse's hoof with a wide-angle lens looking up.'

"With horseracing, nothing ever happens where you want it, when you want it or in the proper order, so when



the magic occurs you have to have all cameras rolling and smartly covered," continues Fine. "Sometimes the horses take off and you get nothing, and sometimes you get something brilliant. We got one amazing shot where the horse really *did* trip. It wasn't right for our [episode], but I'm sure they used it somewhere!

"I liked using Zeiss Compact Primes on some DSLRsfor track work," he adds. "I'd put a couple under the rail or in the dirt without an operator."

By the time Strebel stepped in to shoot Episode 4, the track work was running fairly smoothly. "It was like jumping on a train that was already in motion," he says. At that point, the production added a second camera car and reduced the time allocated for each race.

Over the course of his four episodes, Strebel tried variations on the theme. One race was filmed entirely at 120 fps — it's the first big win for The Old Man, a.k.a. Walter Smith (Nick Nolte), a trainer attempting a comeback. Strebel explains, "As [episode director] Phillip Noyce described it, 'It's God visiting this place.'"

Another time, Mann walked into a prep meeting and told Strebel to "dazzle us — reinvent it." In response, "we tracked in front of the horses with a very long lens that compressed everything," says the cinematographer. He placed a doubler on the 24-290mm Optimo and shot from roughly 300' away, framing three riders in the moving shot. "You'd think that might be too shaky, but it looks amazing," he notes.

In the end, Mann got his organic visuals, and the cinematographers got the satisfaction of meeting an unusual challenge — plus some indelible memories. Fine recalls, "I'd begin the day with a beautiful sunrise over the mountains and fog lifting off the track. Then we'd start with these wonderfully written scenes in the stands with Dustin Hoffman, Joan Allen, John Ortiz and all these amazing actors. Every day, walking up to Santa Anita at sunrise, I'd think, 'I can't *wait* to get on the track.'" ●

TECHNICAL SPECS

1.78:1

3-perf 35mm and Digital Capture

Panaflex Platinum, Millennium XL; Arri 435, Alexa; Sony F35; Canon EOS 5D, EOS 7D, Rebel T2i

Panavision Primo, Compact, Lightweight; Angenieux Optimo; Cooke S4; Canon IS, L Series; Zeiss Compact Prime; Isco

Kodak Vision2 50D 5201; Vision3 250D 5207, 500T 5219





A Very Bad Cop

Bobby Bukowski crafts expressionistic imagery for *Rampart*, which follows the downward spiral of a corrupt police officer.

By John Calhoun

•|•

For the 2009 drama *The Messenger*, director/writer Oren Moverman and cinematographer Bobby Bukowski employed a reserved, contemplative style to tell the story of servicemen charged with delivering bad news to families of fallen soldiers. When they began planning their next collaboration, *Rampart*, "Oren said to me, 'Okay, we learned a lot together as storytellers on *The Messenger*. Now let's forget about it,'" says Bukowski. "He wanted to formulate a language that was for this film specifically."

Set in 1999, *Rampart* focuses on Los Angeles Police Department officer Dave Brown (Woody Harrelson), a department renegade whose life and career are unraveling amid allegations of brutality and corruption. The camera



Unit photography by Brian Tidmore. Photos and HD frame grabs courtesy of Millennium Entertainment.

stays close to Brown as he intimidates, batters, seduces and engages in other power plays, but throughout the film, his monstrous behavior is imbued with flickers of humanity and considerable force of personality.

"The idea Oren is playing with is, how is evil allowed to persist in a society?" says Bukowski. "It is often through people who have this very charismatic way of presenting themselves. We're conflicted over Dave's behavior; we're actually sitting there liking a character who is doing some really egregiously nasty things to people all around him."

But Brown is also on an evident downward trajectory in the wake of the Rampart scandal, a widespread investigation of misconduct in LAPD's anti-gang force that rocked the city to its core. "I think we made quite an expressionistic film," says Bukowski. "The visuals are more about eliciting an emotional response than illustrating geography and action. We're charting the soul and the mind of a man who is disintegrating. That was always our discussion: how do we show that?"

One of the production's first important decisions — the acquisition format — was actually made before Bukowski came aboard. "It was the fall of 2010, and filmmakers had just started using the [Arri] Alexa," he says. "Oren had read a lot about it and screened demos, and he really liked the look. It wasn't up for discussion at all, and frankly, I was very happy to use the Alexa. The virtual ISO is 800, so it's a very, very sensitive chip that allowed us to use very little light for many scenes."

Rather than recording to a codec, the filmmakers used ProRes SxS cards. This resulted in a more compressed image, but through preproduction testing Bukowski came to the conclusion that "the difference in resolution and quality was minimal. Just as important, choosing the cards was going to give us much more flexibility in terms of how I could operate the camera." The latter factor was crucial given that he and Moverman planned to shoot almost



Opposite: As his professional problems multiply, LAPD officer Dave Brown (Woody Harrelson, left) tries to get inside information from a retired cop (Ned Beatty). This page, top: Brown meets with a team of attorneys to discuss strategy. Bottom: Tapping a bungee rig designed by dolly grip John Mang and key grip Tana Dubbe, cinematographer Bobby Bukowski preps the office scene, using a 25-250mm Angenieux Optimo on the Alexa.

A Very Bad Cop









The HD frame grabs on this page and the facing page illustrate in part how the filmmakers' presentation of Brown evolves from clarity and strength to increasing obscurity. Top to bottom: the opening shot; Brown meets with an Internal Affairs officer (Ice Cube); Brown's early meeting with a supervisor; his later meeting with the same person.

entirely handheld.

"We didn't want to be tethered to an external recorder," says Bukowski. "With Oren, I need to light for 360-degree shooting, and never does a mark go down on the ground. The entire set is free game, so if we're on the first floor of a house, that entire first floor is the set, and the actors can roam wherever they want. We approach every scene by talking about the narrative objective of the scene first, and my operating is informed by that: how do I bring the most important narrative elements out in the scene?"

Bukowski's flexibility was enhanced by the EasyRig camera-support system, a weight-distributing vest that suspends the camera from an arm that curves over the operator's head. A flexible cable allows the camera to be quickly positioned at different levels. "I can choose to have the camera at waist height, and then, if I want to boom up, I simply push it back up and the cable retracts with it," says the cinematographer. "It's infinitely easier than bending down to get a low angle and then quickly standing up to accommodate a higher angle."

Lenses were just one visual strategy the filmmakers employed to trace Brown's moral descent. During prep, Moverman described Brown as "a character who is a dinosaur, part of a world he can no longer exist in," recalls Bukowski. To that end, "throughout the film he gradually disappears until he literally fades away." This idea informed the work of all the creative departments, but most especially the way the character was photographed. "As the story goes on, we shoot him less directly — we put him behind glass to partially obscure him, or we shoot him as a reflection to suggest that he's more spectral than substantive."

This also meant emphasizing the intensity of Los Angeles' sunlight, which serves "as a very corrosive element, almost assaulting the protagonist," Bukowski explains. "We decided to introduce lens flares, because the flare hits the glass and corrodes the

pixels in the digital [image]." That led the cinematographer to shoot the early portion of the story with Angenieux Optimo (15-40mm, 28-76mm and 24-290mm) zoom lenses, and the latter portion with a range of older Cooke Speed Panchro primes. "Otto Nemenz, which supplied our camera package, had these Panchros on hand that they'd removed the anti-halation coatings from, and they were very susceptible to flares," he notes. "So with the Optimos, Brown's outlines are very crisp and clear, and [as the story progresses] he becomes hazier and more indefinite against the background. For day scenes, we let the lenses flare naturally from the sun, and if we wanted flares in night interiors, we'd introduce practicals like bare bulbs or bare tubes that would flare the lens if we pointed the camera at them."

However, this strategy was complicated by Moverman's frequent use of zooms during a shot. "As a story element, Oren likes zooming in, the way that in a conversation you might lean toward a person to listen more closely or lean back to give him more space," explains Bukowski. "The challenge became how to handle that when we needed uncoated lenses. Dan Lopez at Otto Nemenz removed the coating from an old Canon [28-70mm T.3] still-photography zoom lens for us. So we had a zoom that was inferior glass and uncoated — the worse the glass, the better!"

The filmmakers largely eschewed movie lighting. Bukowski recalls, "In prep, we started looking at cop movies that had been shot in Los Angeles over the years, and every time Oren would say, 'No, I don't like the way it looks.' And then he would show me still photographs by Todd Hido or Nan Goldin. I began to understand that what he didn't like was conventional film lighting. I said, 'What you're telling me with these photos is that you like naturally occurring lighting, with long shutter speeds and irises that are greatly open, and using available light in rooms. Let's aspire to illuminate the









Some of the touches incorporated into the expressionistic imagery are low angles, lens flares and shots of Brown in which he is increasingly marginalized. In the bottom frame, he is glimpsed only as a reflection on the floor.

A Very Bad Cop



Right: Brown hovers uncomfortably on the fringes of a meal with his ex-wives (Cynthia Nixon, left, and Anne Heche) and daughters. Below: Bukowski at work on location.



scenes with only practical lights.'" Production designer David Wasco became instrumental in providing what was needed, decorating the set with fluorescent tubes if a very cold light was needed, or lampshades with warm colors and fabrics when warmer light was desired.

At times the practicals were augmented by a strip of LED ribbon lights that Bukowski wore on a headband. "I was able to control it with a dimmer on my belt so that it could become a fill light at my discretion," he says. The gaffer, Michael Bauman, wired the practicals on set to wireless dimmers that he then remotely controlled according to Bukowski's movements. "Mike stood at the monitor as I was moving through a room, and if I was panning away from a light that was in the frame, and he saw that what I was looking at now needed more illumination, he'd bring up that light. I could move into a very dark corner of the room knowing that the lamp next to the actor, just out of frame, could be dimmed up for more illumination." The ribbon lights were also used occasionally to augment car interiors, which were mostly lit with available light.

Bukowski describes all of the strategies as adding up "to a feeling that the film is happening before your eyes." Even a few crane shots were operated on a handheld crane arm by a grip on headset with Bukowski. With this way of working, "you can react to things that happen, as opposed to being locked into a frame that is surrounded by flags and lights. If we got on a set and my camera could not pan 360 degrees, Oren would say, 'What are you going to do about that?' We were

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A Very Bad Cop



Bukowski dons the EasyRig to work with the Alexa in handheld mode, assisted by 1st AC Jason McCormick (right). Dolly grip John Mang is partially visible in the background.

always required to make an unobstructed set for the actors."

Moverman's approach could take some getting used to, even for the cast. "Oren doesn't like to rehearse," notes Bukowski. "Our first take is always our first rehearsal for the actors and for the camera. We do our first take, and normally that goes into the second take, which goes into the third take. Oren doesn't cut between takes so the actors can stay in the process." Harrelson, having appeared in *The Messenger*, knew how Moverman worked, but the large supporting cast, which includes Robin Wright, Sigourney Weaver, Ned Beatty, Anne Heche, Ice Cube, Cynthia Nixon and Steve Buscemi, could get perplexed. "At the end of a scene, no one would call 'Cut,' so Woody, who's in every scene, would lead the way in beginning the scene again," says Bukowski.

In one scene, Harrelson, Weaver and Buscemi are having a heated discussion around a table. "Oren said he wished we could simultaneously cover all of the actors so we wouldn't have to run through the scene a thousand times, but at the same time employ movement," says Bukowski. The cine-



matographer's solution was to place the camera in the center of the action and pan across the circumference of the circle created by the three actors. Moverman wanted to know if he could do this with two cameras. There was always a B camera in use on set, so Bukowski's grip crew, led by key grip Tana Dubbe, mounted the two Alexas on a single rotating remote head at 120-degree angles from each other and remotely rotated both cameras continuously as the actors delivered their dialogue; the cameras were zooming in and out the whole time. "For our first take, we succeeded in never capturing a line of dialogue on camera!" says Bukowski. "Oren wanted the scene to be raw, and he was looking for ways to 'mess it up.'"

Burbank post facility FotoKem handled the digital mastering on *Rampart*. "With digital capture, post tools become part of your production process," notes Bukowski. "During preproduction, we shot tests, brought them into the DI theater and started to create looks for the film. We wanted a very contrasty, saturated look, so we'd start crushing the blacks, bringing the highlights up, and setting look-up tables that we could apply on set with our [digital-imaging technician]. Our LUTs weren't embedded; they were just a reference on set and for dailies transfer. With digital, it's important to set specific parameters in prep so that when you get to the final color grading, you're applying choices you've already made. If you arrive in post not knowing what you want to achieve, then the possibilities are infinite."

After two collaborations with Moverman and Harrelson, Bukowski says he feels such strong creative rapport with both of them that he hopes their work together can continue. "Woody is such a savvy actor. Sometimes I'd be shooting him from behind and would think, 'I wish Woody would turn around right now,' and nine out of 10 times, he would. As a cinematographer, it's great to work with actors who have such an awareness of the camera, because they really start to do the dance with you, and you with them." As for Moverman, he adds, "It's a great gift when someone is so implicitly trustful of you as an artist and a human being." ●

TECHNICAL SPECS

2.40:1

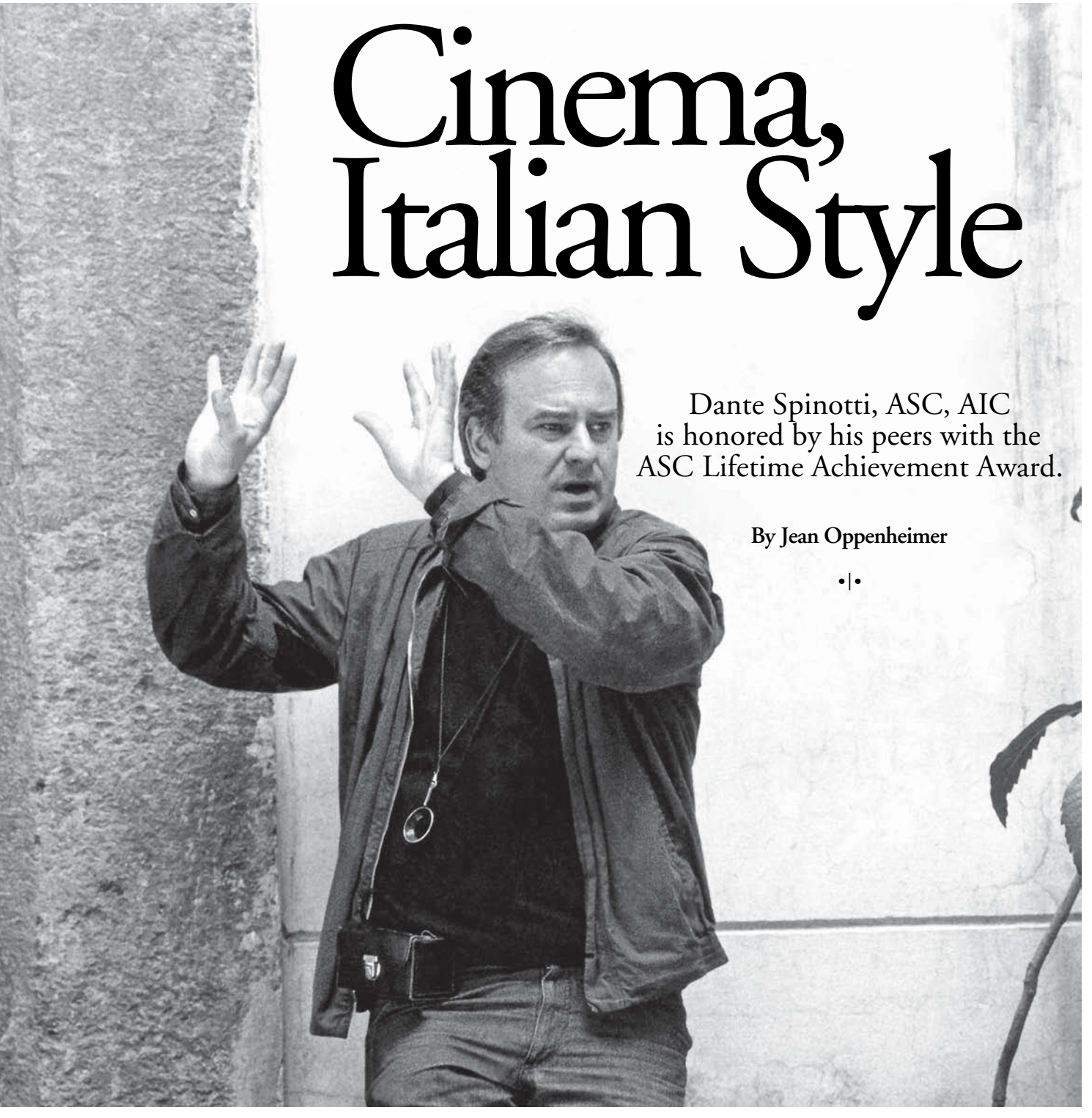
Digital Capture

Arri Alexa

Angenieux Optimo, Cooke Speed Panchro, Canon



Cinema, Italian Style



Dante Spinotti, ASC, AIC is honored by his peers with the ASC Lifetime Achievement Award.

By Jean Oppenheimer

•|•

Dante Spinotti, recipient of this year's ASC Lifetime Achievement Award, was 8 years old when his mother gave him his first camera, a Vest Pocket Kodak that originally belonged to her. "It was a tiny camera," recalls Spinotti, who was born in 1943 in a small village in the Italian Alps. "You looked at your viewfinder by looking down at a mirror and two lenses." Soon he was processing and printing his own photographs in a makeshift darkroom he constructed under his bed.

He wasn't yet 13 when he was named "official photographer" for both his middle school and the local soccer team. By then he was using his father's Zeiss Ikon Ikonta. The prints

were enlarged by the local still photographer and hung in the windows of bars across town, with the credit "Photo by Dante Spinotti" prominently displayed underneath.

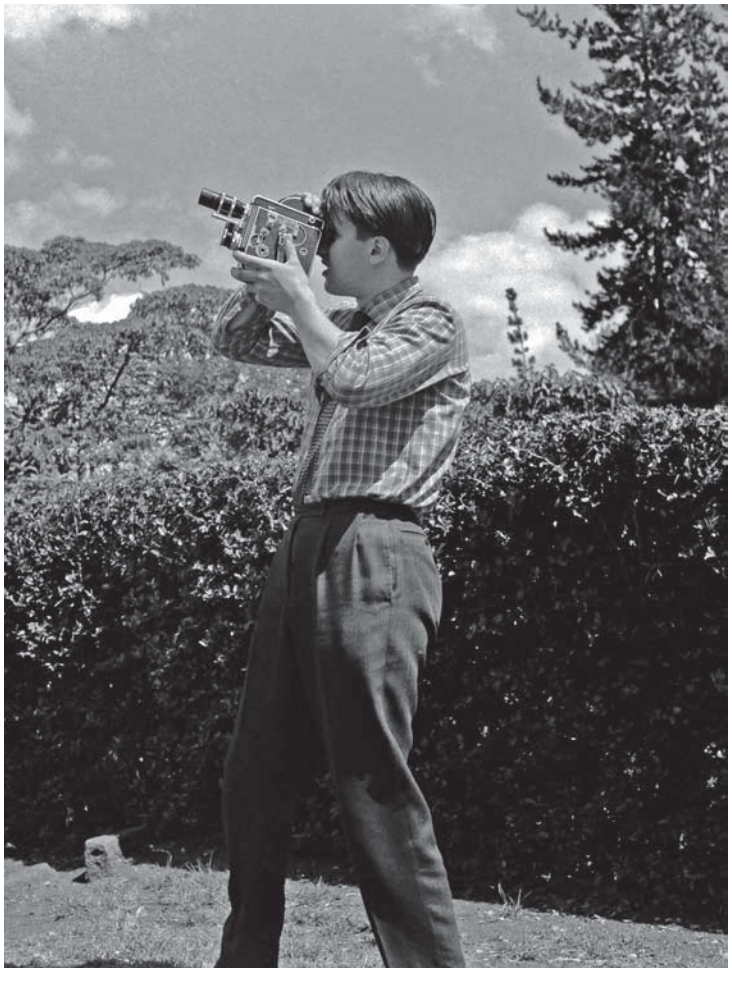
It was an auspicious beginning to what would become a brilliant career. At the time, however, Spinotti had no such thoughts; he simply enjoyed the process of creating images. "I can distinctly remember the magic of the darkroom," he reminisces. "The technology of the camera also fascinated me — the shape and mechanics, the lenses and shutters. I would read magazines about chemical combinations for developing and go to the local pharmacist to buy all the ingredients."

By then Spinotti was living in northeastern Italy's agricultural heartland, where his father had become a partner in a food-distribution business. He loved the outdoors and enjoyed accompanying the neighboring farmer on his rounds. When he was 14 or 15, the family moved again, this time to Milan. He didn't like school and, consequently, did not do well. "My parents were very displeased and decided they had to 'find a solution' for me," he recounts. At 17, he was sent to Kenya to live with his uncle, Renato Spinotti, a photographer and documentary filmmaker. It was there that he realized he had found his life's work. He also read his first issue of *American Cinematographer*.

Spinotti spent his first few months in Nairobi learning English and assisting his uncle, who worked for East African Film Services, which supplied newsreel footage to United Press International. "The company owned a big Mitchell NC, and I'd spend my days taking that beautiful camera out of its case, mounting it, and then putting it back together again and returning it to the case," he recalls fondly.

After proving his ability with a 16mm test film (shot with a Bell & Howell), Spinotti was given his first professional assignment: to cover the release from prison of political leader

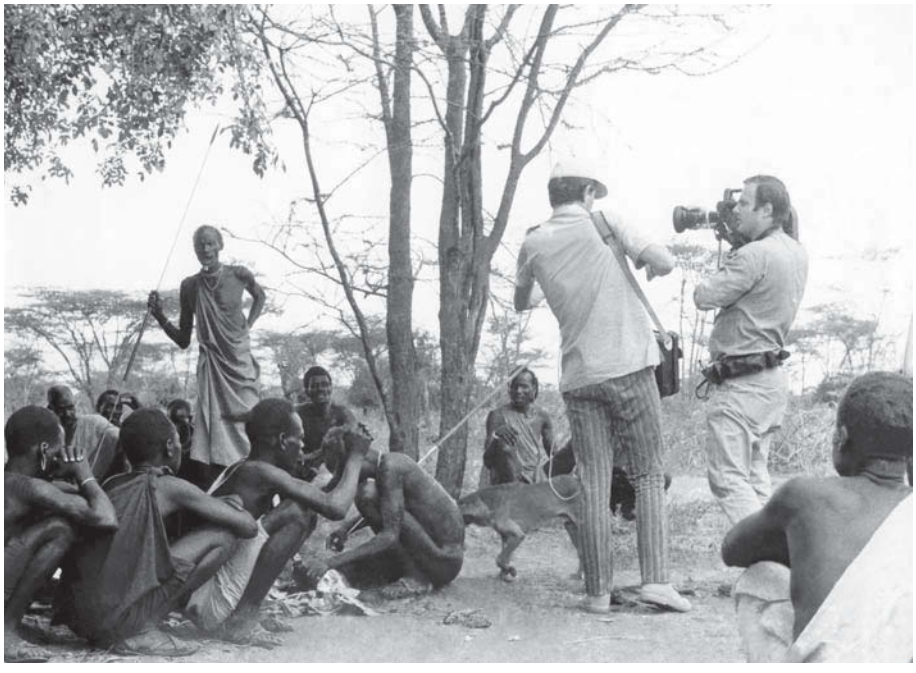




Opposite: Cinematographer and future ASC member Dante Spinotti on set for the Italian production *Cosi parlo Bellavista* (1984). This page: The teenaged cameraman at work in East Africa in the early 1960s.

Photos courtesy of Dante Spinotti and Camerimage.

Cinema, Italian Style







Clockwise from top left: Spinotti shoulders the camera on location for the Italian-television documentary *Giovane Africa* (1970); the cinematographer readies some firepower on the set of *La Freccia nera* (1968); rehearsing with actors Sylvia Koscina (left) and Sandra Milo for *Cenerentola '80* (1984).

Jomo Kenyatta. "I was so insecure I shot everything twice," he says. At the end of the year, he had to decide whether to stay in Kenya or return to Italy. The decision was made for him when his uncle fired him after they had an argument. "He told my parents, 'Dante is not a nice person!'" he says with a laugh.

After working with his father for a year, Spinotti met an executive at RAI, Italy's state television company, through a friend. During World War II, the man had been interned in a British POW camp in Kenya. "That gave us a connection," declares Spinotti. "The executive contacted the head of the cinematography department at TV Milan, and I was hired as a freelance camera assistant."

After a year of compulsory military service, Spinotti returned to television and also began working in commercials. At that time, many Italian businesses were importing British directors and cinematographers for commercial work. "The fact that I could speak English gave me a remarkable advantage over others," he says. David Watkin, BSC hired him as a camera assistant on two commercials, and this proved to be one of the most important encounters of Spinotti's life. "I was accustomed to working with cameramen using spotlights and flags in a very traditional way, but David had an entirely different way of lighting," he says. "He bounced a couple of lights on the wall, putting a little Inky-Dinky in front, using soft light and maybe one spotlight. He really opened my mind to new ways of thinking. He was also an extraordinarily nice and generous man."

Spinotti continued freelancing at RAI and eventually was offered a staff position. Although he worked on several interesting projects, most of the jobs weren't terribly stimulating, but by then he had a wife and two children and felt he needed a steady paycheck. He well remembered his father's struggles to find work and the tension it created in the family. "I didn't want my family to go through the same uncomfortable years," he explains.

He remained on staff at RAI from 1970 to 1980. One day he was asked to shoot behind-the-scenes material for director Marco Ferreri, who was so impressed with Spinotti's talent that he offered him a job shooting his next feature. Spinotti turned it down when RAI refused to grant him a temporary leave. "I told Ferreri, 'I can't accept. I cannot really take this risk.'"

A year later, director Sergio Citti asked him to shoot *Il Minestrone*

(1981). This time Spinotti accepted, and his move to Rome was a major turning point. The list of directors he worked with there included Lina Wertmuller, Liliana Cavani, Fabio Carpi and Giacomo Battiato; the latter became a close friend.

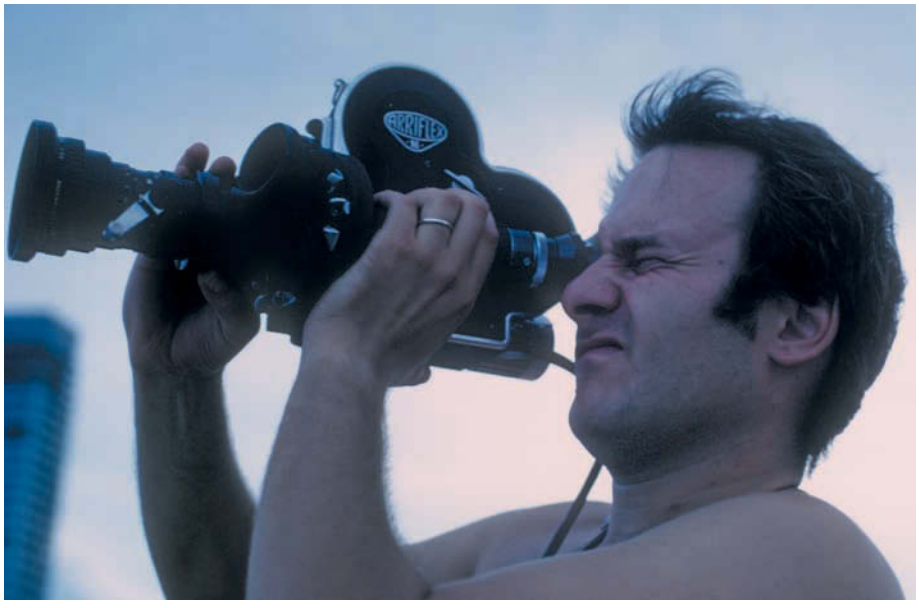
Rome is also where Spinotti met the woman who would become his second wife. "I was very lucky to meet Marcella," he says. "She was an art and literature teacher. She introduced me to Caravaggio's paintings and took me to opera. Up until then, I hated opera!" With a shrug, he confides, "I still feel you have to wait an awfully long time to get to the beautiful arias."

In 1986, Spinotti met a man who was to play a pivotal role in his life. "Dino De Laurentiis is the reason I am sitting here talking to you," he says. "He was just setting up his studio in North Carolina and was looking for [filmmakers] from Italy and England. Someone told him I was an up-and-coming guy, and he asked to meet me.

"I had always wanted to come to America — it's where big cinema was coming from," he continues. "In Italy I had worked with a number of directors whose attitude was, 'I don't care about the audience. I'm making this film for myself.' The whole history of Hollywood is exactly the opposite. Here we want to communicate with an audience. Film is the ideal medium for transporting your mind into different situations. It can provoke discussion and make people think."

De Laurentiis suggested Spinotti to director Michael Mann, who was about to direct his second feature, *Manhunter* (1986). "The biggest favor Dino ever did for me was to introduce me to Dante," says Mann. "I fell in love with his lighting." Spinotti is equally grateful. "Michael was doing the kind of filmmaking I was dreaming about but didn't know was possible. Just meeting a man like him, who has an entirely different vision of storytelling and filmmaking, opens your mind to a different way of thinking."

It proved a fruitful collaboration,







Top: Spinotti takes aim on *Giovane Africa* (1970). Middle: The cinematographer (left) enjoys a laugh with actress Kim Greist and director Michael Mann on the set of *Manhunter* (1986). Bottom: With the original Hannibal Lecter (Brian Cox) in the foreground, Spinotti fine-tunes a setup in the madman's cell.

Cinema, Italian Style

Right: Spinotti (at left, wearing orange shirt) discusses a shot with his collaborators on *I Paladini* (1983), his first anamorphic feature. Below: Spinotti (in beige sweater) and his crew join director Paul Schrader (left) on the water for *The Comfort of Strangers* (1990).





producing five films so far: *Manhunter*, *TheLast of the Mohicans* (1992; *AC* Dec. '92), *Heat* (1995; *AC* Jan. '96), *The Insider* (1999; *AC* June '00) and *Public Enemies* (2009; *AC* July '09). "We had many, many adventures on *Manhunter*," relates Mann. "One crazy night Dante and I were sitting in the trunk of a car, each with a camera, hurtling through a forest and down some twisting dirt road. It's the scene when Bill Petersen [playing FBI agent Will Graham] is racing to get to the killer's house. We filmed all night." After a pause, he adds, "It was quite a marriage."

On *The Last of the Mohicans*, Spinotti took over for another cinematographer but retained the camera crew that was already in place. Camera operator Gary Jay, a frequent Mann collaborator who was a first AC at the time, remembers one of Spinotti's first days. "It was a day scene out in the middle of nowhere, and we were using available light, so all we had was camera equipment. Michael was rehearsing and the sun was setting. Well, the sun set, and Michael was *still* rehearsing. Finally, when we could barely see our hands in front of our faces, Michael says, 'Okay, let's shoot!' And Dante, sitting calmly in his chair smoking a cigar, says, 'You know, Michael, it's too dark now. We could light it, but it would take two or three hours, and it would look like shit. But we can light it if you like.'" Chuckling, Jay adds, "I thought, 'I can hang with this guy!'"

Camera operator Duane C. Manwiller was a second AC on *Mohicans*. "Dante is the kindest, gentlest man and, without doubt, the most loyal cinematographer I've ever worked with. None of us knew if we'd ever work with him again, but he always called us first after [*Mohicans*]. Gary and I have done 17 pictures with him."

Other colleagues and friends use similar words to describe Spinotti: kind, gentle, warm, calm, respectful, inclusive, gracious, great sense of humor. Some laugh and add "stubborn." Michael

Top photo by Sergio Strizzi. Bottom photo by Deborah Beer.

Waxman has worked with Spinotti several times as an assistant director, starting with *Manhunter*. He observes, "You spend so much time with people when you're working on a show, and in a high-pressure situation you learn what kind of human beings they are. Dante is just a first-class person."

Spinotti has a reputation for promoting his crewmembers. Jay recalls the cameraman calling him when he was assembling a crew for *Blink* (1994), which would be shot in Chicago. "He said he needed an operator, and I started to suggest a number of good ones that I knew in Chicago," Jay says. "But Dante stopped me and said, 'Gary, I think you should be my operator." Jay hesitated, and the next day Spinotti phoned him again. This time Jay accepted.

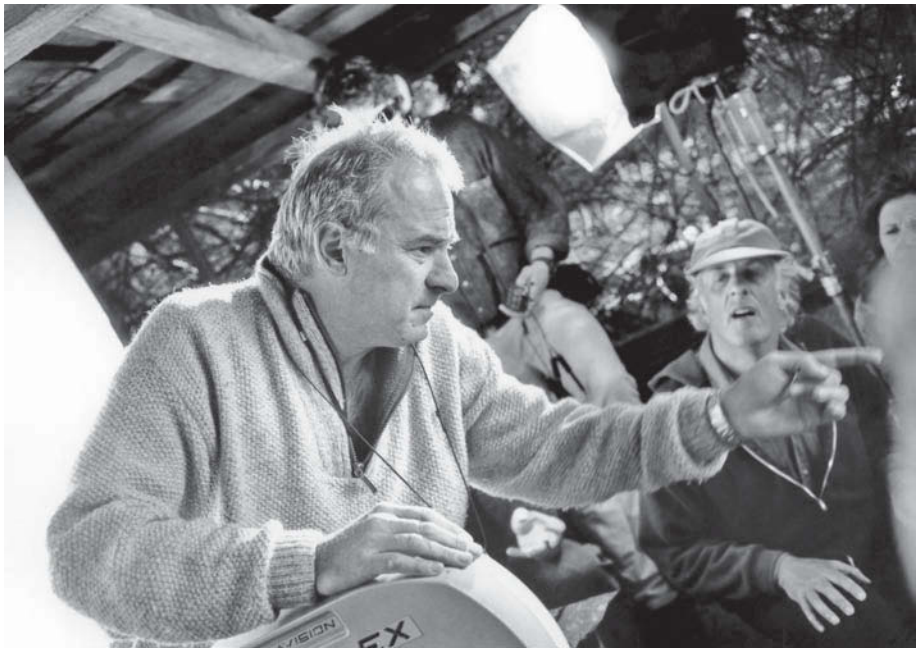
Spinotti has enjoyed multi-picture relationships with an eclectic mix of directors, including Mann, Garry Marshall, Curtis Hanson, Bruce Beresford, Michael Apted and Brett Ratner. "Dante juggles so many different kinds of films," marvels John Bailey, ASC. "He doesn't limit himself to a certain [genre] or a single kind of look or director."

Among the many honors Spinotti has received so far in his career are ASC Award nominations (for *The Last of the Mohicans* , *L.A. Confidential* and *The Insider*); Academy Award nominations and L.A. Film Critics Association Awards (for *L.A. Confidential* and *The Insider*); and BAFTA and BSC awards (for *The Last of the Mohicans*). He received Camerimage's Lifetime Achievement Award in 2009, and has twice won Italy's Donatello Award (for *La Leggenda del SantoBevitore* and *Il Segreto delbosco vecchio* , both directed by Ermanno Olmi).

"Dante embraced the American system without giving up his love and dedication to Italian film," notes Bailey. "He has kept that cultural connection." Spinotti agrees. "One of the lucky things in my working life is that I can go back and forth between Italy and the







Top: On location for *True Colors* (1991), Spinotti makes a point while director Herbert Ross (far right) observes. Middle: The cinematographer looks on as director Garry Marshall works with Al Pacino and Michelle Pfeiffer on *Frankie & Johnny* (1991). Bottom: Spinotti works with director Michael Apted on *Nell* (1994).

Top photo by Jürgen Vollmer. Middle and bottom photos by Andrew Cooper, SMPSP.

Cinema, Italian Style



Right: Director Sam Raimi discusses a setup with Spinotti on *The Quick and the Dead* (1995). Below: Spinotti checks the light on Gene Hackman, who portrays the film's villainous sheriff.



U.S." Partially because of that, he has never followed a traditional career path. "I have never taken a job because it would be a good step for my career. I am stubborn and follow what seems interesting to me."

One of those projects was the 2007 feature *Slipstream*, written and directed by Anthony Hopkins. "My wife suggested I send the script to Dante," says Hopkins. "I said, 'He wouldn't dream of doing it; there's no money in it.' She sent it to him anyway, and a few days later Dante called and said, 'Tony, I want to do your movie.' I said, 'You're crazy. I can't pay you anything.' But he was intrigued by the story. Of course, I was over the moon. Dante really was the energy behind the movie."

Panavision had just introduced its digital Genesis camera, and Spinotti felt it would serve *Slipstream* very well. It was his first experience shooting digitally, and he quickly became a proponent of the format. "I like the idea of having a canvas in front of me where I can judge exactly what I am doing, where I can judge colors the way they will turn out to be and not just how you see them through a viewfinder," he explains. "There is a trade-off, of course. It doesn't look as good as film in terms of exposure range or the richness of the colors. And I must admit I miss the kind of technology that goes with film. Processing and printing are things you can relate to directly, as opposed to going through a computer."

Spinotti not only embraces new challenges, but also seeks them. "He is consistently open to trying new things," affirms gaffer Jeff Peterson. Jay Fortune, another gaffer and frequent collaborator, jokes that "at the beginning of every job, Dante would come up with something new that would make me think he didn't know what he was doing." In a more serious vein, Fortune continues,

Photos by Murray Close.

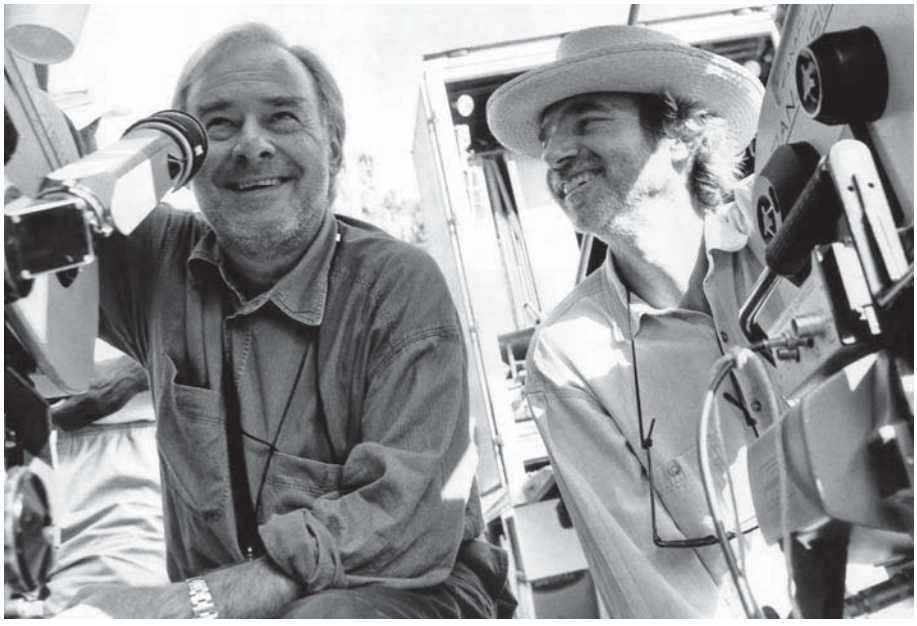
"It took two or three projects before Dante looked at me and said, 'You might have a good idea.' That was the greatest feeling. Now we not only work together, we are also good friends."

Colorist and ASC associate member Stefan Sonnenfeld is another close collaborator. "Dante brings all of his life experiences to his work and is always pushing himself to do innovative and creative things," he says. "He always wants to try something new, but only if it's right for the project. He uses these hilarious analogies to express how he imagines the shot working out — he'll talk about some good Italian cooking with really great ingredients that make the dish special, and that's how he imagines the shot."

"I have never taken a job because it would be a good step for my career."

Marshall, who directed Spinotti's first studio feature, *Beaches* (1988), says the cinematographer's sense of humor makes working with him a pleasure. "I kid around a lot on set, and Dante gets my jokes and gags. When I was interviewing cinematographers for *Beaches*, he had been in the States for less than two years, and people told me he couldn't speak good English, but I didn't like anybody else. There was a lot of miming on that set!"

Spinotti is the first to admit that the initial preproduction tests of Bette Midler didn't go well. "Bette is a fabulous person, and we talked about it. [I happened to be in] a bookstore and saw a book titled *How to LightBeautiful Women*. It was intended for still photographers, but I bought it and learned







Top: Spinotti and director Curtis Hanson share a laugh on the set of *L.A. Confidential* (1997). Middle: The cinematographer checks the light on LAPD smoothie Jack Vincennes (Kevin Spacey). Bottom: Hanson and Spinotti together again on *Wonder Boys* (2000).

Top and middle photos by Merrick Morton, SMPSP. Bottom photo by Frank Connor.

Cinema, Italian Style



Director/actor Roberto Benigni points the way on location for *Pinocchio* (2002).

their tricks for shooting portraits. We did a second set of tests with Bette, and they were perfect."

Ratner is another friend and frequent collaborator; he and Spinotti have made seven pictures together. "What's great about Dante is he's always thinking about the story," says Ratner. "He is meticulous about studying the script and understanding the intention behind every scene. Every frame is driven by the story. His one rule is that we sit down and discuss the language of the film. I'm always thinking about other movies that express what I want to express. I'll mention them and he'll listen, but he's more about, 'Let's create the language of *this* film.'"

That doesn't surprise Spinotti's son Riccardo, who graduated from the American Film Institute's directing program last June. He notes, "The best creative advice my father ever gave me was, 'There has to be a reason why those particular images are on the screen.'"

One of Spinotti's close friends, Vittorio Storaro, ASC, AIC, believes that Italian culture plays a significant role in how he and Spinotti both think about images. "Being Italian is quite different from being American," says Storaro. "From our first day of life, we are surrounded by paintings, sculpture and architecture — all the visual arts that are important to cinema. In elementary school, they give us a little notebook that has a picture of Giotto on it. Walking down the street, we pass



Romanesque buildings. At any hour in any town in Italy, our eyes are capturing all kinds of [cultural images], even if we are totally unconscious of it. Dante has this knowledge in his blood."

Spinotti was welcomed into the ASC in 1997, the same year he officially relocated to the United States. He was proposed for membership by Society fellows Storaro, Allen Daviau, Vilmos Zsigmond and Steven Poster. "I was elated when we voted Dante in," says Haskell Wexler, ASC. "The Society celebrates technological professionalism, but our charter also talks about character, and Dante's character is in keeping with what the ASC stands for. His membership speaks well for us."

When Spinotti isn't working, he and his wife often retreat to their home in the Italian Alps. Built in the early 15th century, it is his family's ancestral home. He spends time with his two older children, Giovanni and Francesca, and dotes on his two grandchildren. He has taken up mountain climbing, and he also works on restoring and printing some 300 glass-plate negatives that were taken by his great uncle between the late 1800s and the early 1920s. "I have washed them, scanned them and am now restoring and printing them," he says.

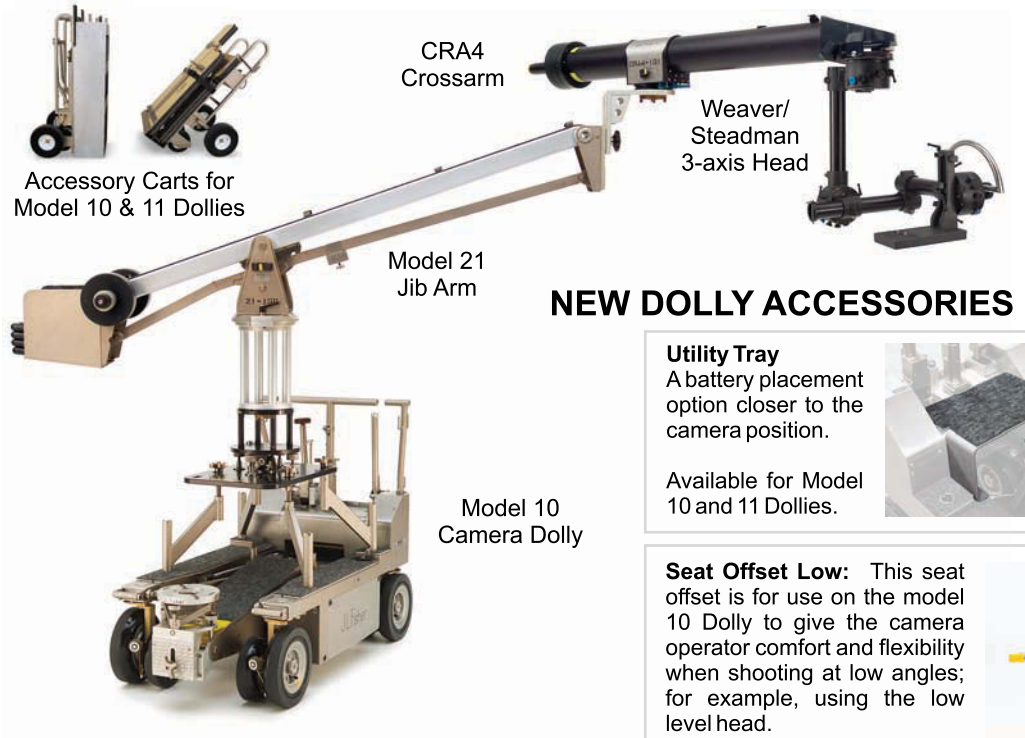
> "Dante's character is in keeping with what the ASC stands for."

Meanwhile, his own work is being archived by a cinematheque in Gemona. Spinotti maintains that the climate-controlled facility is the only one in Italy capable of properly preserving films. He serves as its honorary president.

Thirty years ago, Spinotti made a documentary about his hometown called *Carnia is Silent*. He would like to make a sequel that examines the area today, now that so many young people have moved away. "People no longer live in one area all their lives," he muses. "How do you keep a strong sense of culture alive when that happens?"

In general, however, he is not somebody who looks back. "To say, 'I could have done things differently' is not useful," he observes. But he does often think about how fortunate he has been. "I often think of my father, a man who wasn't a businessman but went into business. He invested his life in something that wasn't his passion. Images are my passion, and I'm so lucky to work with something I love." ●

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Filmmakers' Forum

Left: An architecturally impressive clock tower graces the town center of Batumi, Georgia, site of the 2011 Golden Eye Festival. Right: One of the festival's founders, Zurab Gegenava (center), takes the stage with the awards ceremony's hostess (left) and a local official.





Firsthand Impressions of the Golden Eye Festival

By Hiro Narita, ASC

Batumi, Georgia, which is nestled on the southeastern corner of the Black Sea, with Russia to the north and Azerbaijan, Armenia and Turkey to the south, boasts a long history; thus, the town is a marvelous architectural mosaic of spires, towers and courtyards, some earthy and medieval, some vibrantly modern. There empires and crossroads have bumped into one another, traded with one another, conquered one another and influenced one another — not just for centuries, but for millennia. This makes Batumi an especially fitting place for almost any kind of international gathering.

I was delighted to be invited to attend the International Festival of Cameramen: Golden Eye, because Georgia is a country I associate with great filmmaking thanks to such directors as Sergei Parajanov (*Color of Pomegranates*, *Shadows of Forgotten Ancestors,* the latter filmed in Ukraine), Lana Gogoberidze (*Day is Longer Than Night, Turnover*) and Otar Iosseliani *(Falling Leaves, Pastorale*). They and many other Georgian artists left strong impressions on me and many other filmmakers who came of age in the 1960s.

Founded in 2009, the Golden Eye Festival aims to support the development of film and TV camerafolk. The first festival was held in Tbilisi and was scheduled to coincide with the 125th anniversary of the birth of Georgia's first cameraman, Aleksadre Dighmelashvili. There are records of his work dating back to 1910, with more than 30 feature and documentary films known from both the silent and sound eras.

Golden Eye is a unique event — a gathering of camerapeople, an exhibition of their work, and a showcase for the improved and refined gear we all love to see. Since last year the festival has operated under Georgia's International Foundation for Innovative Technologies, an organization committed to implementing the most modern technologies in Georgia and its region, and to seeing its professional broadcasters and filmmakers working at and contributing to international standards of excellence. Festival founder Zurab Gegenava and festival director Eka Ioseliani are especially passionate about high quality in the film and television industries.

Along with films from the Caucasus region, works from Western Europe, South America, India, Africa and the United States were shown. More than 100 films were submitted, and judges from five countries, led by director Otar Litanishvili, screened them over several days. At the same time, the elegant Sheraton Hotel hosted three days of seminars and exhibits. Participants included Avid, Canon, Fujifilm, Panasonic, Sony, Riedel and others.

Photos courtesy of Hiro Narita.



The eye-catching cover of the festival's program book.

The festival was generally structured with equipment seminars early in the day, followed by screenings and other programming. We enjoyed the wide display of digital technologies and learning the latest about current equipment, as well as what shape future gear might take. When needed, excellent translations were provided, but none were needed for such terms as "download," "chips" and "pixels."

A Fujinon representative from Germany introduced the company's three new PL-mount HD/ENG zoom lenses, each equipped with a new 2x extender. Already available in the United States, they had not yet hit the local market. Sony representatives from Russia introduced NXCam Super 35mm, and they brought a PMWF3 camera along for hands-on demonstrations. It certainly caught the cameramen's attention, and many stayed long after the seminar to inspect it. Two Panasonic representatives from Osaka, Japan, joined a Russian counterpart to introduce the AVCCam/AG-AC160, mounted with the company's new 22x zoom lens.

Riedel's pioneering real-time networks for video and audio communication displayed notable flexibility, and the company's fiber-based wireless audio- and video-transmission system demonstrated how much one can get into a small pack-









Top: ASC member Hiro Narita (red shirt and scarf) enjoys the awards ceremony with his tablemates, who include camera operator Jonathan Abrams (directly behind Narita); Levan Katsadze (black jacket and white shirt), project manager of the festival's sponsor, the International Foundation for Innovative Technologies; and cinematographer Phil Parmet (far right, at edge of frame). Bottom: A Sony representative from Russia gives a hands-on demo of the company's new FS100 camera.

age. The rapid growth of such new technologies is making filmmaking more and more accessible to more and more regions of the world.

There were all kinds of camerapeople, too. I met a medical cameraman from Belarus, a specialist in shooting surgeries and other medical procedures. He was attending the seminars to search for an appropriate HD camera to replace his current equipment. Further, he and his associates from Belarus were looking into advanced devices that would allow instant HD networking with other doctors and hospitals so that both media and medical care could be more broadly shared. Improvement in their telecommunication system, especially at the private institutional level, was at the top of their list.

Naturally, in a place as famous for its hospitality as Georgia, it wasn't all screenings and seminars. One evening we were taken to a charming restaurant for traditional food, drink, dance and song — things all Georgians seem to love. When we arrived, we were immediately handed aprons and floured by the cooks standing by, then drafted into making Khachapuri (cheese bread). Instead of rolling cameras, we were put to work rolling pastry pins. Many of us joined in, and soon the delicious smell of baking bread wafted from the courtyard's large stone oven.

As for drink, there was a small grape-vodka still at hand. From the end of a narrow tube dripped clear, potent liquid for anyone brave enough to consume it. And consume it we did.

But the highlight of the evening was the traditional Georgian dances and songs, which were performed by youth groups while we dined. Actually, we all stopped eating because the dance was captivating, the energy and elegance of the dancers absolutely hypnotic, and the tones of the choir transcendent.

On the fourth day of the festival, I and two other Americans, cinematographer Phil Parmet and camera operator Jonathan Abrams, were invited to the Apollo Theatre, where other camerapeople joined us for a Q&A. Most of the questions reflected a keen interest in Hollywood. Of course, they also asked if we were familiar with Georgian films. After a bit of stumbling on correct pronunciation, I managed to mention Iosseliani and Parajanov, whose films were so inspiring to me in the 1960s and '70s. Great Georgian directors still inspire many film students today. Nana Dzhordzhadze's *Chef in Love*, a delightful comedy co-produced with France, was nominated for an Academy Award in 1996.

At the festival's awards ceremony, Golden Eye statues were presented for The Most Original Shot, The Best Sketch, The Best Topic, The Best Risk Shot, The Best Student Work, The Best TV Cameraman's Work, The Best Movie Cameraman's Work, and for several other technical achievements. The Georgian Public Broadcasters Special Award was given to my colleague Jonathan Abrams. Finally, the grand prize was awarded to Matteo Cocco of Germany for his work on the black-and-white feature *Zima* (2011).

The evening included one somber moment: the entire assembly rose to offer a minute of silence in honor of the many camerapeople who have lost their lives while covering current events. As Golden Eye co-founder Giorgi Jajanidze noted, "Although cameramen stay behind the scenes, we see the world through their eyes." ●



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Kodak Expands Vision3 Line

Eastman Kodak Company has introduced Vision3 50D color negative film 5203/7203, which integrates the company's advanced Vision3 imaging technology into a fine-grained, daylight-balanced film.



5203/7203 is a low-speed negative optimized for capturing images in natural or simulated daylight conditions. The stock incorporates Vision3 technology advancements such as Dye Layering Technology and sub-micron imaging sensors, which deliver as much as two stops of additional overexposure latitude and better signal-to-noise performance, especially in over- and underexposure. The stock also offers improved color consistency with the ability to shoot challenging high-contrast exteriors and follow the action into bright highlights without loss of image discrimination.

"This addition to the Vision3 film portfolio is designed to give extraordinary creative latitude to cinematographers working in daylight conditions," says ASC associate Kim Snyder, president of Entertainment Imaging and vice president of Eastman Kodak Company. "This new stock — the finest-grained negative on the market — offers a combination of unmatched resolution, reliability and proven archival capabilities."

Cinematographer Blake Evans recently tested the new stock. He reports, "I wanted to stress-test the contrast capabilities of the new Kodak 50D stock, so we shot a few scenes in a high-contrast exterior situation that included bright whites and shadows. I exposed normally and followed the actors' faces as they moved from the sun into the shadows. The negative was processed normally, and when I saw the footage as DVD dailies, I found the grain a tiny bit tighter in the dark toe of the shadows. That says a lot, considering the [Vision2 50D] 5201 emulsion was already a super-fine grain. This new 5203 stock dug deep into the shadows and maintained neutral colors, especially in the skin tones. There was no biasing of the whites in the bright highlights."

5203/7203 also possesses all the necessary qualities that allow a color negative film to perform well in film recorders, including extremely fine grain, high resolution, excellent latent image keeping and reciprocity characteristics, and a low level of unwarranted crosstalk between the color channels. The ability to render finer-grain images in underexposed areas also produces cleaner film-to-digital transfers.

"We understand that digital cameras are improving, but the industry holds film as the benchmark by which they are all judged," says Snyder. "This new emulsion is another example of Kodak's dedication to filmmaking technology and ongoing innovation."

For additional information, visit www.kodak.com/go/motion.

EasyFocus Makes Focus Easy

Building on his experience designing the Moviecam and, with Walter Trauninger, the Arricam camera lines, Fritz Gabriel Bauer has introduced the Moviecam EasyFocus system, a distance-measurement tool that combines a precise reader with a video display.

EasyFocus is designed for focus pullers and is especially help-

Arri Adds 135mm to Master Prime Line



Based on feedback from cinematographers, operators and directors, Arri has introduced the 135mm Master Prime. Fitting nicely between the 100mm and 150mm Master Primes, the 135mm makes an ideal portrait lens and brings the Master Prime set up 16 focal lengths.

Like all other Master Primes, the 135mm provides a high resolution, high-contrast image with very low flares and veiling glare; the lens offers a clean starting point from which the cinematographer can shape and sculpt the image to his or her content, be that through lighting, filters or digital manipulations during color corrections. The 135mm focal length is sufficiently telephoto to separate the subject from its surroundings, but not so telephoto that the perspective becomes flat; therefore, faces retain a pleasing three-dimensional quality. The widest aperture of T1.3 combined with the Master Primes' ability to maintain their high image quality even wide open allows for an extremely shallow depth of field when desired. Additionally, to facilitate close-ups, the 135mm Master Prime has been designed with a close focus range of 37"; even at that close range, the 135mm maintains its high image quality.

In keeping with the rest of the Master Prime range, the 135mm has its iris and focus rings at the expected positions, making lens switching fast and easy. The front diameter also remains at the customary 114mm to allow the use of the same mattebox for almost all Master Primes.

For additional information, visit www.arri.com.



ful on setups involving cranes and r emote heads. The focus puller can use a mouse, pen or fingertip on the EasyFocus' touch-screen monitor to dir ect the EasyFocus Reader to measur e the distance between the camera's film or sensor plane and an object visible in frame. The distance measurement can be shown using metric or imperial units. The system' s effective measuring range is from 6' to 400'.

The EasyFocus system featur es five operating modes. The Focus Mode of fers the simplest way of using the EasyFocus system. The user places the cursor on a target and either clicks the left mouse button or touches the target on the touch-screen monitor; immediately, the measured distance will appear in a flag next to the target and in the Reader field on top of the user-interface window, and the lens motor will automatically shift the focus to the measured distance in the shortest possible time.

When the Ramping Mode is acti-vated, the lens motor will shift the focus from one distance r eading to another over a predetermined duration. The option of pre-setting the duration of the focus ramp (from 0.1 to 9.9 seconds) pr ovides more sensitive control.

In Tracking Mode, the cursor follows the movement of a selected target, and the EasyFocus Reader will continue measuring and displaying the moving target' s chang-ing distance while the lens motor adjusts the focus accordingly.

In Manual Mode, the EasyFocus Reader provides measuring distances, and the focus puller maintains contr ol over all connected lens motors via a Cmotion Lens Control Unit. Additionally , focus can be pulled via a Focus Bar in the EasyFocus' monitor.

Finally, the Mapping Mode allows the user to measure a set in order to create a topographic map. Small flags on the video image show the distances between targets and the camera. The user can then save the map image for later use.

For additional information, visit www.easyfocus.at.

Cavision Introduces Mattebox, Viewing Glass

Cavision Enterprises Ltd. has intr o-duced the MB3485S 3x3 Mattebox, which is ideal for DSLR, video and film cameras alike.

The MB3485S can be used as a clamp-on mattebox, or it can attach to the camera system by way of an 8mm or 15mm rods support system. Its small size



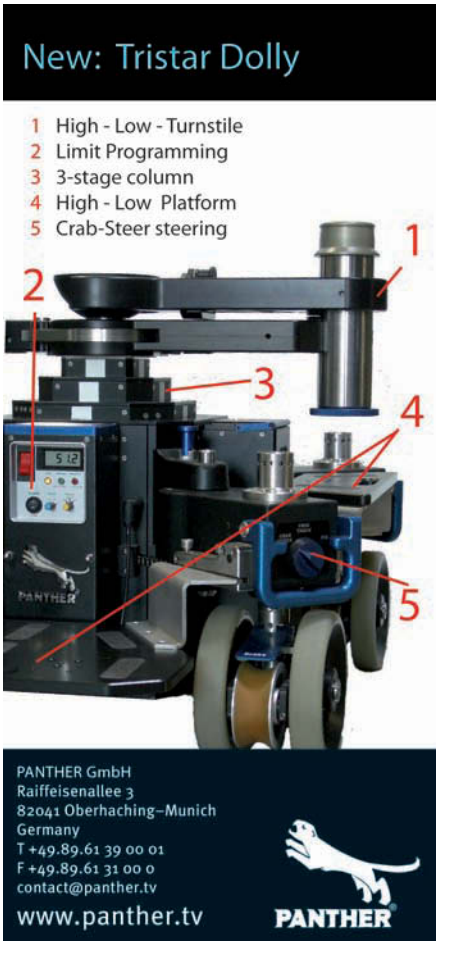
and light weight make it ideal for use when mobility is r equired. Additionally, expand-able top and side flags can be easily and quickly removed and r eattached. A new, wider shade also enables the mattebox to be used with wider-angle lenses than previ-ous 3x3 matteboxes allowed.

The MB3485S of fers two filter stages, which accept 3"x3" filters. The rear stage allows for 270 degr ees of r otation, making it ideal for use with polarizing filters. Cavision carries a large range of filters in the 3"x3" format as well as most other standard sizes.

Cavision has also intr oduced the OLF-37A density adjustable viewing filter , which features a nine-stop neutral density range, making it useful for both interior and exterior conditions. The OLF-37A can also be used to observe bright light sources, including the sun during a solar eclipse. It features a standar d 37mm fr ont thread, which allows for the attachment of addi-tional filters.

The MB3485S (with expandable top











and side flags) retails for $249, the MB3485B (without flags) retails for $119, and the OLF-37A retails for $69. All three products are available directly from Cavision or through Cavision's worldwide dealer network.

For additional information, visit www.cavision.com.



Panther Announces Wedge/Tilt Plate

Panther has introduced the Wedge/Tilt Plate, which boasts continuous adjustability from 0-90 degrees.

The quickly adjustable Wedge/Tilt Plate weighs 3 pounds and can accept a payload of up to 65 pounds. It measures 9"x4"x2", has two locking levers, and attaches to tripod and camera plates via ¼" and ⅜" screws.

For additional information, visit www.panther.tv.

ToughGaff Holds Tape

ToughGaff is a gaffer- and camera-tape holder that sits solidly on the worker's belt and allows him or her to quickly load and release the tape with only one hand.

ToughGaff was the brainchild of Steadicam operator Nir Bar, who has a background in the grip and electric depart-



ments. "I clearly remember the day and the production when [the idea for ToughGaff] hit me," says Bar. "[I was] wasting too much time and effort seeking my gaffer tape, or taking forever to untie it from its clumsy rope, or standing on a ladder, needing to secure myself with one hand and having only one other hand to get the tape out.

"Thousands of sketches were drawn, hundreds of materials were tested, many different shapes were suggested and tried until I came to the right prototype," Bar continues. "I love to see any work getting done properly, focusing on what's really important: having our tools work for us, and not the other way around."

ToughGaff is made from high-quality materials and is available in 1" and 2" sizes, both of which are suitable for up to a 60-yard roll of tape. It features a stainless-steel spring, a special slot for attaching working gloves, and is waterproof. Additionally, ToughGaff comes with a one-year warranty.

For additional information, visit www.toughgaff.com.

16x9 Distributes Movcam in U.S.

16x9, a longtime distributor of film and video production accessories, has signed an agreement with Movcam Tech to be the exclusive distributor of Movcam camera accessories in the United States. Previously known for its camera-stabilizer systems, Movcam has recently expanded its offerings to include standard camera accessories, as well as accessories designed for specific camera systems, including the Sony PMW-F3 and Canon Cinema EOS C300.

"What first caught our eye with Movcam was the high quality of their products, which is why we're proud to offer them with a two-year warranty," says Jeff Giordano, vice president of 16x9. "As we have seen with their Sony F3 accessories, they are interested in creating new and innovative products, which is what 16x9 Inc. is always looking for."

Movcam's current offerings include universal products such as follow focuses and matteboxes. For the Sony F3, Movcam has developed a full package of accessories that can be built up into personalized configurations or used individually. These



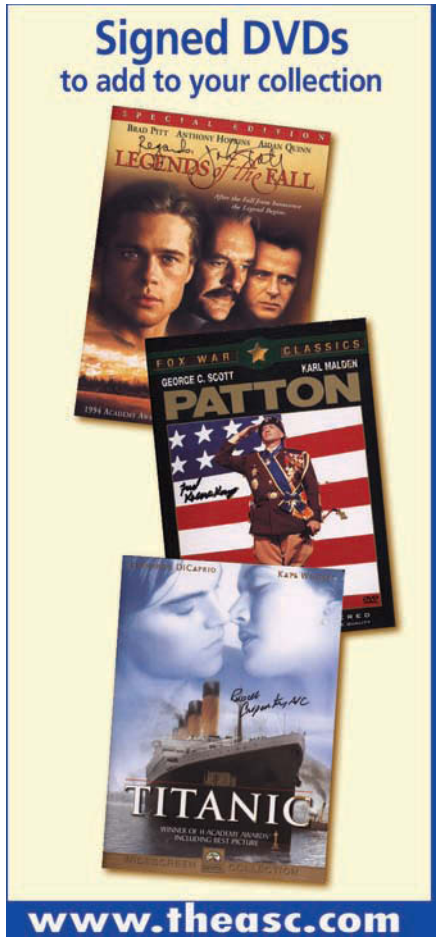
include base plates with 15mm rod support and an integrated shoulder pad, a top mount and handle to provide stability and more mounting points, and side handles for the creation of an accessible cage around the camera. 16x9 will be working closely with Movcam to design and develop even more quality products for the professional market.

For more information, visit www.16x9inc.com and www.movcam.com.

P+S Technik Opens L.A. Base

P+S Technik has opened the P+S Technik Technical Base in Los Angeles. Located in Hollywood's Television Center at 6418 Santa Monica Blvd., the Technical Base will offer sales, service and support for North America. The center will serve as a single point of contact for customers, cinematographers, directors, technicians and partners.

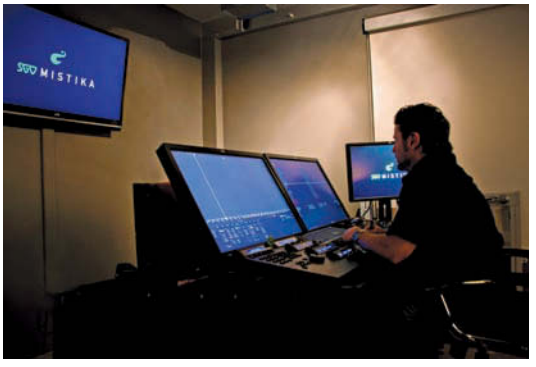
Alan Lasky and Michael Gamböck will oversee the operation of the Technical Base. Lasky, a specialist and technician for P+S Technik products, will run the office as an external consultant, helping customers, partners and end-users with technical and workflow issues. ➢





This announcement follows the news that P+S Technik and reseller ZGC have decided to end their business partnership. However, ZGC will continue to offer service for Pro35, Mini35 and other P+S Technik optical products.

For additional information, visit www.pstechnik.de.



Identity FX Expands 2-D, 3-D Services

Identity FX, Inc. has embraced the SGO Mistika 4K system and is unveiling a new category of comprehensive 2-D and stereoscopic 3-D production and post services. With the newly installed Mistika 4K color grading and stereo 3-D system at the core of its service offerings, Identity FX delivers a combination of services that positions the studio to deliver camera-to-delivery 2-D and 3-D services to its client base.

Additionally, Identity FX now provides clients with enhanced on-set stereo solutions, including stereo dailies, real-time stereo previs and on-set compositing, while continuing to offer visual-effects and stereo supervision.

With an innovative technology platform built on the Mistika 4K, The Foundry's Nuke and Imagineer Systems' Mocha Pro, Identity FX offers a list of stereo-centric services that includes 2-D and 3-D visual effects, 2-D to 3-D conversion services, complete 2-D and 3-D DI finishing services up to 4K, native stereo previs, stereo native correction services, and on-set consultative and visual-effects supervisor services.

"The future of the 3-D market is largely dependent upon understanding the interface between evolving technologies and content creators," says Identity FX stereoscopic and visual-effects producer Alison Savitch. "Identity's goal is to bridge the gap between the complex post process and production. We all believe 3-D is here to stay whether in the theatrical, broadcast or emerging new media markets, and understand that to be successful we must understand the trans-media production model as well as what the right tools are for the task."

For additional information, visit www.identityfx.com.

Image Systems Updates Nucoda, Phoenix

Image Systems has released Nucoda 2011.2, a 64-bit color-grading software application that delivers greatly increased performance, particularly when using memory-intensive tools such as the DVO image-processing toolset.

The Nucoda 2011.2 software includes a number of enhancements and refinements to the user interface as well as new features for the Precision grading panel. The introduction of a project storage feature speeds up project handling, and enhancements to the backup process give increased confidence to users.

There are also enhancements for file import and export, including support for Apple's ProRes codec. In addition to existing support for importing ProRes, Nucoda allows users to export files in any ProRes resolution, which particularly benefits workflows utilizing the Arri Alexa camera and Final Cut Pro. Nucoda can now provide an end-to-end ProRes workflow without the need to encode on an intermediate workstation.

Users can now select any layer to create intermediate caches. New tools available directly from the Precision panel manage and replace cached material on the timeline when the original material has been changed or updated. The software's stereo workflow includes greater control over the monitoring of tracks. New assignable left, right and mono tracks allow stereo compositing and flexible monitoring options to ensure the user only sees what he or she needs to.

Further enhancements include AAF export options and AAF audio support as well as support for Sapphire 6.0 and the new Sapphire Preset browser.

Complementing the release of Nucoda 2011.2, Image Systems has also released the 2011.2 version of its Phoenix restoration and archive solution. The release sees a move to 64-bit, which significantly improves speed and performance when restoring memory-intensive projects at 4K resolution.

Phoenix now delivers interlaced motion-estimation tools, which provide restoration and enhancement tools for any tape format. This allows users to fully correct and deliver projects of mixed film and tape media within a single timeline.

"Among all the features of the 2011.2 release, we are especially pleased to announce the integrated video-restoration toolset," says Torbjörn Dyrvold, Phoenix and DVO product manager for Image Systems. "With this release, Image Systems' Phoenix is now the only high-end restoration and mastering solution that provides both film and video restoration tools. The addition of the video tools also enables our customers to expand their services and bring new life to valuable content stored on tape."

As in the latest Nucoda release, Phoenix 2011.2 users can now select any layer to create intermediate caches. Tools have been added to easily manage and replace cached material on the timeline when the original material has been changed or updated. A simplified effects selection, new review and scrubbing modes and improvements to the bookmark system allow users to work faster and smarter.

For additional information, visit www.imagesystems.tv.



Luma Pictures Moves into Larger Facility



Visual-effects house Luma Pictures has completed its move into a larger facility in Santa Monica, Calif. The new 16,000-square-foot space allows the company to expand its workload, services and creature comforts.

The custom-designed facility features a 100-plus-seat capacity for artists; a plush screening room, complete with an NEC 1200 C 2K stereo projector; and a new motion-capture stage, rigged with wall-mounted camera tracks to provide performance capture ability in-house.

"This has been a long-anticipated move and one that gives us more flexibility in how we work with high-profile, resource-intensive projects," says Payam Shohadai, Luma's executive visual-effects supervisor. "The new office provides our hardworking staff with an environment that is conducive to artistic inspiration and enables Luma to scale with our client's needs and take on even higher caliber project work.

"Our core focus remains in full-length motion pictures, but recently we've had opportunities to delve deeper into the commercial world and provide shots on interesting varieties of work," continues Shohadai. "The short format allows for a lot of fascinating creativity that Luma finds very attractive."

For additional information, visit www.lumapictures.com.

LightSpace CMS Adds Features

Light Illusion has released new features for its color-management system, LightSpace CMS.

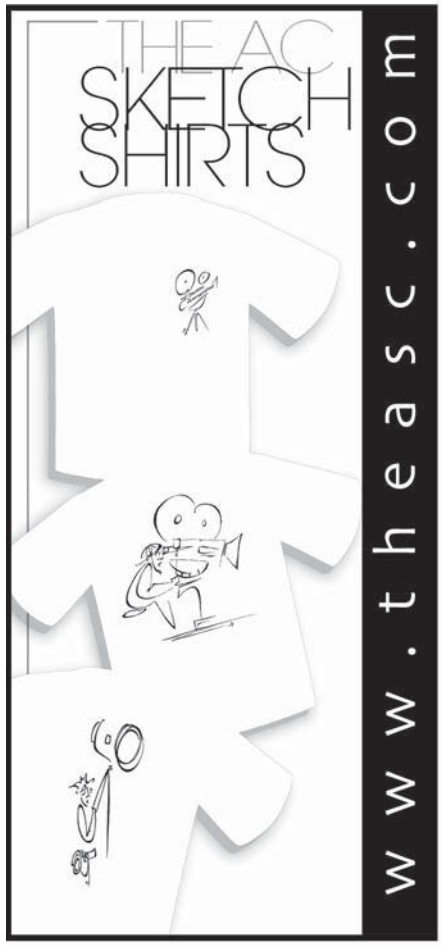
LightSpace CMS provides fully integrated facility-wide color management regardless of the creative systems and displays in use for on-set, post and broadcast workflows. A single LightSpace CMS license can provide total facility-wide calibration capabilities, without the need for multiple systems or a floating license.

New developments for LightSpace CMS include advanced color-science manipulation tools aimed at greatly improving accurate color management with lower-cost color probes through the use of advanced Color Blend, Axis Blend and Smooth Filtering algorithms. Changes to the underlying Color Match engine further enhance end results, providing all users with more choice in terms of cost of calibration, achievable quality and accuracy for all color critical workflows.

"We develop all the Light Illusion color-management tools and services based on real-world experience, providing tools and capabilities directly applicable to industry requirements," says Steve Shaw, CEO of Light Illusion. "The continued development of LightSpace CMS with the addition of advanced color-science tools provides enhanced calibration capabilities to all users for full display and film profiling, LUT conversion and manipulation, as well as automatic LUT generation for display matching and calibrated preview."

LightSpace CMS is capable of visualizing film images on digital displays, as well as accurately matching different displays, allowing operators, colorists, supervisors, cinematographers and directors to be confident that a matched final look is presented at every point in the production and post-production chain, saving time and effort and avoiding unexpected results by ensuring any image is accurately portrayed across a wide range of target environments and displays.

For additional information, visit www.lightillusion.com. ●





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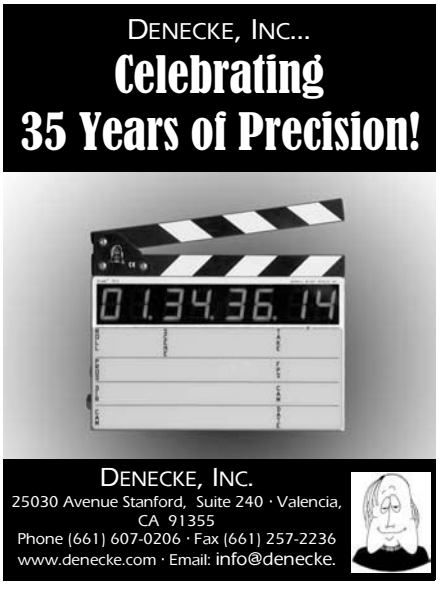














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Clubhouse News







Top: Ben Seresin, ASC.
Bottom: David Stockton, ASC.

Seresin, Stockton Join Society

New active member **Ben Seresin, ASC** was born and raised in New Zealand, where he developed an early interest in acting before setting his sights on cinematography. When he was 17, he got his first job on a film, working as an electrician on *The Race for the Yankee Zephyr* . Soon thereafter he relocated to Australia, where he transitioned to the camera department; by the time he was 19, he had progressed to first assistant cameraman.

In 1992, Seresin moved to the U.K. and began working as a director of photography. His first jobs came on commercials, and he was soon shooting independent features. In 2000, he served as second-unit cinematographer on *Lara Croft: Tomb Raider*, which he followed with a similar credit on *Terminator 3: Rise of the Machines*. Seresin now divides his time between the U.S. and the U.K. His recent credits include the telefilm *Free Agents* and the features *Transformers: Revenge of the Fallen* and *Unstoppable*.

New active member **David Stockton, ASC** grew up in New York City's Greenwich Village. He attended New York University, and in 2004 he made a splash with the short film *Underground*, for which he won the Best Director of Photography Award at the Beverly Hills Film Festival. He then moved into television work, shooting episodes of the series *Medical Investigation*, *CSI: Crime Scene Investigation* , *Eleventh Hour* and *The Forgotten*. He won an ASC Award for the *Eleventh Hour* episode "Resurrection," and he received another ASC nomination for the *Nikita* pilot. Stockton has also shot commercials for such clients as L'Oreal, DeBeers Diamonds, Oil of Olay, Discover Card, Armani, Toyota, Sony and Maybelline. His recent credits include the series *Chase*, the pilot for *Alcatraz* and the feature *Home Run Showdown*.

Lee, Manios, Patel, Rose, Schulman Named Associates

New associate member **Chuck Lee** graduated from the University of Wisconsin and worked for the National Park Service before changing tacks, moving to Los Angeles and entering the film and television industry. He worked as a camera operator before joining Fujinon in 1986, and today he serves as technology manager and western-region manager for the company, which has since rebranded as Fujifilm Optical Devices. During his tenure with the company, he has been involved in the development of Fujifilm's Cine E Series and Premier Series lenses.

While growing up, associate member **Steven Manios Jr.** spent his summers training under his father, ASC associate Steven Manios Sr., who owned Century Precision Optics. The younger Manios joined the company as a lens technician in 1981 and later advanced to service manager before working in the sales department. In 1991, Manios founded Ste-Man, Inc., which has helped introduce products from such companies as Cartoni, Angenieux and Transvideo to the U.S. market.

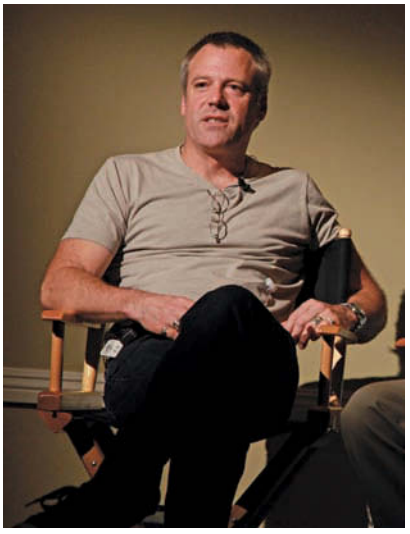
Born in Tanzania, associate member **Dhanendra Patel** was raised and educated in England. He began working for the BBC as a studio engineer, and after a decade with the network he crossed the pond to join Ikegami USA as a camera specialist. Patel then joined Sony Electronics, where he has served in various capacities. He has worked on numerous television and feature productions, and he has been an integral part of Sony's migration from standard definition to high definition, assisting other companies and individuals with operational and technical training. Patel currently serves as Sony Electronics' senior product manager for digital cinematography.

Associate member **Frederic Rose** has been Technicolor's chief executive officer since 2008. He graduated from the Georgetown University School of Foreign Service and the Georgetown University Law Center, and he holds dual French and U.S. citizenship. Prior to joining Technicolor, he was president of Alcatel-Lucent's Europe, Asia and Africa region.

Associate member **Wayne M. Schulman** fell in love with the movies when his grandmother took him to see *Tom Thumb* (1958). He dabbled in photography while attending Syracuse University and Colorado State University, but it wasn't until he went to work for The Tiffen Co. at age 44 that he entered the industry on a professional level. In 2003, he moved on to

Photo of Clubhouse by Isidore Mankofsky, ASC; lighting by Donald M. Morgan, ASC.





From left: Associate member Dhanendra Patel; associate member Frederic Rose; Wally Pfister, ASC.

Manfrotto Distribution, where he currently serves as the product manager for Manfrotto video products and Formatt filters and the national sales manager for all video products.

Pfister, Prieto Address Breakfast Club

The Society's Breakfast Club conversation series recently continued with appearances by **Wally Pfister, ASC** and **Rodrigo Prieto, ASC**. Both sold-out events began with a relaxed breakfast, after which the guest cinematographer sat down for an interview conducted by *AC* associate editor Jon D. Witmer. Pfister shared his views on shifting trends in technology and screened clips from the features *Memento*, *Inception* and *The Dark Knight* . Prieto traced his career path and enthusiastically detailed his approach to key scenes from the features *Biutiful*; *Lust, Caution*, and *Water for Elephants*.

ASC Breakfast Club seminars are open to the public. Tickets are $20 for Friends of the ASC, $35 general admission in advance and $40 at the door. For information, visit www.theasc.com.

Pines, Demos Receive SMPTE Honors

The Society of Motion Picture & Television Engineers capped its 2011 Annual Technical Conference and Exhibition by celebrating 19 industry innovators and pioneers. Among the honorees, ASC associate **Joshua Pines** received the Technicolor/Herbert T. Kalmus Medal for his work developing improvements to film scanning and recording technology at Industrial Light & Magic and Technicolor, and for his dedication to achieving the highest possible image quality while overseeing the color science and image processing on numerous feature films and film-restoration projects.

ASC associate **Gary Demos**, CEO and founder of Image Essence LLC, was among five industry professionals who received the SMPTE Fellow Membership Award, which recognizes individuals who, by proficiency and contributions, have attained an outstanding rank among engineers or executives in the motion-picture, television or related industries.

Bailey, Kodak Announce Film-School Winners

The annual Kodak Film School Cinematography Competition recently announced four first-place winners, one from each major region of the world, and one in a new 35mm category. For the third consecutive year, **John Bailey, ASC** judged the entries.

Joshua Spires from the University of Texas won in the Americas region for the short film *The Whale*; Johannes Praus from the University of Film & Television "Konrad Wolf" Potsdam won in the Europe-Africa-Middle East region for *Submerged*; Masanori Yokota from Osaka University of Arts won in the Asia-Pacific region for *Bullet of Angry*; and Brendan Barnes from AFDA in South Africa won in the 35mm competition for *Those of Water*.

Second-place winners were also named: Marcella Nunes from Universidade Estácio de Sáin Brazil in the Americas region for the short film *Itapoanama*; Dimitar Skobelev from National Academy for Theatre and Film Arts in Bulgaria in the Europe-Africa-Middle East region for *The Service*; Hachul Chung from Seoul Institute of the Arts in South Korea in the Asia-Pacific region for *Knock*; and Lotta Kilian from University of Film and Television "Konrad Wolf" in Germany in the 35mm competition for *We Die*.

Johanna Gravelle, worldwide image capture marketing director for Kodak's Entertainment Imaging Division, says, "We are so encouraged by the high-quality, creative filmmaking we see coming from film schools around the world. This competition is a wonderful way to recognize the talented students, and it's just part of Kodak's many efforts to support the emerging filmmaking community." ●

Pfister photo by Matt Turve.

Close-up

Roberto Schaefer, ASC, AIC

When you were a child, what film made the strongest impression on you?
Jerry Lewis' *The Bellboy* (1960), probably because a kid in the audience was knifed during the show, and we had to leave the theater. Or maybe *Psycho* (1962), which I never got to see — I was pushed through one of the theater's plate-glass windows by a mob trying to get into the sold-out show. Fortunately, it was winter, and I was wearing a parka and a hat!

Which cinematographers, past or present, do you most admire?
Among others, Gordon Willis, ASC; Sacha Vierny; Raoul Coutard; Néstor Almendros, ASC; Christopher Doyle, HKSC; David Mullen, ASC; Robert Elswit, ASC; and Vittorio Storaro, ASC, AIC, for his earlier work. I admire all of them for their great, unique images and storytelling abilities.



What sparked your interest in photography?
I was given an Instamatic camera when I was 13. Then I got a 35mm Beseler Topcon, and later a 4x5 Speed Graphic. Seeing the works of greats like WeeGee, Man Ray, Horst P. Horst, Guy Bourdin and Irving Penn gave me the impetus to try my hand at it. Stills soon became series of stills, or motion images. That's when I experienced Chris Marker's brilliant *La Jetée*.

Where did you train and/or study?
I went to art school in St. Louis, where there was no film study except for film history, so I minored in photography. I got my practical training in New York at a non-union company where I was able to work in every department, from set construction to editing. I got my real start working in Italy in the 1980s and '90s as a cinematographer, operator and Steadicam operator.

Who were your early teachers or mentors?
I wish I'd had some, but I was really on my own, as I didn't come up through the normal industry routes. I did get to operate Steadicam for Néstor Almendros, who was a true giver, and I worked as an extra on *Once Upon a Time in America*, which allowed me to observe Tonino Delli Colli, AIC at close range.

What are some of your key artistic influences?
Music, Surrealism, French New Wave and Italian Spaghetti Western films, Caravaggio, Hopper, James Turrell, and the writings of Thomas Pynchon and Italo Calvino.

How did you get your first break in the business?
When I was 15, I was an extra in a toy commercial. Years later, the mother of the friend who starred in that commercial recommended me to the non-union commercial studio in New York that had shot the spot. I interviewed and got a staff job. I went back there a year later and got hired as the assistant to the production manager. Two months later, I was the production manager, and after that I produced for them for four years.

What has been your most satisfying moment on a project?
Each project has its own moments, and they are all very different.

Have you made any memorable blunders?
On my first and only job for Reuters in Rome, I was sent to Brindisi with a defective light meter to film the Italian soldiers shipping out to the Gulf War. I shot color reversal 16mm, and it was 3 stops under.

What is the best professional advice you've ever received?
Listen to your gut instinct and believe in it. And remember that the craft-service person on this job might be the producer on the next.

What recent books, films or artworks have inspired you?
Anything by Thomas Pynchon or William Gibson. Last year at the Art Institute of Chicago, I saw a great exhibition about architecture and design, and revisited the Impressionists, too. Also, Criterion's Blu-ray of *Last Year at Marienbad*.

Do you have any favorite genres, or genres you would like to try?
I'd love to do a real Western or noir.

If you weren't a cinematographer, what might you be doing instead?
Chef, proofreader or musician (if I could carry a tune!).

Which ASC cinematographers recommended you for membership?
Steven Poster, Sandi Sissel and Theo Van de Sande.

How has ASC membership impacted your life and career?
I feel that I am truly a part of the 'art of filmmaking' community but still need to prove myself every day. I really appreciate the chance to meet with other cinematographers and discuss our art and business. ●

Photo by Karen Ballard, SMPSP.

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