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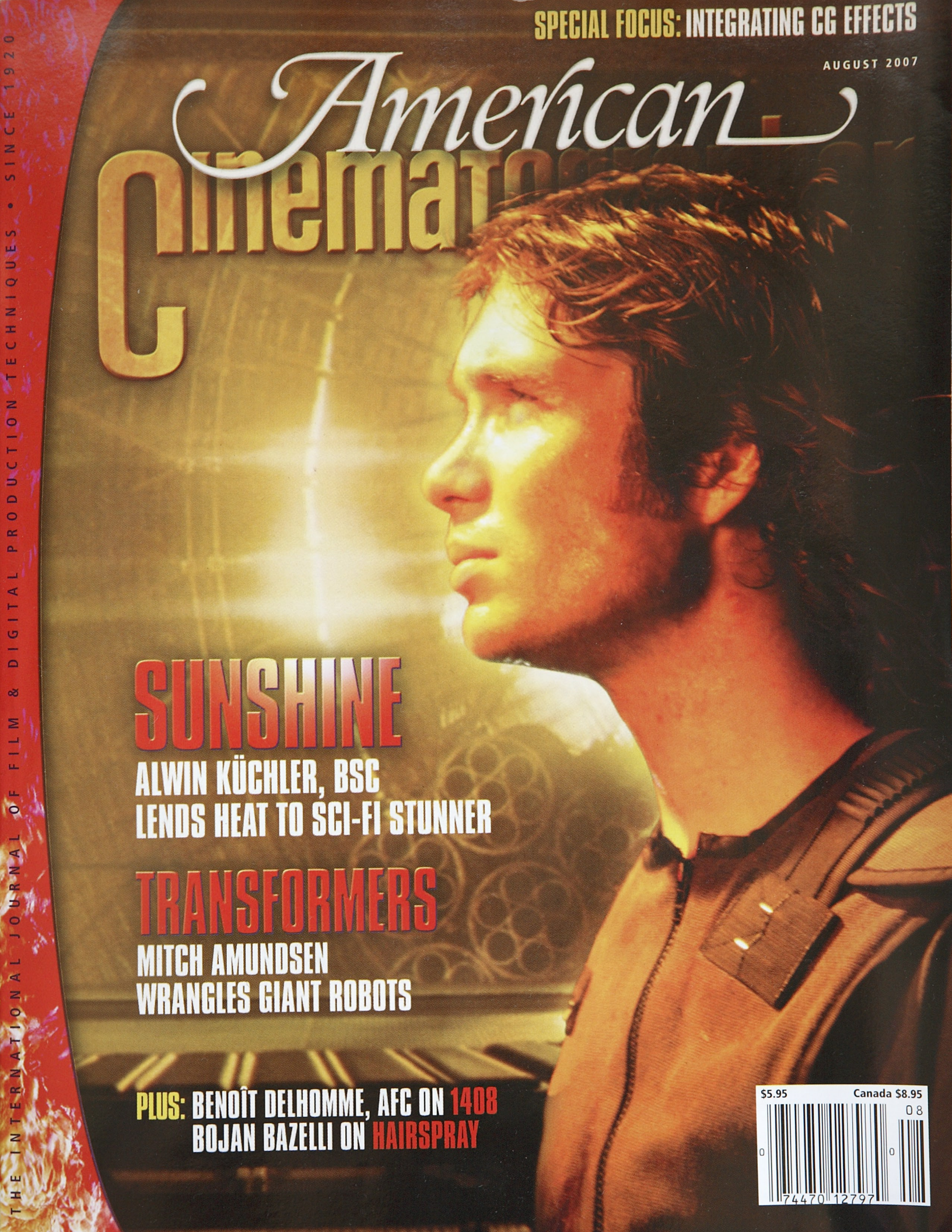

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Short Takes

"Writing With Light" for The Willowz

by Elina Shatkin

The Willowz perform amid an explosion of practical lighting effects for the video "Jubilee," shot by Ross Riege.

Director Toben Seymour and cinematographer Ross Riege grew up together in Wisconsin, and they shared a passion for stop-motion animation and puppetry. With the "Jubilee" music video for The Willowz, they found an opportunity to try a technique they had been interested in for some time: stop-motion long-exposure photography. "We'd had the idea tucked away in our archive for a long time," says Riege. "We wanted to find the right project, something that would allow us to really push the concept."

Inspired by Pika Pika, a group of Japanese artists who created whimsical videos from still images adorned with light doodles, Seymour and Riege began laying the groundwork for a stop-motion video composed entirely of still images. Although the images would require significant refinement in post, they wanted to create all the light-doodle effects in camera. "It was really important to us that the video be organic," says Riege. "We wanted to create something that couldn't be done in post."

Set at night, "Jubilee" begins with a series of casual shots of outdoor scenes adorned with simple light doodles (a bouncing ball, a box, a flower), and then transitions to shots of people interacting with and creating larger, more complex light doodles; for example, two people feed light-doodle fish to a light-doodle pelican, and a light-doodle tree grows and swallows a man. As the song's tempo picks up, the video builds to a frenzied scene of The Willowz performing amid an electronic storm of light doodles.

The video was largely shot over three days in November 2006. Riege had at his disposal 12 digital still cameras: six Canon 350Ds (8 MP), four Nikon D50s (6 MP), and two Canon 20Ds (8 MP). "I made sure the Canons were operating in the same RGB color space, but aside from that I left the cameras' presets at their base levels. I knew I'd be performing all the color correction in post, so I decided to shoot images as clean as possible.

"Most of our cameras came from contacts who were willing to rent or loan them to us, so we were all over the map in terms of lenses," he continues. "On the 20Ds, which we used for first-unit photography, we used a package of three lenses I would have preferred to use on all the cameras: a Canon 24-70mm f/2.8L, a Canon 70-200mm f/2.8L, and a Zenitar 16mm f/2.8 prime. However, we couldn't afford to rent those lenses for everything, so we used what we had: Canon 17-85mm f/4-5.6 on the 350Ds and Nikkor 18-55mm f/3.5-5.6 on the D50s.

Photos courtesy of Ross Riege.

Left: Director Toben Seymour (second from left) provides guidance during filming. Below: Riege (at camera) shoots a frame for the opening setup.

"The main variable was the shutter speed, which depended more on the animators than the operators. If we had an artist drawing at a certain speed, we had to determine how long the exposure needed to be. They ranged from 8 to 30 seconds."

Riege set the ASA on all the cameras at 400 to give the operators wide latitude regardless of exposure length. "At 400 ASA, I figured the exposure would be high enough that we'd be able to maintain enough detail in the shadows while not compromising the integrity of the images in terms of noise and digital grain," he says. His goal was to keep everything at a T4.

He chose to shoot at a much higher resolution (3500x2400 JPEGs) than the video would ultimately be finished at, because, Riege says, "we wanted to shoot at the highest resolution possible while still being able to shoot efficiently. We would have shot at a higher resolution if that didn't increase the amount of storage we needed and the turnaround from shot to shot. This was the right balance of efficiency and quality." He shot the images at 4:3, knowing he would crop and

Above: A test image of in-camera effects. Below left: An angel (Marin Panunzio) gains wings and a halo. Below right: Aliens surround guitarist Aric Bohn.

reframe later as necessary.

However, he opted not to shoot at full resolution because he had to maximize the number of images that could be contained on the memory cards, which ranged from 512MB to 2GB. Media manager and interactive programmer Michael Lew, who helped establish the video's workflow, was on set to oversee the process. As soon as a memory card was full, a camera assistant would run it to Lew, who would download the images onto his laptop and organize them to preview sequences for the team.

The video contains more than 60 setups, and instead of shooting one setup at a time, the filmmakers broke the crew into small units that worked on different scenes simultaneously. "When Toben and I weren't shooting images that were essential for the script, we spent most of our time walking around and facilitating each shot," recalls Riege. "With so many cameras on set and an individual operator for each one, I had to step back from my normal role and focus on overseeing the technical aspects of the production." As the production wore on, the artists became faster and more proficient at drawing the light doodles, but even so, some shots required up to six hours to complete.

The only scene that was shot with all 12 cameras was the wide setup of the band's climactic performance. The video's limited budget allowed for three Hensel Integra 500 strobe lights, and for this setup they were rigged with a Pocket Wizard wireless control that set off all three flashes at the push of a button. If there were fraction-of-a-second differences between when each operator pushed the shutter on his camera, it didn't matter. "The flash of the strobes froze a single moment of the action that was recorded on each camera, regardless of the slight variation in when each shutter was depressed," says Riege. "The strobe was the only way to accomplish what we wanted in camera; the only way we could justify the long exposures was by using flash photography. I knew we weren't going to be lighting with hot lights that were always on and needed to have the same level of exposure."

As soon as Riege pushed the button, more than 30 animators would run in and create their light drawings using a mix of flashlights, keychain lights, LED lights, Christmas lights, neon lights, rope lights, and a remote-controlled disc light that production designer Matt Lackie found in Chinatown.

The most painstaking shots in the video were the ones that involved singing. Animation supervisor Johnny Sweeney broke down the sections of the song where Seymour wanted coverage into 13 mouth positions, and then explained to the singer which position

his mouth needed to be in for a given shot. When all the shots were strung together, it looked like he was singing to the music.

The main shoot yielded more than 10,000 raw images, and once it wrapped, Seymour and Riege continued to work in smaller groups to shoot pick-ups and fix problems that arose in the edit. Riege organized the images by setup and shot; he then viewed a series of thumbnails of the images in Photoshop to see how the action played. "After I previewed a series of shots, I would find a key image and create a new action that recorded a series of commands: crop, color correction, occasionally a grad filter or a vignette. I could save that as one action and apply it to an entire group of images. For me, that was the most time-consuming task." He cropped the images to their final size of 1280x720.

He passed the images to editor Ryan Bartley, who began to string out the images in Final Cut Pro, holding each shot for three frames. As he imported more images, the application slowed down almost to a halt. Bartley suggested they export each series of images as a DV clip (rendering it at DV resolution) and then bring these clips back into the timeline. Instead of working in HD, the video's final format, Bartley had down-rezzed the images to DV so he could work at a normal pace. After Bartley finished his cut, he re-imported all the stills into FCP, laid them on top of the video, deleted the video files, changed the timeline settings to HD, and reconnected the original images.

The edit then came back to Seymour and Riege, who went through the video and refined the timing of the animation, holding some shots for one frame and others for up to six frames. After picture was locked, Riege performed additional color correction in Photoshop and exported the timeline at full HD resolution to create a master. "We actually delivered the video on DV," he says. "So far it has only aired online. The only place an HD cut exists is on my hard drive!" ■