

FADE TO BLACK

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Visual Effects Pioneer Tells How Digital Showed His Studio Who Was Boss

By P.J. HUFFSTUTTER, Times Staff Writer

Richard Edlund may be mostly unknown to the moviegoing public, but he's something of a celebrity in the behind-the-scenes world of special effects.

The winner of four Oscars, Edlund left George Lucas' Industrial Light & Magic in 1983--after playing a key role in the "Star Wars" trilogy--and launched Boss Film Studios, his own shop based in Marina del Rey. Edlund built his company before the digital effects revolution, when optical printers were more efficient than Cray computers. It was a time when visual effects shops were filled with slouchy geeks who drank Sanka, not artists in Gap jeans sipping cappuccinos.

Then, in the '90s, the visual effects industry became cool. Computers evolved as a powerful artistic tool. Competition in the once-sparse field grew intense. And Edlund, 56, watched his company lose millions of dollars--"too much to think about," he says.

In August, the boss closed Boss, citing increased competition from other large shops and a booming boutique industry. As the company prepared to auction off its equipment, Edlund talked about Hollywood history, what went wrong at Boss and why the visual effects community should pay heed to his mistakes.

Hollywood rewards actors for their performances, writers for their stories and directors for their visions. But the role of visual effects artists has mostly been hidden.

It's true. Special effects go back to the turn of the century, with [French magician Georges Melies' film] "Voyage to the Moon." Hollywood didn't want to talk about their movie tricks, all this industrial sleight of hand.

They still don't. Not really. Because special effects isn't about ticket sales or big box-office openings. It's about making films that people say can't be done. It's about spaceships and aliens and light sabers and thousands of things you can't see but want to believe. . . . [Back in the '70s] I remember I had these fantasies about how to do new things with unwilling technology. We had to trick the camera and the equipment to make it do what we wanted.

Like how?

Take "Star Wars." At the time, we were layering strips and strips of film together to get certain composites. I remember George [Lucas] saying, "Let's figure out the simplest way to get the image onto film." He had this idea of men, dressed in all black, running around an all-black set and carrying black poles with model spaceships perched on top of the sticks. We would then film the scene and somehow, magically, all you would see would be these little ships moving jerkily around a dark background. Obviously, that technique doesn't work. But the concept was right on.

You were using digital tools at the time too, right?

Yes. "Star Wars" was the first feature film to use a computer to control the effects camera. We boot-strapped all the equipment together. None of it existed. So we'd take a piece from one camera and a bit from another and hope it worked. It was a matter of using old technology with the latest optical tools and even newer ideas.

Why did you leave Industrial Light & Magic?

After "Return of the Jedi," I knew a lot of the top people would go, and I wanted to be with them. George knew it was coming; he knew I was looking at locations in Los Angeles. [I hired] friends and friends of

friends. The talent pool was tiny but so was the competition. There was IL&M and DreamQuest and a couple small shops. There wasn't a lot of competition because the field required such specialized equipment and techniques.

Forget throwing a bunch of PCs in a room with a handful of animators. We needed engineers and photographers and traditional animators and modelers. We needed hands-on people who could create tools and break them apart. We needed optical printers that took up entire rooms. We needed a lot of space.

And a lot of money?

Yes and no. Yes, the equipment was expensive. But the overhead was lower back then. You weren't constantly looking to Silicon Graphics Inc. for the latest, greatest machine or to some tiny software firm hawking the best program to make virtual fur. Your desk wasn't filled with resumes from kids right out of college demanding six-figure salaries.

I admit I'm not a money man. I'm not a businessperson. I'm an artist. I've always been more interested in making the best movies in the time we've got than in the business aspect of starting up a company. All I know is that until we completely jumped into the digital world, we were profitable.

So you hate digital.

Not at all. The photo-chemical systems were always frustrating for me. So unfriendly, especially when dealing with color. You find yourself hovering over a light table with strips of film for hours, just to make sure the color's right. Is this red the same red as these 300 other frames? Is the camera steady or did it jump in frame 173 and 192?

Look, digital's been around for a long time. Everyone thinks Hollywood's love affair with computers started with "Terminator 2," but that's so wrong. The first big effects movie to really tap digital techniques was "The Last Starfighter" [1984], where the spaceships were digital. And then there was "Tron" [1982] with its motorcycles racing along the ground floor. And most people forget about "Futureworld" [1976], where there's the face of Peter Fonda rotating in midair.

Don't forget the genesis shot in "Star Trek II: The Wrath of Khan" [1982]. Remember that one? A lifeless moon until the missile hits it, then a wave of lush vegetation and water and clouds. That got Steven [Spielberg] excited, and I remember him asking around if it would be possible to do a whole film using that technology.

All of these shots were done digitally. But the shots had this sugar-candy look, with flat textures and too-perfect images.

When did that change?

For Hollywood? Around 1989, with "The Abyss" and the column of water that turned into a face. For me? Around 1992, when we were working on "Batman Returns." The scenes at the end, the ones with all the penguins carrying rockets on their backs. They tried to use live penguins, but the birds wanted to toss the rocket packets off their back every time the cameras started to roll. We realized that we had to create digital penguins, or we'd never get the show finished. Before then, we'd been doing some work on a Cray, this beast of a machine that cost us \$35,000 every time we touched a button.

Eventually, the cost came down.

Not enough. When we were primarily an optical shop, I had an appraisal done of the equipment. All photo-chemical pieces, all bootstrapped together, all worth about \$7 million to \$9 million. It was the mid-'80s. We were making a fortune, and whatever I made, I put back into the business.

Then digital hit, and all my equipment was worthless. If I could get 10 cents on the dollar, I would have been lucky. So I spent \$4 million in 1993 to take Boss digital. And we did a Bud Bowl commercial, and that bought us about 30 workstations.

And you know what? There was never enough money, because your overhead shoots up, your profit margin drops, and you're always needing to pay to update all the software and hardware. It's incredibly volatile technology.

When did Boss stop being profitable?

When the industry went digital. We started paying for today's projects with tomorrow's profits. It was costing me \$1 million a month to keep the machines running and maintain a minimum staff of 90 people. I tried to keep things going, but it's getting too easy for anyone to jump into this business. I tried to strike a deal with other post-production facilities to consolidate and spread out the use of the workstations among several different groups. I couldn't make a deal fast enough to save Boss. I realized that if I closed the shop now and sold everything off, I'd be completely clear of debt.

How much do you owe?

I don't want to say.

Other shops, both larger and smaller than Boss, seem to make things work.

I can't speak about what's happening in other houses because I haven't seen their books. But I will say that, in general, there's quite an "emperor's new clothes" scenario happening in the industry. Big companies with lots of expensive workstations--and deep pockets from some outside source--are surviving. Small shops using PCs and reporting lower overheads are surviving. And still, everyone says they're making so much money working on these films. They can't be profitable.

Why?

Because they're underbidding us, and we're losing money. We were ready to sign a contract and another big local effects house underbid us by \$1 million, just to get the show. I know they were going to lose money on that show, but it didn't matter.

It can be a vicious arena because everyone's bidding for the same projects. And there's not a lot of loyalty between visual effects houses, and film producers and directors [who usually decide which group] gets the contract. All the producers care about is finding some new effect, something they've never seen before, and to keep it under budget.

Has it ever been different?

Not really. One of the first shows [Boss] did was "Ghostbusters." We had 10 months to build printers, build a studio and do a show. It was supposed to be an easy show, but [director] Ivan [Reitman] liked what we were doing and added 50 more shots. This was after months of seven-day workdays. It was insane. No breaks, no time off. I called Ivan and met him in the parking lot. He asked when the additional shots would be done. I brought out a samurai sword and asked him what he wanted to cut.

He got the point.

Now, I'm the one making cuts. I've loved this business for a long time. But I couldn't keep paying to work in Hollywood.

Isn't that Hollywood's duty to the public, to always find new stories and new ways of telling those tales?

Yes. It's the magic factor. But that doesn't mean it's cheaper to explore new areas. Either the budgets need to go up, or you're going to see a lot of these bigger houses disband. IL&M will be fine, it's an island all to itself. I think you'll see a lot of temporary companies assembling for a particular project, then disbanding at the end. If I'm a visual effects producer for a show, I can rent all the motion control cameras and the workstations. I can hire the people I need. And I don't have to maintain a lease on a building or worry about updating all my digital equipment.

Digital is the future, and so is the virtual visual effects team.

