

Hidden away in a high-security building cleverly disguised as a dilapidated warehouse, the Imaging & Effects team plies its trade. They like it this way. It's...



They're mysterious, they're ingenious, they're... Men in Fog. Here's part of the 60-plus member Imaging & Effects team. Front (left to right): Joe [redacted], Brian [redacted]. Middle: Charlie [redacted], John [redacted], Rick [redacted], Ray [redacted]. Back: Leonard [redacted], David [redacted], Phil [redacted].

I could tell you how

Imaging and Effects gets that window to smash to bits and disappear without a trace or what it takes to make an entire room vanish—poof!—in *The Twilight Zone Tower of Terror*™. Or how, every four minutes, you can cause a major earthquake that unleashes fires, huge explosions and a 70,000-gallon flood—and then make it look like nothing happened at Catastrophe Canyon, part of the Backstage Studio Tour at Disney-MGM Studios.

But I won't. It's classified.

"Everything we do is hush-hush so we're ahead of the game," says senior Imaging engineer Tom [redacted].

Actually, even if I wanted to talk, I couldn't. For after hours of interviews with the Imaging & Effects (I & E) team, I still haven't got the slightest idea how they do what they do.

These guys are good. And as quiet as they need to be.

Why So Clandestine?

I went to our official keeper of company secrets, vice president and general counsel Peter [redacted], for answers. "Why? Because we're Disney," says Peter, adding in a hushed tone,

"There are people out there whose main pursuit is to find out more about us." He entered into evidence the website he saw recently on which were posted color photos of the "rocket rod" mock-ups, taken from over the barbed wire topped fence at Bonus Bilt, including directions on how to get there. "If you don't think there's reconnaissance out there. . .," he says knowingly, not needing to add another word.

Besides not giving our competition any breaks, there's a practical side to keeping Imaging & Effects under wraps. "If technical inventions become known, there could be some impact on our patent program," says Peter reassuming his lawyerly manner.

It Takes All Types To Make It Happen

What we *can* talk about is the people, and the process, that make the amazing a reality. The team is made up of specialists in Imaging, formerly Projection Development ("anything to do with cameras or projectors," says Tom), that merged with the Special Effects department five years ago. Who are they really? "We were the kind of kids, who played with propane and set fire to the garage once or twice," says one effect designer who seems to speak from experience. Another view comes from someone who should

know: I & E senior secretary Michelle [redacted]. "In my opinion, they're the greatest guys in the company. They're quirky, but wonderful."

And they certainly bring a wide variety of abilities to the table. "The Imaging & Effects talent base runs through the complete spectrum of effects," says principal special effects designer Gary [redacted]. "pyrotechnics, cryogenics, fiber optics, water effects, steam effects, film and video projection, computer simulation, electro-mechanical devices, and much more." Gary should add high-pressure water fog systems to that list: He and Sam [redacted] are currently supervising the installation of 5,000 linear feet worth of high-pressure fog nozzle banks at Disney's Animal Kingdom. "I believe this is the largest indoor/outdoor fog effect that has ever been attempted," says Gary. The thick, mysterious mist will blanket many Park areas, including, the *Tree of Life*.

The Process Is A Challenging One

Ideally, the Illusioners, as they're called, prefer to begin at the blue sky level. "It's false economy to not have I & E involved earlier in the project life cycle," says principal special effects designer Ray [redacted], a 17-year veteran. And from there they go start to finish, "working with almost every discipline at WDI," says lead special effects designer Jack [redacted]. The process, explains Jack, goes from creative to design to manufacturing and, finally, to installation in the field.

But the most critical is the early testing phase here in Glendale. "Mock-ups are a vital part of the I & E process," says manager of I & E Dave J. [redacted], from his desk in the building where the majority of the team members have offices. "And there's constantly something being put up or taken down—you never know what you're going to find at Bonus Bilt." (See accompanying photos).

And, besides creating a memorable effect, the challenge in those mock-ups is to make the effect keep going and going: "If we were just doing the single shot for a movie, we'd blow it up," says Ray. "But after we've blown it up we have to reset it." And do it again.

But they have their own philosophies for facing challenges head on. "Don't think because it's never been done that it can't be done," says Jack. And Gary shares how "good enough" is not a consideration: "As soon as we believe we are close to doing all that can be done with an effect, someone comes along and asks, 'What if ... ?' 'What if?' should be the slogan for the I & E group."

Past, Present . . .

It's no mystery around WDI that I & E plays a special role; one that those outside the department respect. Notes senior concept writer

Kevin ██████, who is working on *The Enchanted Tiki Room* rehab, “You know, it was one thing pitching the show and saying ‘OK and now [this thing] explodes.’ It’s easy for me to say, but somebody has to figure that out—and [Joe ██████ and team] came up with a pretty cool effect.”

Dave J. ██████ sums up the role of I & E concisely: “We take a scary effect and make it Disney safe.”

And they’re a group with history. Gary ██████, an Illusioneer since 1979, apprenticed with Imagineering legend Yale ██████, considered one of the true pioneers of theatrical

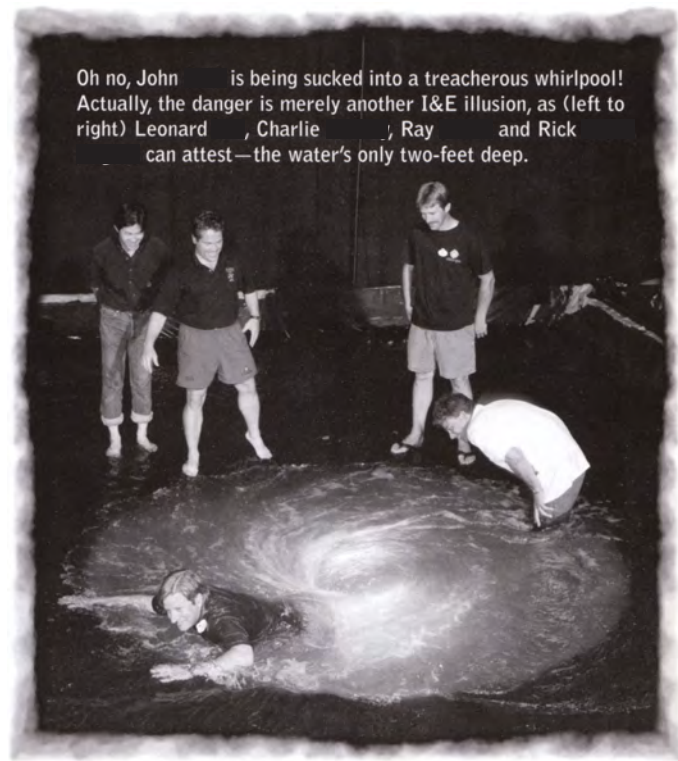
illusion. “He taught me that the effect does not have to be top-of-the-line technology to be great: Imagination is the key.” Principal special effects designer Jim ██████ likes to share his knowledge of the department’s history. “Just as I used to ask Bill ██████ and Yale how they approached an effect, so do the newer folks ask me,” says Jim, who has Imagineered special effects for 16 years. “But one should build on the past not repeat it.” And Jack, who moved from Research & Development to I & E five years ago, after being with the Studio since 1981, says he learned a lot from 51-year Disney veteran, optical engineer Gene ██████. “I owe him for the Disney college education he gave me,” he says. “But my one regret is not having worked with Walt Disney.”

... And Future

“Interactive water effects are the trend now,” says Jack, as evidenced by the fountain—the kind guests can run through—slated for the future Tomorrowland at Disneyland. At 50-feet in diameter, it’s the world’s largest of that type. “They’ll get ... damp,” says Jack choosing his words carefully.

For Jim, the *Tree of Life* show “is a true example of pushing the envelope.” While he has worked on all of WDI’s 3-D projects, he says this show “takes the genre to an even higher level—I can’t wait to see how the guests react to it!”

Tom, an Imagineer since 1987, is working on a new projection effect for the Buzz Light-year attraction that will maximize Buzz’ facial



Oh no, John ██████ is being sucked into a treacherous whirlpool! Actually, the danger is merely another I&E illusion, as (left to right) Leonard ██████, Charlie ██████, Ray ██████ and Rick ██████ can attest—the water’s only two-feet deep.

expressions and “make him goofy,” he says. (That’s goofy with a small “g.”)

And beyond our Theme Parks, Illusioneer Geoff ██████ designs the future as he creates Disney magic in the most unusual places. Let’s just say, your neighborhood movie theater may offer some exciting dimensional surprises in the coming years.

Now, about that tremendous, never-done-before special effect currently being designed for the finale of the “big coaster” attraction at Disney’s California Adventure....

It’s don’t ask, don’t tell. Need I not say more?

—VIVIEN S. HUGHES



Chris ██████ (right) and Ken ██████ look for bubble trouble while testing this I&E mock-up.

A Few of Their Favorite Projects

GARY ██████: “It’s hard to single one out because you have different favorites for different reasons. But the fiber optic pattern tiles at Innoventions at EPCOT resulted in one of the best guest reactions of any project I’ve worked on.”

JIM ██████: “It’s the finale sequence to *The American Adventure* at EPCOT—not because of any technical achievement, but because I was able to bring my personal training in opera stage design and large format projection to the project.”

TOM ██████: “I’d have to say the bugs in the *Indiana Jones™ Adventure* at Disneyland. It’s a perfect example of how the two disciplines of Imaging and Special Effects can be combined.”

RAY ██████: “*Alien Encounter* was the most challenging because I inherited that show mid-installation [due to personnel changes] and it was a big jigsaw puzzle. But what a great mix of technology and art: We had water effects, laser, strobes, liquid crystal, liquid nitrogen, fog, smoke ... in that small space, we pulled out all the stops.”

JACK ██████: “If I have to choose one, it’s *Space Mountain* at Disneyland Paris. But my favorite is really all the new ones we haven’t done yet.”

