## OVERSEERS O RESURRECI



an Alien that'll still scare people? The ADI team found the answer.

By ANTHONY C. FERRANTE

lose encounters of the extraterrestrial kind have become an everyday occurrence for Alec Gillis and Tom Woodruff Jr. Owners of the special FX outfit Amalgamated Dynamics Inc. (ADI), Gillis and Woodruff have jumped from one alien FX-driven movie to another at a rather grueling pace for the past two years.

They provided some of the practical, non-CGI elements of the bloodthirsty insects in Starship Troopers, made some topsecret creature contributions to

**ADI's Newborn creation** received last-minute alterations to spare viewers the sight of an Alien Erection.

this summer's X Files movie, created the "true form" of the title character for the forthcoming My Favorite Martian (yet another big-screen comedy based on an old TV show) and in Alien Resurrection they brought back the ferociously streamlined extraterrestrial killers in grand style.

"It's funny how these things go in cycles, because you can look back on your career and go, 'I guess there was a trend between this year and that year,' " Gillis says. "We're just happy because we're creating characters. There was a point where we were doing a lot of body mockups, like in Death Becomes Her and Demolition Man, and we sort of felt we were getting pigeonholed as human repli-



ca makers. But you know, it's good to be in whatever niche you fall into.'

Being abducted by so many studios for these big-screen encounters, one might think "alien"ation would set in, but the diligent team has found the challenge of working on different extraterrestrial species continually invigorating. ADI is particularly proud of reprising their involvement with the Alien franchise on Alien Resurrection, having supervised Stan Winston's shop on James Cameron's classic Aliens and going solo under their own company banner on the troubled Alien3. "We were told by the producers at Fox that they came to us and only us to do number four," Woodruff recalls. "Luckily, when they hired director Jean-Pierre Jeunet, he didn't want to replace us either. I believe there was a lot of confidence, based on what we had done before, that we would deliver again."

Their FX plate was full for Alien Resurrection, which required them to design a variation of the Alien warriors, bring back a slightly new and improved Alien Queen and offer up the first appearance of a mysterious critter dubbed the Newborn. "What we were trying to do was give a little more character to these Aliens, and also do something that was more threatening," explains Gillis. "We were given a little more leeway

The "c" in c-section stands for creature in Alien Resurrection's opening operation scene.

to do some redesigning than perhaps we had been able to do on the last film."

The plot point that opened up the door to this redesigning was the cloning of Ripley (Sigourney Weaver). In the movie, the Company's crack team of doctors need a stilldeveloping Alien fetus from Ripley's womb, and in achieving that, they wind up with a new Ripley on their hands as well. Naturally, the genes of the two have a few things in common... "The cloning process would natu-

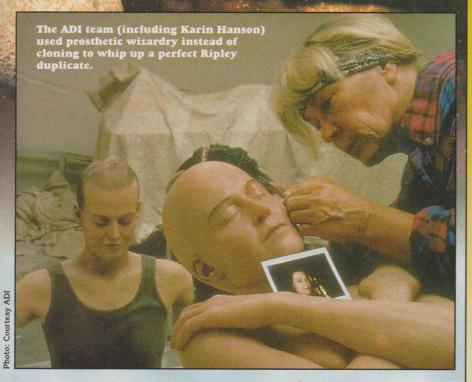
rally be contaminated, so the Aliens would have slightly messed-up DNA and be somewhat different," Gillis says. "We thought this was the perfect opportunity for us to do something like give them longer arms and other subtle things. Our belief was that the design from the first was very successful, and you don't want to fix something that ain't broke. So all our effort went into improving it and making it look more organic, having more of a bio-mechanical exoskeleton feel, instead of going for the easier route of combing car parts into the clay before we cast it."



Utilizing new materials was very important for ADI in "bringing the Alien design into the '90s." New skin types and advancements in mechanical technology were also key to the process. "It really improves the reality of the whole thing and complements what has been done before,' notes Gillis. Jeunet and cinematographer Darius Khondji's highly streamlined style also influenced the creatures, since the Aliens became an integral part of Khondji's ingenious lighting design.

"We shifted a lot of shapes around on the Aliens and made the lower jaw "We were trying to give a little more character to these Aliens, and also do something more threatening."

—Alec Gillis



a little stronger than it had been," says Gillis. "The shapes are bolder and a bit more aggressive, because those shapes read in a different way on screen due to the thicker version of methylcellulose we used. The way Darius filmed the Aliens was like product photography. He used a lot of fluorescents with filters over them that are just out of frame; they made an incredible reticulated pattern all over the creatures, and the thick slime made them that much more reflective. It gave the Aliens a lot more kick; it looks like they're covered in a half-inch of mucus. It's really gorgeous, and a lot of that is Darius Khondji and his craftsmanship."

Another returning Alien family member is the venerable Queen. Due to time constraints, though, Gillis and Woodruff weren't able to sculpt and mold a new version from scratch; the solution was to hunt down the Queen molds designed for Aliens and use those as the basis for their modification and resculpting. "The Queen is featured prominently in the script, but we didn't have enough time to make a new one," says Woodruff. "They had a certain window to shoot in order to work with Sigourney Weaver and Winona Ryder's schedules and to make the release date, so we had to investigate getting whatever pieces we could of the Queen to save time.'

When the team had been shoot-

ing Alien3 in London, they recalled finding a storage bin containing the remnants of the Queen mold from Aliens, but its condition was almost unusable. That ended up being the very beginning of a long quest for workable material. "The molds had literally been thrown into a huge steel bin," says Woodruff. "They were silicone rubber with a fiberglass jacket, and the silicone and fiberglass were shredded to pieces. I believe what happened was that somebody wanted an Alien Queen for themselves and had pulled a fiberglass copy, and the remaining pieces were shipped to Distortions, a company in Colorado that was manufacturing big polyfoam versions for people to buy. That's where we tracked the molds down, and we paid to have them shipped to us here in Los Angeles, but they were useless. There was little of them left that could even be pieced together.'

The next leg of the journey led ADI to Bob Burns, an avid collector who understands the cinematic value of such creations and preserves them to the best of his ability. Burns turned out to have a replica of the Alien Queen head given to him by Cameron. "We got the head from Bob and gave it a new, detailed paint job, refabricated a body and did new sculptures for the body and neck," says Woodruff. "We also used some molds that we found which were still

## Digital Resurrections

hile this winter's Starship Troopers proved that fully computer-generated creatures could impressively carry a film when done properly, the people behind Alien Resurrection were more hesitant about taking their deadly extraterrestrials into the CGI realm.

"Everyone knows the Aliens so well and they're constantly dripping goo, so it becomes difficult to do it all with computer graphics," says Alien Resurrection digital FX supervisor Mitch Kopelman, who handled the film's 20 CGI Alien shots for Blue Sky VIFX. "On Starship Troopers you have dozens and dozens of these bugs running around, doing things that would be too complicated to do practically. But in our film, where at any given time there are maybe only two Aliens on screen, you start focusing in on their performances very carefully. So we looked at each shot and figured out what could be achieved practically, and decided from there what the digital shots would be."

The primary sequences involving this work were the underwater pursuit of the leads by a pair of Aliens, a smattering of full-body shots and a scene where an Alien climbs up an elevator shaft ladder. "We worked really closely with Amalgamated Dy-

intact. Had it not been for Bob Burns, though, there would not have been a Queen in the movie, because there wouldn't have been enough time to get it done."

One design that didn't cause nearly as many headaches was the Newborn, which Gillis describes as "a showstopper that appears in the third act" of Alien Resurrection much like the Queen did in Aliens. As Gillis explains, since this creature is born through an egg sac from the Queen-which has some of Ripley's DNA in her-some human elements were incorporated into the designs. "There was some reference that the Newborn had to look like Ripley, but we were never big believers in incorporating such a beautiful woman's face as Sigourney's into a monster's face," says Gillis. "The only time it has been successfully done has been in H.R. Giger's paintings, where it has a creepy kind of beautiful quality. The problem with that is trying to ground it. We didn't want to do something that looked like it was straight out of Species. So we took a different tack in humanizing the

namics [ADI] in understanding how the Aliens move," says Kopelman. "For reference, though, instead of filming Tom [Woodruff Jr.] in the suit, we filmed him out of it as he did various Alien walks and movements. That allowed us to get our Aliens closer to the way theirs behaved."

For the underwater attack, Blue Sky VIFX required especially strong references to pull the complicated sequence off. This was achieved by hiring a diver and a cameraman to go underwater and put various objects

and textures (such as chrome shapes) in front of the camera so they could get an idea of how light might play off the real Aliens when placed in this environment. What we discovered was that because the Aliens don't have long flowing hair, it's hard to tell they're underwater when you film them there," says Kopelman. "So we added certain elements like air bubbles that interact with them, and cooked up an effect that helped give the Aliens a caustic reflection under the water."

Keeping an Alien trilogy greatest-hits videotape on hand also helped the anima-

tion team; whenever they had a problem, they could take a close look at what the other three films did with movement and texture. This came in handy when it came to animating the Aliens from head to toe, which revealed some surprising complexities about the Alien design not previously revealed. "What you get to see for the first time is that the Aliens have triple-jointed legs," says Kopelman, who adapted these designs from ADI. "When you have a man in the Alien suit, you're not able to see what it looks like fully, but here you get to see it very clearly."

The main trick for Blue Sky VIFX, however, was preventing audiences used to seeing live-action Aliens from easily identifying the company's work as computer-generated. "A lot of making something look good has to do with attention toward lighting a model," Kopelman explains. "You can have this amazing character which has every bit of detail that real characters have, but someone might not pay enough attention to lighting it and the character gets flattened out. What we do is pay

attention to the black level in the frame and kind of concentrate the ranges of everything, so the same qualities that are filmed live with light are then done in the computer. I believe that's what sets our company apart, because we have the most photorealistic imagery in the industry."

Ultimately, Kopelman and company reveled in adding their own imprint to the Alien mythology, since many of them were kids when the original was released and, like Star Wars, it left an indelible impression on them. "The first Alien gave me nightmares

for weeks," Kopelman recalls. "I loved it, though, and watched the movie over and over again, so it's great to be a part of the Alien franchise and the history of these films. We certainly wanted to keep a level of quality here. They did such a fabulous job in all the [previous] movies making the Aliens seem so alive and real. So everybody here in our studio took it upon themselves to continue that, and make sure every single facet holds up to what's come before."

-Anthony C. Ferrante



creature. We moved away from the standard bio-mechanical look and thought in terms of a very strong sort of classical death imagery, a skull-like face, and tried to lay in textures that would make it look part human and part Alien.'

Sculpted by Jordu Schell, the Newborn was a totally animatronic character that stood 8 feet tall and required 14 puppeteers to operate it. It also had a motion control rig hooked up to it to record movements and aid in making the creature move

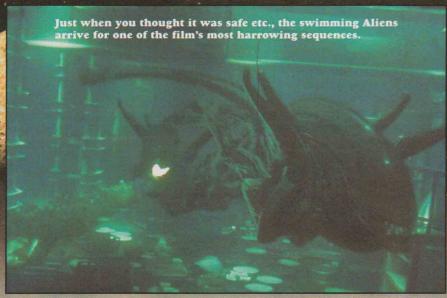
as smoothly as possible.

The Newborn provides the film with some of its eeriest moments, particularly in the sexual attraction the creature develops towards Ripley. This concept was fully realized in designs that soon sparked the most controversial element of the entire picture. "There was this issue of the Newborn's genitalia, and Jean-Pierre used to joke that since he was French, he had to have something sexy in the movie," says Gillis. "Sigourney is a very daring actress, and she and Jean-Pierre really wanted to disturb the Fox executives. Sigourney in particularly was in favor of going further with the sexual attraction between the Newborn and Ripley, to the point where the creature would have articulated genitalia. So we built them; they were a combination of male and female organs. We wanted to be a little vague about what the sex of the creature is. Ultimately, you don't see the genitals as much-they shot around them. Because of the Newborn's height there was a lot of shooting over its shoulder, and in some cases they had to digitally remove the genitals. I'm not sure that has ever been done before-digital genital removal."

Much like the Newborn sharing human characteristics, Ripley accrues some of the Alien traits as well. She has the creatures' acidic blood

The warrior Aliens aren't such perfect killing machines that they can't continue to be refined. (Maquette by **Amalgamated Dynamics**)





"We were never big believers in incorporating such a beautiful woman's face as Sigourney's into a monster's face."

-Alec Gillis

running through her veins—though it's a watered-down version—and while her skin doesn't have "pipes running down her arm," according to Gillis, she does possess Alien affectations on a cellular level. "We did some makeup appliances that showed where some of those dorsal tubes had been removed and some vestigial Alien appendages had been taken off her back, but they were all subtle physical differences. This Ripley represents the successful attempt at cloning. There were seven failed prior attempts."

Those magnificent botched seven were also created by ADI, with six of them used as props during a scene in which Ripley visits the clone storage lab. "There are these giant stasis tubes, and she sees that each one contains a different horrific version of herself at various stages of development," says Gillis. "Also, there is one that is still alive and has been kept for scientific experimentation."

While computer-generated imagery is now the norm in FX-driven films (most notably *Starship Troopers*, for which 80 percent of the bugs were CGI-created), ADI was never concerned that the studio might go that route on *Alien Resurrection*. "We actually have no fear of CGI, because we see it as having different benefits than animatronics have," Gillis says.

"Our feeling is that the Alien series will always be heavily reliant on animatronics because of the nature of the slime, the texture and visceral quality and the contact the Aliens have with the actors. Even if it could be done effectively in the computer, it would still be cost-prohibitive. Also, when you get someone like Darius Khondji lighting the Alien suit, I don't believe you'd be able to duplicate that look in the computer, except maybe in the wider shots for action, climbing and swimming. Obviously, you don't want to show a man in the suit or anything from the waist down unless it's in a very controlled way."

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