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Imageworks Creates Uncanny Effects for *The Forgotten*

By Catherine Feeny

VFX supervisor Carey Villegas, a veteran of such films as "Cast Away" and "What Lies Beneath," talks about working on the supernatural thriller, "The Forgotten," starring Julianne Moore.

When did you start working on The Forgotten?

We started in October of 2003. The project lasted about 10 months. It was initially supposed to have a much earlier release, but we re-shot the ending. Our post-production schedule was longer than usual, considering the number of visual effects shots in the film.

How many VFX shots were there in the film?

Just under a hundred.

Why did they reshoot the ending?

After having a preview screening it was decided that the ending that we shot initially didn't wrap the story up as well as it could. It needed a little more closure and a little more excitement.

When did you become involved?

We were involved early in the pre-production phase. Imageworks got a call from Revolution Studios, Charles Newirth, who has a strong relationship with Ken Ralston. The filmmakers had some interesting conceptual ideas that they wanted to discuss. Ken was already working on "Polar Express" full-time and would not be able to take on another project completely so he asked me to come along.

Ken and I flew to New York together and met with director Joe Ruben, and Bruce Cohen and Dan Jinks—the producers—to talk about some of the conceptual ideas they were interested in pursuing. Ken and I worked together over the next few weeks to develop visual concepts that we thought would further enhance the story.



What were the concepts that you discussed at the first meeting?

The one thing that we kept coming back to was that this movie wanted to have a very realistic feel. The shooting approach was almost going to be documentary style. A lot of handheld camera movements, a washed out palette -- it was supposed to be an autumnal setting.

We also wanted to create shots that the audience was not expecting. We did not want any of the effects to call attention to themselves. We wanted them to maintain the same feel as the rest of the photography. For instance, we did not want to go from close-ups to a big master shot for an explosion. We wanted the explosion to be held in the same tight framing as the shots leading up to it, so we were never giving too much away.



How did you do the car crash that happens toward the beginning of the film?

That was the first little surprise in the film. We chose to shoot all of the shots leading up to it greenscreen. We did not want to shoot real photography and then all of the sudden go to an obvious visual effects shot.



I felt there were two ways to approach that shot, having worked on "Bad Boys II" just prior to "The Forgotten." The Michael Bay approach would have been to have a Suburban ram into a real camera, and that would have been the background plate—done deal.



On this film, we could not throw a camera away to do it. It was pretty tricky. We actually photographed the background plate in reverse, starting at the "impact" position. From there, the Suburban drove in reverse down the street as the camera car drove in the opposite direction.

There were a lot of little things we had to do to make that work. When played in reverse, as the two vehicles are about to collide, they actually start to slow down instead of accelerating into a violent impact. In order to reduce that effect, we had the vehicles pull away at a really slow speed. I do not think they went faster than 10 miles an hour throughout that shot. We added motion blur in post, and sped it up 5 or 600% to give us the speed that we wanted.

How did you achieve the effect of the people getting sucked into the sky?

The first time you see it is when the NSA Agent is in the cabin and the cabin explodes. The characters in that sequence were all shot greenscreen. We shot the Ash (Dominic West) and Telly (Julianne Moore) characters together, but we ended up doing a splitscreen where we could control the timing of the two characters separately.

The NSA agent that gets sucked up was shot separately on a greenscreen. We used a ratchet driven by a high-powered air compressor to pull him up quickly. We photographed him at a normal speed even though we knew that he was only going to be in the shot for a few frames. This would give us the control in post to decide how much or how little you would see of him.

When the cabin exploded, we did not want fire and flame, we wanted it to be otherworldly, so that it burst into pieces for no apparent reason. We built a 1/4-scale miniature that we rigged with cables and hung upside down, about 30 feet in the air. We pulled the cables and gravity did the rest.

In the shot there is a quick tilt up on the cabin as it explodes. We knew if we tried to operate the tilt in-camera, we would probably miss some of the explosion that was cool. So we took a Vistavision camera and set it on its side and photographed it that way. Vistavision has a bigger frame, so we could crop it. That allowed us to do the tilt in post and control the timing of it.

The coverage for this shot was fairly tight. Typically when you do an explosion for a movie, you want to get the most bang-for-your-buck—you want to see as much of it as possible. We wanted to keep the framing as close to the shots preceding it as possible, so we did not give away the effect. But we could not frame it so tight that you couldn't see anything, so it was kind of a balancing act.

The one tricky thing with the explosion was that because it was shot upside down, once the cabin explodes, the debris that appears to go up into the sky actually just hits the floor. In reality it never comes back down. So all of the debris that comes down was CG debris that we created. We also shot dust elements and a bunch of greenscreen miniature trees. It is so dark in the shot that you do not see a lot of this, but it gives the shot a little bit more depth.

Can you talk about the shot where Anne Pope (Alfre Woodard) gets sucked into the sky?

For that shot we photographed Alfre Woodard on location in South Hampton in front of the ocean. He mimed getting pulled back, throwing her body and arms into the air. We then shot a stuntwoman at the same location being pulled back with a ratchet.

We knew the speed at which Ann Pope would have to get pulled away would probably be impossible to achieve practically, but we wanted to shoot a stuntwoman to get good reference on how the body would react to this violent motion. At some point, because we could only pull the stuntwoman a good 10-15 feet back, we knew we had to transition to a CG character.

We executed the shot with these elements and it worked, but it did not have the violence that we wanted. We ended up eliminating the stuntwoman altogether and going directly from Alfre Woodard to a CG character.

The Orphanage helped us create CG elements for this shot. We wanted to be able to control how fast the camera tilted up, so we tiled background plates that would allow us to do some post moves later. It was essentially the same technique that we had used on the cabin.

Visually, there were not a whole lot of things in the frame to take advantage of. One element that helped the shot was some bushes that were in the background. We ended up shooting a bunch of miniature trees and bushes being blown with high-powered fans. All the little bushes that are lined up behind her get blown back, which adds that little bit of integration that helps sell the shot. It was pretty amazing the difference that those elements made.

We worked with Matt Gratzner of New Deal studios on all of our miniature stuff. We built three miniatures for the movie. The cabin was one, the explosion at the end was another and we also did a quarter-scale model for a scene where Telly and her husband are lying in bed and there is an alien point of view of the bedroom. The skylight and the chimney and the entire exterior that you see are a miniature.

We chose to do that because it was supposed to be raining in the shot and we wanted to have real interaction with the rain. It is such a subtle thing, but we were building miniatures anyway, and it was more cost effective to do it that way than all CG.

Can you talk about the final sequence?

That was all done in the reshoots. We had 3-4 weeks to finish all of the visual effects, including building the final miniature and creating a CG character for the end of the film, where the character called the 'friendly man' (Linus Roache) gets pulled away.

For the shot where the alien screams, we shot the real actor at 144 frames per second -- we really wanted to draw that out. We did a concept design of what the alien might look like. We did not want to pull something out at the end of the movie that was completely out of line with the rest of the film. There was a lot of talk about whether or not we should show the alien at all, but ultimately the studio decided we should.

We went down two roads simultaneously, because we knew we only had three weeks to accomplish the shot. We really wanted the alien to have a fully 3D face. We went down a full 3D path as well as working on a 2D morphing/warping approach. We came through with the 3D approach, but since we were able to get to the 2D approach more quickly, everyone got used to seeing it. So, they chose the 2D approach. It was a race, and we had more time to finesse the 2D approach.

We also made a miniature for the scene where the 'friendly man' gets pulled out of the sky. The real hangar where we shot was 600-feet long.



It was huge. We knew we had to build a corner of it, so we ended up doing that as a 1/6-scale miniature, and that was photographed at New Deal Studios. Because of the time crunch, we did not want to have to do a full-on greenscreen composite to integrate it. Instead, we actually shot it outside in a parking lot, looking up at the real blue sky. We augmented the footage with CG debris, etc.

When the character gets pulled into the sky, we went directly from the actor to a CG version of him. We did a cyber-scan of Linus Roache that we handed off to the Orphanage to create the CG element. The rest of the integration was done here at Imageworks.

How big was your team?

It varied, because it was a relatively small show. We had 20-30 artists, total. But at any given time it was a very small crew -- we had fewer than 10 people working on it full time.

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for more information about Carey Villegas, visit

