

# Occupational Therapist and Prosthetist Help Firefighter Return to Work

by Sean Toren

Firefighter Luis Nevarez knows a lot about motivation to get back on the job.

Called out for a downed power line in January 2002, Nevarez accidentally touched a hidden 12,000-volt line while breaking the limb off of a smoldering tree.

"Honestly, at first I was afraid he wasn't going to survive," says Tulare, California, Fire Chief Michael Threlkeld (Nevarez' boss). "We knew we needed to keep his spirits up. So when one of the first things he said was that he wanted to come back to the department, we did everything to support him."

Firefighters from his own and neighboring engine houses maintained a constant vigil as Nevarez underwent nine surgeries, including many skin grafts to heal his burns. And when he was ready to go home, his department picked him up in the very engine he'd gone out on the day of his accident.

## Coming Back

Nevarez worked diligently with his occupational therapist to build up his strength, and he also went to the gym on his own, taking ankle straps for the leg weight machines and slipping them over his residual limb to train. Nevarez knew he needed to get in incredible shape to pass the tests to become a firefighter again – tests that demand power, endurance and quick action.

When it was time for him to be fitted with his body-powered prosthesis, his OT accompanied him to his prosthetist to help find the best solution for him. Nevarez also brought along some of the equipment he'd have to work with as a firefighter, and his prosthetist focused on creating a prosthesis that was rugged and precise enough for the work

Nevarez hoped to be doing again.

After he was fitted with his prosthesis, Nevarez returned to light duty at the fire house that summer, but it was still his goal to return to active duty, and he began training for fire situations with other firefighters.

## Work Hardening

"We as a department had to determine testing criteria for him," says Threlkeld. "We figured that if he could do what a probationary firefighter could do and pass the test, then he'd satisfy the requirements."

Firefighters have to do a lot, including hauling, connecting and operating hoses, climbing ladders, driving rescue vehicles, and operating the "jaws of life."

Normally, firefighters use certain techniques to perform such tasks, but Threlkeld and his team decided not to put any limitations on how Nevarez did what he needed to do. "We never

put up a roadblock," Threlkeld says. "All we had to do was provide the pathway. He had to do all the work, and he met every challenge."

Nevarez worked with other firefighters to discover new techniques for doing things. Most firefighters, for example, connect hoses with two hands, but Nevarez learned to do it by holding one side with his forearm. He also learned to operate the 50-pound "jaws of life" tool in a similar way, using one of his legs to do the work his left hand used to do.

On the day of his test, 364 days after his accident, Nevarez "passed with flying colors" —but he didn't do it alone. He credits his prosthetist and occupational therapist, as well as his fellow firefighters, for helping him train and find specific solutions to perform his duties. To help him even more with his job, Nevarez was recently fitted with a myoelectric prosthesis with two interchangeable terminal devices, including an electric gripper that generates a stronger pinch than his body-powered split hook.

Since his return to duty, Nevarez has won numerous awards, including the "Purple Heart" at the California State Firefighters' Association Conference. He's also been speaking with other amputees to motivate and encourage them to keep moving forward.

"Luis took something that was a near tragedy and turned it into a positive experience," says Threlkeld. "He's a different person now, spiritually and emotionally." ■

