
Aspen

Finding his voice

Adaptive equipment helps computer whiz reconnect

Aug. 27 dawned warm and sunny, and Richard Heuer of Star decided it was the perfect day to ride his Suzuki motorcycle to work.

His destination was the Jackson-Evers International Airport in Pearl, where he has spent the past 15 years maintaining aircraft control equipment for the Federal Aviation Administration.

As Richard cruised along Highway 468, the 37-year-old outdoorsman came upon a familiar scene. A car ahead had hit a deer, and Richard began coasting to a stop, thinking he could lend a hand.

But within seconds, it was Richard who desperately needed help. His neck was broken when the frantic deer leapt for freedom and slammed into Richard's head. And if not for a seemingly miraculous series of events, the father of two might have died at the scene.

"We had angels every step of the way," said his wife, Wendy. "There was a nurse driving in the car behind him who goes to our church. She saw it happen and jumped out to help Richard."

When the trauma caused Richard to go into cardiac arrest, a volunteer firefighter happened upon the accident and performed CPR. An ambulance then took Richard to the University of Mississippi Medical Center, where he spent 12 days in ICU.

On Sept. 8, Richard moved to Methodist Rehabilitation Center to begin an intensive rehabilitation program. The accident left Richard paralyzed from the neck down and relying on a ventilator to breathe. Yet he still had a desire to support his family.

"My goal is to get back into the working world," Richard said. "Quite possibly back to my old job."

That's where George Gober comes into the picture. As the assistive technology associate for Methodist's Adaptive Computing Lab, Gober matches disabled computer users with the best equipment and software to meet their needs. And in Richard, he recognized a kindred spirit.

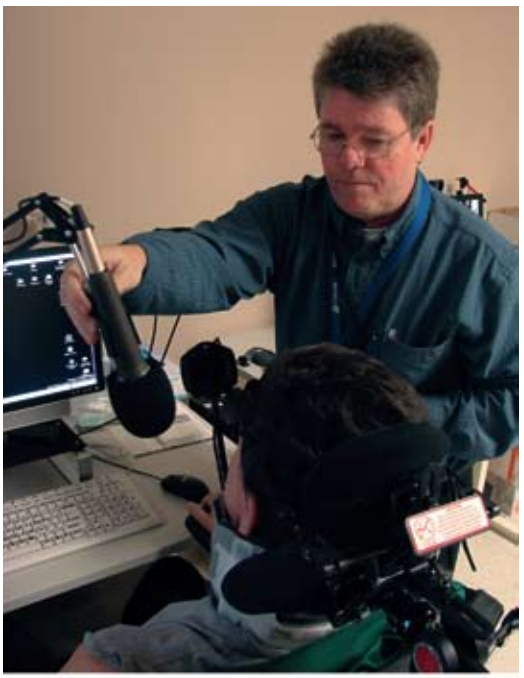
"Richard is a major computer geek, just like me," Gober said. "He's very comfortable in front of a computer, so my job was simply a matter of figuring out how to reconnect him with what he already knows.

"Instead of focusing on what Richard can't do, we focused on what he can do," Gober said. "A computer has input and output. With his injuries, learning to input is the main issue for Richard."

While a voice-recognition system offers Richard the best option for operating the computer again, Gober says the system has its challenges.

"Right now, voice recognition software understands about 90 percent of what most people say," Gober said. "For Richard, it might be a little less than that because his voice has been compromised by the ventilator. It will be a long and tedious process, but he's up to the challenge."

Continued on next page ⟶



In Methodist Rehab's Adaptive Computing Lab, assistive technology associate George Gober works with Richard Heuer to find the right equipment and software to meet his computer needs. At far left, Richard uses a custom-designed microphone system to try out a voice recognition software program.

"We look at how **technology** can work for people."

— George Gober

Gober said a special noise-cancelling microphone was secured to help reduce the background interference from the ventilator. Richard will direct the movement of his computer cursor by using his mouth to operate a QuadJoy Mouse®, which is specially designed for quadriplegics.

At 6 feet, 4 inches, Richard sits tall in his power wheelchair, so some custom-fitting of equipment was in order. Bridgett Pelts, an occupational therapist at Methodist Rehab, used her expertise to suggest the most user-friendly placement for his mouthpiece and microphones. "I collaborated with George, who then worked with the biomedical engineers and technicians on staff here to develop something that would work well for Richard," she said.

The Biomedical Lab created a one-of-a-kind connector that enabled the team to connect a gooseneck extension to a mount/clamp system normally used with cameras. This special mounting option allows Richard to access the "sip and puff" operated mouse.

"A lot of what we do is simply problem solving," Gober said. "We look at how technology can work for people. The human psyche is a remarkable thing. Richard has the desire to learn, which makes it easier for all of us. He already knows how the computer works and what to do. It's just that now he has to learn a new way of doing it."

Richard's injury qualifies him for the eTHANKS Research Project, an online, modular training program that helps Methodist Rehab spinal cord injury patients learn how to stay healthy once they get home. As part of the program, Gober visited the Heuers' home and set Richard up with a desktop computer, adaptive software, an accessible desk and other adaptive equipment

Richard and Wendy have two sons, Aaron, 14, and Justin, 11, who will be helping with Richard's care. With his supportive family and friends surrounding him, and the ability to network with those outside his home via the computer, Richard looks forward to living a long and productive life. "I appreciate all that George has done to help me gain access to the computer again," Richard said. "He has really gone the extra mile for me."

by Susan Marquez

Richard Heuer and his wife, Wendy, are grateful for the community support that has poured in since Richard suffered a paralyzing spinal cord injury. One Friday night, the McLaurin High School Band even stopped by Methodist Rehab to play several spirit-lifting songs for Richard, their beloved booster club president.