



Device designed by University of St. Augustine professors helps amputees learn to run outside

By Travis Gibson
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After losing his right leg following a boating accident in 2003, Bobby Baker didn't run outside for 16 years.

Although he had a prosthetic leg, Baker said he never felt confident enough on the leg to attempt running on pavement. The risk of falling and potential injury kept him away.

That changed Tuesday morning in a parking lot on the University of St. Augustine for Health Sciences campus. On his 50th birthday, Baker ran across the freshly paved blacktop with the help of a new running frame designed to help amputees feel confident enough to run without the fear of falling.

"This is amazing," Baker said after a brief demonstration of the device. "I have tried to run a few times before, but I can't get that arm swing where I can fully get into it. Now I can really feel that burn in my chest."

The idea for the running frame started about three years ago when USAHS faculty member Dr. Scott Love, an above-the-knee amputee, was trying to figure out a way that he could start running safely. When he and Dr. Rick Coleman, a prosthetist and fellow faculty member, were eating at Mojo's Tacos, they sketched the idea for the device on a napkin. A trip to the plumbing section of a home improvement store later, the first prototype was born. It was made of four-inch PVC pipe.

"To have the amputee in there and for them to have the freedom to know they are not going to hit the ground, that's the key. With above the knee amputees especially, the prosthetic knee can buckle like that," Coleman said. "The fear of that knee buckling and the fear of that fall keeps them from taking that leap of faith into that prosthesis."

While there are devices that allow amputees to run on treadmills inside, the doctors said those devices don't fully prepare amputees for the normal elevation changes and turns needed when

running outside, something the running frame can offer. With the second prototype, the one on display Tuesday morning, the runners wear a harness that connects to the frame using a clip, a nylon strap and a pulley system. The strap can be adjusted to give a feeling of weightlessness to the runner or kept loose so there is no support.

“It’s a good first step towards learning how to run again,” Baker said.

The device is also equipped with handle bars so that a physical therapist can guide the device from behind. Once the runners feel confident, they can then unhook and run on their own.

The device, which doesn’t have a name yet, was recently granted a patent and Love said they plan to bring it to the National Amputee Coalition Conference in July in San Antonio and show it off to 6,000 amputees.

Baker said the device is already giving him the confidence to run more and hopefully try a 5k one day soon.

“Being on it just feels so free,” Baker said. “It feels like my options are endless.”