## Helo again

Learning to fly the Apache Longbow helicopter begins in a Boeing-developed simulator

By Alison Sheridan and photos by Bob Ferguson

oeing Mesa employee David Hosea was itching to get back into the cockpit of an Apache, the Boeing-built helicopter he had once flown in the U.S. Army as an instructor pilot.

So he lost nearly 60 pounds (30 kilograms). He had a bum knee repaired. And now he's completing the very Apache Longbow simulator training he has been supporting as a Boeing employee.

"Those first two hours were pretty sad," Hosea, a field engineer in Mesa, Ariz., said of his first time in the D-model Apache simulator. "I was very rusty. But the second time I got in, what had taken me 45 minutes the first time only took me 15. This is a huge advantage because you aren't burning up valuable blade time in an actual aircraft."

Hosea had helped develop the simulator after he joined Boeing 12 years ago. He previously spent nine years in the U.S. Army flying the AH-64 A-model Apache, but he received a medical discharge due to a knee injury. He decided the next best thing to flying the Apache was working with the helicopter, so he went to work for Boeing in Mesa and eventually transferred to St. Louis. There, as a member of Training Systems & Services, he worked on the original Apache Longbow Crew Trainer program.

He spent time in Iraq with Boeing, as an operational maintenance manager for the Longbow Crew Trainer, and eventually returned to Mesa, where his job in the Field Engineering organization is to coordinate the resolution of field issues involving the Apache.

But he wanted to fly the Apache again, so he re-enlisted in the Arizona Army National Guard and, to make sure he met the active-duty pilot qualifications, went through his own personal training program. Getting his knee repaired proved pretty easy. But he also took Boeing's online health assessment and researched tips on diet and exercise on the Boeing Wellness website. Hosea changed his diet, started bicycling until he was riding up to 35 miles (55 kilometers) a day—and lost 58 pounds (26 kilograms).

He also began another kind of training program—in the Longbow Crew Trainer he had helped bring into existence. It simulates the helicopter's fully integrated avionics and weapons, including a modem that transmits real-time, secure, digitized battlefield information to air and ground forces.

The Longbow simulator, Hosea noted, "allows you to go through the maneuvers and 'freeze' the trainer at any point in time. The instructors can get up from their station and walk over to you and provide instant feedback."

Boeing has delivered 29 of the Longbow trainers worldwide, including to locations in Iraq and Afghanistan. The trainers, which can be linked together in a network, allow pilots ample opportunity to meet training requirements and to rehearse missions.

"I love the Apache and I've seen the LCT save lives—for instance, you can't practice landing in 'brownout' or dust-obscured visibility conditions in an aircraft to the same level as you can in the trainer," Hosea said. "When I think about how I get to work with the Apache and get to fly it, I realize, dang—I'm a lucky guy!" ■

alison.sheridan@boeing.com

