

X-rays on the Move



Dr. Clark Turner photo by Kevin Kiernan

Dr. Clark Turner and his dentist, Dr. Eric Vogel, sparked the initial idea for their portable X-ray machine when they spoke together at a Cub Scout pinewood derby.

By Carolyn Campbell

“I HAD DESIGNED A MINIATURE X-RAY TUBE,” Turner recalls. “He (Vogel) was planning to travel to Russia for humanitarian work and said he could really use a portable X-ray machine.” Back then, the only available portable X-ray machine weighed 20 pounds and needed to be plugged into a wall outlet. The two men brainstormed the concept of a portable machine and originated their perception of a handheld, battery-powered unit.

During the next year, they developed their ideas further and exhibited a prototype at the 2004 American Dental Association meeting. “We showed it to a large number of dentists to make sure my dentist wasn’t the only guy who was interested,” Turner says. “They all loved the idea of being able to perform handheld X-ray work.”

Following the trade show, Turner resigned his position at Moxtek, where he designed X-ray analyzers for chemical analysis. “Dentistry was not a strategic area for them,” he explains. He derived the name for his own company, Aribex, from the Spanish word *arriba* — meaning up — and the term X-ray. The portable X-ray machine was christened Nomad because of its mobility. “It’s a traveling wanderer without a permanent home,” Turner says. “You can use it any place, anytime.”

Turner hired contract engineers to develop the machines on a royalty basis. Final assembly and testing was completed at Aribex’s Orem facility. After receiving Food and Drug Administration clearance in July 2005, he began marketing the Nomad. “We originally designed it for field use, so that someone on a medical mission could take along portable equipment,” Turner says. “As dentists started using it in the field, they said it would be really slick in the office.”

Turner discovered that marketing the machine for dental office use was a bigger business opportunity than selling it to field users. The Nomad has three main advantages over traditional X-ray machines. “Every dentist has three to five wall-mounted machines. With our device, you only need one or two,” Turner explains. He adds that by using the Nomad, the dentist is able to stay in the room with the patient during the procedure, rather than leaving to fire the machine. During traditional X-rays, if the patient moves after the dentist leaves, the X-ray needs to be retaken. “By staying there, the dentist can make sure the patient stays in the right position,” Turner says. Portability, the third advantage, allows X-rays to be taken in nursing homes or other places where it is hard to move patients.

In 2004, Aribex had two employees. Today, there are 35. The company was one of 13 businesses to receive the “Emerging Elite” award from MountainWest Capital Network’s Top 100 list of fastest growing Utah companies. Turner and Vogel plan to design a Nomad version for veterinary use. Their long-term strategy also includes creating a machine for sports medicine. “We also plan to take the Nomad internationally to mainstream dentists in other countries,” Turner says. ☺