

## ELWOOD “WOODY” G. NORRIS

Elwood “Woody” G. Norris won the 2005 \$500,000 Lemelson-MIT Prize as Inventor of the Year. He holds approximately 80 U.S. patents with more than 100 corresponding patents worldwide, Mr. Norris is widely recognized as a prolific inventor and a talented technology integrator. His interest in electronics started at a young age, with a rigorous experimentation method of inventing that he continues to this day.

Woody Norris joined the U.S. Air Force in 1956 and was trained as a Nuclear Weapons Specialist, specializing in electronic fusing systems. He studied electronics at the University of New Mexico. In 1959 he began employment at the University of Washington where he continued his practical education, elevating his position from technician to Director of the Engineering Experiment Station within two years.

Upon conceiving his first commercial invention in 1970, Mr. Norris left the university and embarked on his entrepreneurial career. He invented a phonograph tone arm that initially was developed for a contest, and was later sold for a modest \$20,000.

Many of Woody Norris's inventions are not just single product ideas; they shatter technology barriers creating multiple applications and a lasting impact. Among these technical breakthroughs, are:

Developed and patented a cordless microphone, an artificial hip, and HyperSonic® Sound (HSS)—a revolutionary directional loudspeaker that focuses sound to a specific location. It also shapes the sound wave to fill only a predetermined area much as a spotlight narrows its beam. HSS® actually creates sound in the air. He has 11 additional issued patents relating to HSS® and others pending. HSS® has been recognized by various magazines as well as *Popular Science* as the “Best of What’s New” in the General Technology Category, winning the Grand Award in 2002. That same year Mr. Norris also won best of what’s new in the Aviation category for his one man helicopter invention.

Developed and patented Flashback®, the first-hand held digital recording technology (U.S. Patent #5,491,774) that allows digital recording of information on non-volatile flash memory rather than tape. He was a pioneer in the use of Flash memory. Flashback® has been recognized by numerous magazines as well as by *Popular Science* in its “Best of What’s New” in the Audio & Video Category. This technology has been licensed to many of the world’s leading manufacturing giants and is in almost universal usage today.

Mr. Norris also invented an ear-mounted speaker/microphone combination (U.S. Patent #5,280,524) that permits hands-free speaking and listening without audio feedback. This invention was sold to JABRA Corporation. He has 4 additional issued patents relating to this invention that were also sold to JABRA and which product is a market leader sold around the world.

Woody invented a Gas Tube RF Antenna (U.S. Patent #5,594,456) that can be called into existence and made to disappear at will. He has 2 additional issued patents relating to the Gas Tube Antenna. It is currently being used by the U.S. military.

Developed and patented a Transcutaneous Doppler System (U.S. Patent #3,631,849) and sold the technology to a medical company. This product was the precursor to today's Sonogram devices used by doctors and hospitals in imaging the human body.

Developed and patented a Helicopter Propulsion and Control System (U.S. Patent #6,460,802) - a new generation, recreational flying vehicle. AirScooter® is a new kind of safe, single person helicopter designed for recreation. Currently a production model of this craft is on display at California Disneyland in the Tomorrowland exhibit. Remarkably, it does not require a pilot's license and can be mastered in one afternoon of training.

In 2002, AirScooter® was recognized by Popular Science as one of the "Best of What's New" in the Aviation & Space Category.

Invented and patented 20 other diverse product ideas and technological breakthroughs.

The inventions of Woody Norris have been the keystone for several new companies. In 1980, he founded American Technology Corporation (ATC) where he recently retired as Chairman. ATC (now LRAD) is publicly traded and is marketing products to customers around the world.

Currently he the Chairman and Chief Executive Officer of Parametric Sound™ Corporation, a spin-off from LRAD Corporation where he is marketing and selling a new version of HyperSonic Sound that creates a true 3D sound in the air using only two speakers.