

the Bionic Tradesman



Imagine for a moment that your hearing is better than anyone else's. Suppose you could hear air leaks from a fifty-foot distance before they became large enough to be heard by others and their damage escalates. Could costly downtime be averted if you could hear bearings, deep inside a machine, in the infancy of their failure rather than waiting for the outward signs of deterioration and destruction? Your extrasensory abilities also allow you to remember how those bearings sounded each and every time you have heard them and in your mind you can visualize, chart and compare all the subtle differences throughout the bearings life. You can hear valves leak internally and grease and oil as it finds its way into a bearing's rollers and races. As you approach a closed electrical panel you are aware a component inside is arcing. You can point out potential wind and water leaks in a passenger compartment without water or even driving the vehicle. You have become the Bionic Tradesman. At Wixom this has become more fact than fiction, not with surgical implants but through technology and education to enhance and extend your sense of hearing.

These are just a few of the many applications for ultrasound. Ultrasound equipment allows the operator to hear and see graphically, sound frequencies far beyond human detection capabilities. The equipment also records field data and interfaces with a computer for storing, tracking and reporting abnormalities. On January 14th, 15th and 16th *SDT of North America* presented a Level I Certification class for Airborne and Building Borne Ultrasound to ten of Wixom's tradesmen. Each maintenance group sent tradesmen to this three-day class. The instructors, Liane Harris and Gary Latham, introduced the participants to the principals of sound, ultrasound equipment capabilities and applications through lecture and hands on use. On the third day each student was required to achieve a score of 80% on both a written and hands-on application exam before receiving their Level I Certification meeting the requirements of ASNT (American Society For Non-Destructive Testing). Congratulations to the following tradesmen for receiving their Level I Ultrasound Certification: Gary Bodurka, Gary Dirske, Ed Galloway, Max Groteka, Hank Kitowski, Dave Kroll, Tom Marr, Jeff Thomson, Don Thurmond and Jerry Twigg.



Hands on Ultrasound training:
(Left to Right) Jerry Twigg, Tom Marr
& Max Groteka

For more information and Ultrasound and its applications go to the following websites:

Free online courses: <http://www.reliabilityweb.com/fa/ultrasonic.htm>

SDT North America home page: <http://www.sdtnorthamerica.com/index.htm>