For your protection

2 Oklahoma employees earn key certification to help speed processes

By Jennifer Hogan

Ray McKee and Darren Stout recently joined an elite group of professionals with highly distinct knowledge and skills in the world of classified information protection.

The two Oklahoma City–based Boeing employees are among only 82 individuals in North America and the only employees at Boeing who have TEMPEST Level II certification to test, design and approve work performed on classified systems. These systems can encompass anything from a computer program to airplane communications.

Testing for TEMPEST—which refers to the unintentional transmission of signals containing information—takes place anytime changes are made to a classified system (for more on TEMPEST, see box at right). The testing, which Boeing previously contracted with outside companies, ensures that the system changes do not produce any unintentional transmission of information.

With their certification, McKee and Stout now can investigate and mitigate the risk of information leakage. This certification also provides confidence to customers that Boeing has experts within the company prepared to address requirements of TEMPEST. What's more, it helps reduce cycle time in defining TEMPEST requirements, design and verification across several programs and locations within Boeing.

> "This proves I could achieve what I once thought was impossible."
>
> —Darren Stout of IDS, after earning TEMPEST Level II certification

Preparation as well as the security-clearance requirements for TEMPEST certification are rigorous and demanding. McKee and Stout took several courses at the National TEMPEST School at Lackland Air Force Base in San Antonio before attempting the exams. During the courses, the instructors often emphasized the difficulty in passing. For instance, last year only three out of 23 persons attempting the Level I certification passed the exam.

The actual six-course training, consisting of two levels, can take two to four years to complete. Level I certification has two parts: a six-hour, 110-question closed-book written examination and a six-hour laboratory test. The Level II certification has another six-hour, 110-question closed-book written examination. Each element requires a 90 percent or better score to pass.

"As grueling as they were," Stout said, "I was not nervous." Both McKee and Stout said their Electromagnetic Interface experience at Boeing helped.

"During the lab exam, I struggled with finding and interpreting one of the test signals," McKee said. "I had a breakthrough with only about 30 minutes of the six-hour test to go."

"This proves I could achieve what I once thought was impossible," Stout said. McKee agreed and added: "I see a whole new world of opportunities." ■

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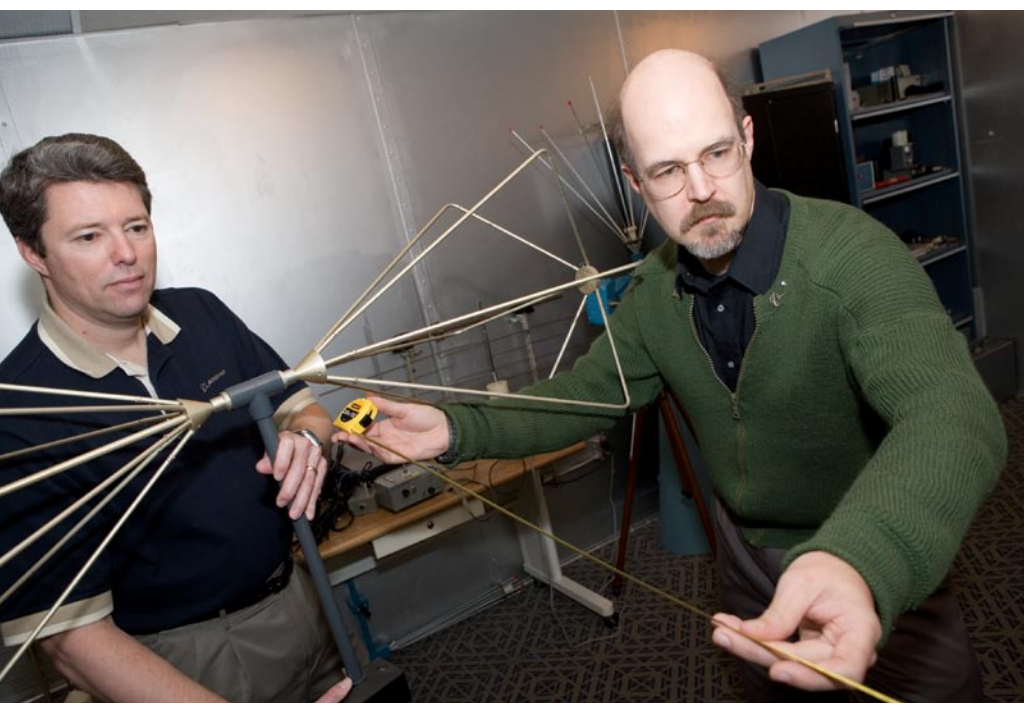
TEMPEST in an acronym?

What does TEMPEST stand for? When used in talking about the certification needed to test, design and approve work done on classified systems, TEMPEST actually is a code word—and not an acronym.

In this context, TEMPEST refers to investigations and studies of "compromising emanations"—unintentionally emitted signals from electronic equipment that, if intercepted and analyzed, would disclose sensitive information.

TEMPEST is administered by the U.S. government.



PETER GEORGE PHOTO

Ray McKee (left) and Darren Stout measure an identified test signal at the National TEMPEST School in San Antonio. By earning their TEMPEST certification, McKee and Stout give Boeing expertise in adhering to TEMPEST requirements—and help cut cycle time in handling TEMPEST-related requirements.