

LAW ENFORCEMENT

Arguments rage over voice-stress lie detector

By Dennis Wagner
THE ARIZONA REPUBLIC

At least 20 Arizona law enforcement agencies are relying on a voice-measuring lie detector for criminal investigations even though experts say the device does not stand up to scientific scrutiny and may prompt innocent suspects to make false confessions.

The Computer Voice Stress Analyzer, or CVSA, purportedly measures FM radio waves produced by muscles around the larynx. Deceptive answers cause stressful "micro-tremors" in the voice that are charted by the device's software program, the manufacturer says.

Yet, independent experts have consistently found the in-

See CVSA Page A14

CVSA

Continued from A1

strument to be dubious, at best, when it comes to separating truth from lies. And, while increasingly more police agencies are using it to interrogate suspects and assess witnesses, they don't use the machine for internal investigations or to screen recruits.

The Department of Defense Polygraph Institute concluded that CVSA produced "dismal results" and "no examiner did better than the chance level."

Two years ago, the National Academy of Sciences reviewed voice-stress studies and concluded there is "little or no scientific basis" to consider the device an alternative to polygraph machines.

And a report done for the International Association of Chiefs of Police found: "Whatever the CVSA may record, it is not stress. ... The poor validity for the current voice stress-technology should provide a caveat to agencies considering adding voice stress to their investigative toolboxes."

Despite those critiques, the company behind CVSA claims its device is more accurate than a polygraph machine, and has solved hundreds of crimes across the country.

Charles Humble, chairman and chief executive officer of the business known as National Institute for Truth Verification, said voice-stress technology helps detectives target the bad guys during investigations, and clears innocent suspects who might otherwise remain under suspicion. It also is used to check witnesses' veracity.

"We believe the system is 100 percent accurate," Humble added.

Widespread popularity

According to the institute, 1,400 American law enforcement agencies have purchased Computer Voice Stress Analyzers in recent years, at \$10,760 per machine.

The device is purportedly used in Iraq by counterintelligence forces and at the military's terrorism detention cen-

ter in Guantanamo Bay, Cuba.

In Arizona, it is employed by the state Department of Public Safety, Maricopa County Sheriff's Office and police in Mesa, Glendale, Gilbert and Avondale, to name a few. It also has been used in training programs at Fort Huachuca, the Army's intelligence training center in southern Arizona.

The institute's literature identifies research works that seem to endorse the instrument. One study found "100 percent agreement between CVSA and the polygraph." Another concluded it is "accurate when utilized as a truth verification device, and produced a confession rate of 94.8 percent."

Humble acknowledged, however, that no independent testing has demonstrated the machine's integrity. He claimed CVSA cannot be evaluated under laboratory conditions because stressful deviations occur only when an interrogation subject is afraid of prison or the death penalty.

"We never really had the funding to do that, to take it to a university and pay for all the researchers," he said.

Competes with polygraph

Peoria police Detective Tom Stewart, who has administered dozens of CVSA exams, said suspects often crack when told they are facing a foolproof deception-detector.

"I don't know if this thing works," Stewart admitted. "But it works for me in getting people to see the light. ... They deny doing it right up to the point of me asking the first question. Then they break down and say, 'You don't need to do the test. I'm guilty.'"

Before CVSA, Stewart said, police departments had to pay \$150 for private polygraph exams or wait days for state examiners to be available. With voice-stress testing, he said, getting confessions is faster, cheaper and easier.

CVSA technology is based on research first conducted by the Army four decades ago. A pair of retired officers took their findings to the public in 1970