

New Lie Detector 'Listens' to Voices

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A new type of "lie detector" device that can detect psychological stress by analyzing a person's voice is gaining acceptance in some law enforcement circles and its results have been used in a few court proceedings.

The device, called a "Psychological Stress Evaluator,"

has become a controversial subject among operators of the traditional polygraph lie-detector because it is sometimes used to test "truth" through voice recordings without the knowledge of the speakers.

This asserted capacity to test the truth of statements

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by people who were speaking for other purposes could touch off "an overwhelming furor before this is all done," concedes Allan D. Bell Jr., president of Dektor Counterintelligence and Security Inc., which developed the new device.

Bell and his associates in the Industrial Security Company in Springfield, Va., outside Washington, say that the device has not been used to their knowledge to test the truth of statements made at news conferences or other official events.

But the potential use of the machine to test the veracity of televised remarks is implicit in the company's promotional brochure, which says that the device was tested by monitoring 25 segments of the television program, "To Tell The Truth."

It picked the persons who were telling the truth 94.7 per cent of the time, the brochure says.

COURT

The Psychological Stress Evaluator was put to a more serious purpose Friday in criminal court in Ellicott City, Md., when Delores Jackson, a Baltimore woman accused of writing bad checks, was found not guilty on the basis of a "PSE" test and handwriting analysis.

Before she took the test, the state attorney's office and the public defender, Bernard Goldberg, agreed that the results could be used in evidence. Without an agreement, "lie detector" tests by traditional polygraphs, truth serum or any other technique are inadmissible as evidence.

The test indicated that Mrs. Jackson was telling the truth when she said her

checkbook and identification had been stolen.

OTHERS

It was the fourth time that judges in Ellicott City have been told of the results of stress evaluator tests.

In two of the cases — another bad check prosecution and a murder case — the charges were dropped. In the other, involving a shoplifting ring, a defendant pleaded guilty to a reduced charge after the machine indicated he was involved.

The theory behind the new device is that the human voice normally operates in both audible frequencies and inaudible frequency modulations. The exception is said to be when a person is under stress. Then, according to inventors of the device, the inaudible FM vibrations disappear from the voice. To the ear there is no difference, but the machine traces the fluctuations on a chart.

CRITICISM

Critics of the new device do not dispute that these fluctuations occur under stress and that the device charts them. Rather, they say that the stress could be due to other psychological pressures than lying. Because the polygraph monitors several bodily functions, they say that it offers the opportunity to cross-check various indicators without depending completely on one.

Ronald Decker, the chief of the Department of Defense's polygraph school at Fort Gordon, Ga., said that the device is being tested by the department at Fort Holabird, Md., but that he has no plans to switch from the polygraph.

Intelligence agencies within the government are said to have purchased three or four of the \$3200 machines.

But an intelligence source insisted that they are not being used because "definitive testing is not complete."

The source said that they were purchased as a possible alternative to the polygraph, and not with the thought of checking the truth of foreign officials' statements.