

## JUDGE WEICHS USE OF TAPE EXPERTS

Aides Say Sirica May Hire  
Technical Consultants—  
Their Benefit Doubted

By RICHARD D. LYONS

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WASHINGTON, Oct. 25—Aides to Federal District Judge John J. Sirica said today that he was considering hiring experts to determine the authenticity of the White House tapes.

Some audio specialists said, however, that verification might be impossible.

Judge Sirica's aides said that the use of technical consultants was only one of many possibilities that he had under review in connection with his monitoring of the nine tapes and that he did not believe the White House was deliberately trying to trick him.

A check of audio experts, however, found that they believed it would be almost impossible to detect an expert doctoring job.

"There would be only one chance in a million to detect the work of a very skillful editor," said Mike Randall, a consultant to Syntonic Research, Inc., of New York, which is marketing a record named "The Altered Nixon Speech."

His remarks were echoed by Paul Ginsberg, president of Professional Audio Laboratories of New York, who helped produce for the National Lampoon a similar record called "The Watergate Tapes (Doctored of Course) Starring Richard M. Nixon."

### Expert Editing Seen

"Impossible to detect," was the conclusion of Peter Bochan, a sound editor and production engineer who made yet a third version for radio station WBAI in New York.

The collective conclusion of experts employed by the major producers of magnetic tape and recording instruments, most of whom asked not to be quoted directly, was that for every method of detecting an editing job, there was another method of covering it up. All those questioned assumed that if the tapes had been edited it had been done by an expert who had access to the most sophisticated electronic gadgetry.

The tapes may shed light on President Nixon's role in the events immediately following the break-in of Democratic National headquarters in the Watergate office building here on June 17, 1972.

The tapes, originally subpoenaed by Archibald Cox, the ousted special Watergate prosecutor, are secret recordings of conversations Mr. Nixon had with four former aides. H.R. Haldeman, John D. Ehrlichman, John N. Mitchell and John W. Dean 3d.

Included in the group that Judge Sirica will listen to are recordings made between June 20, 1972, and April 15, 1973, of eight meetings and one telephone conversation.

### First Word on Tapes

Their existence was disclosed July 16 by Alexander P. Butterfield, a former White House aide, in testimony before the Senate Watergate committee. The question of their authenticity ensued and heightened during the squabble over Mr. Nixon's right to keep the tapes private.

Senator John C. Stennis said in response to a question last Saturday that Mr. Nixon had assured him that the tapes were authentic.

"Yes, in substance he did; I didn't bring it up, he did," the Senator said.

In an effort at compromising the issue of making the tapes public, Mr. Nixon offered to allow the Mississippi Democrat to listen to the recordings and determine the authenticity of a White House summary of their contents.

But Mr. Stennis added that he could not "assume the responsibility that these tapes haven't been tampered with" and would seek "technical advice" if he suspected that the recordings had been altered.

William D. Ruckelshaus, the former Deputy Attorney General, urged yesterday that electronic experts examine the tapes.

"There should be some authentication that the tapes are what they are represented to be," Mr. Ruckelshaus said.

Yet the question of who should do the authentication—should it be sought by either Judge Sirica or another central figure in the tapes controversy—has not been faced.

An expert with one of the major recording companies said, "There are not that many experts and many of the few there are work for the Government itself."

### Certainty Ruled Out

Tony Schwartz, president of New Sounds, Inc., which makes radio commercials, said on the detection of tampering: "The best any expert can say is 'I feel it's been done,' but none would be able to say 'I know it's been done.'"

Mr. Randal, of Syntonic Research, said the difficulty of detecting tampering was increasing because of the nature of the tape recording process.

"The medium of tape became popular because tape itself is so infinitely flexible—you can do anything you want with tape," he said.

In arriving at conclusions

about the difficulty of detecting tape editing, the experts whose opinions were sought assumed that the equipment used at the White House was not overly sensitive, which would make the detection of changes more difficult.

Their point was that if long hours of conversations were to be taped, then stored for reference, a recording device would be used with a very slow drive, perhaps 15/16ths of an inch a second. This would reduce the number of times that the tape would have to be replaced.

The fidelity of the recording declines with the slowness of the tape. At the same time, the amount of background noise that would be encoded on the magnetic tape increases with the tape slowness.

This works to the advantage of a person seeking to alter such a tape, the experts said, because it helps to mask the editing job, usually the splicing of the tape.

Obvious splices may be seen because the tape has been cut with a scissors and the severed ends reattached. Other splicing methods use electronic means to erase selected parts of the audio signal on the tape's magnetic field, without physically cutting the tape.

Other words of the same speaker then may be imprinted over the places that have been erased, but specialists agreed that these are generally easy for an expert to detect because the meter and pitch of a person's voice shifts as he talks.

The specialists said a better means of avoiding detection would be to excise whole sentences and paragraphs so that relatively little splicing would be necessary.

Even this has its drawbacks since in the passage of a minute or so a speaker's position relative to the recording microphone could shift.

One means of circumventing this type of editing, the experts said, would be to raise artificially the amount of background noise in a room. This is done by recording synthetic noise atop the previous conversation,

damping the differences in sound at the splicing points.

One expert, said by specialists at competing companies to be the nation's foremost authority on the editing of voices on magnetic tape, put it this way: "If a job of editing a tape is done very skillfully it would be almost impossible to determine if a change had been made."