

orities of this Administration." But he shattered White House claims that Cox alone had arrogantly scuttled Nixon's tapes compromise. Richardson said that if he had been in the prosecutor's position, he too would have refused to comply with the President's orders. At stake, said Richardson, was "the very integrity of the governmental processes I came to the Department of Justice to help restore."

There was more bad news for Nixon in the charge by Judge Sirica to the two grand juries considering many Watergate-related indictments. Solemnly, Sirica told the jurors that "the grand juries of which you serve remain operative and intact . . . You are not dismissed and will not be dismissed except as provided by law." Although he did not mention it to the jurors, Sirica had already received a four-page White House memo urging him to accept the "Stennis compromise" and had been gathering legal research for a probable contempt citation against the President.

When Nixon heard from Harlow that House Republican leaders were insisting that he turn over the tapes and appoint a new prosecutor, he summoned Haig and two of his counsel, J. Fred Buzhardt and Len Garment, to the Oval Office. The discussion, said Haig, was "very painful and anguishing." Confronted with the enormous public demand for impeachment, the President reversed field. He told Buzhardt to instruct Nixon's top tapes counsel, University of Texas Law Professor Charles Alan Wright, to inform Judge Sirica that he would comply with the judge's decision and turn over the tapes.

Wright, who was preparing to argue the Stennis compromise before Sirica at noon, was astonished. Nixon was surrendering in a battle he had waged for three months, causing the wear and tear of national controversy plus immense injury to his own reputation as one who wanted the full truth of Watergate exposed.

It was only 45 minutes before court time when Wright reviewed this turn-about announcement with Nixon in the Oval Office. No word of the switch had leaked out when Wright sat down quietly in Sirica's crowded courtroom at 2 p.m. At a table opposite him were eleven lawyers from the ousted Cox staff, apparently prepared to argue against the Stennis plan. Sirica entered, read tediously for 15 minutes from his original order demanding the tapes, and from the sustaining appeals court decision. Then he put down his papers and asked Wright: "Are counsel prepared at this time to file the response of the President to the modified order of the court?"

The courtroom was hushed. Everyone expected Wright to present the Nixon alternative plan—and everyone expected Sirica to reject it. Said Wright slowly: "I am not prepared at this time to file a response. I am, however, authorized to say that the President of the United States would comply in all re-

Could the President's Tapes Be Altered?

Since President Nixon agreed to hand over the Watergate tapes, a consuming question in Washington has been whether tapes can be altered without detection. The answer is a qualified yes. The right man with enough time and with access to the original tape recorder could, in the opinion of audio experts, make substantial changes that would defy detection.

There is no reason to assume that the Watergate tapes have been tampered with; that would be a major undertaking. Most experts believe that the necessary know-how could not be found in the U.S. Government, not even among the engineers of the Army Strategic Communications Command. Such skills are scarce even outside Government. Estimates of the number of people able to accomplish the task range from half a dozen to 1,000. Moreover, not even a qualified man with the nerve and skill of the Jackal would be enough. He would also have to be willing to leave himself open to criminal charges of tampering with evidence. "Whoever would do that would have to be crazy," says Mortimer Goldberg, technical operations supervisor at CBS Radio. In an Administration where apparently no skulduggery has been safe from exposure, it is more than likely that sooner or later the man's name would be leaked.

All an expert would need in the way of equipment to alter tapes would be a recording studio, two to four quality tape recorders, a variety of auxiliary gadgets and perhaps an echo chamber. First he would listen to the tape over and over again until he felt at home with the speech patterns—voice modulation as well as breathing space. When he was satisfied that he knew the voices as well as his own, he would do the easy part first—simply cutting out certain words or sentences with a razor blade and splicing the tapes together. This would probably constitute the bulk of his work. From there he would move on to the more complicated tasks: rearranging passages, constructing new words out of word fragments.

Once the tape was recomposed, he would have to make sure that it flowed smoothly from beginning to end, with no telltale shift in tone of voice. Inflections can now be modified with a device known as a variable-speed constant-pitch tape recorder. "When we increased the speed in the past," says Goldberg, "we increased the pitch too. The voice sounded like Donald Duck's. Now we can pick up or slow down without changing the pitch." Background noise can be simulated by playing a second tape behind the voice tape. Thus, if in the original tapes, doors are slamming, buzzers buzzing, asthmatics wheezing or pipes clinking against ashtrays, all of these sounds can be per-

fectly duplicated. Such background noises can be used to blur over any foreign sounds caused during the editing of a tape. Says Goldberg: "This kind of masking covers a multitude of sins."

When the tape is completed, it is recorded on another, unspliced tape. This is done on the original machine, since each recorder leaves its particular markings on tapes. As exacting as open-heart surgery, the process of altering a tape is extremely time-consuming. It may take as long as an hour to change a word; to alter a one-hour tape could consume a full day. The result of all this fastidious enterprise can be startling. A record is available of one of Nixon's speeches defending his role in Watergate; on the flip side is a doctored version of the speech in which Nixon confesses that he was to blame for Watergate. Same speech, same words—only differently arranged.

Aware of these doctoring techniques, Judge John J. Sirica has indicated that he would like experts to examine the Watergate tapes. But there is a problem; anyone who listens to the tapes will learn what is on them—a breach of confidentiality. Under the U.S. Court of Appeals order, only Sirica is supposed to hear the tapes initially. Even if Sirica wins authorization to have the tapes examined, the fact remains that the technology of detection is not so far advanced as the technology of deception.* The detector must rely on an oscilloscope, which translates electrical impulses of sound into visual patterns—green wavy lines—on a screen. These patterns are altered by erasures or breaks in a tape. But a skillful masking job does not interrupt the pattern and leaves the impression that no editing has been done.

Though some audio experts believe that they can uncover almost any kind of tampering, the hard evidence seems to dispute this. Last August the Canadian Broadcasting Corp. put on a radio show in which nine audio specialists were asked to identify parts of a tape that had been doctored. They were unable to detect 90% of the edits—but reported finding numerous nonexistent changes. Producer Max Allen explained: "In a speech by Roy Cohn [Joe McCarthy's onetime protégé], they said they had looked at their oscilloscopes and swore they saw edits. But it was just Cohn's pattern of speech, which sounded naturally as if it had been edited." At the program's end, all the participants agreed that they would never be willing to testify in court on whether a tape had been doctored or not.

*Sirica will have no difficulty identifying the voices on the tapes, since the White House is supplying him with a log indicating the participants at each of the meetings, which were usually attended by only a few persons.