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OFFICE OF THE SECRETARY OF DEFENSE
WASHINGTON 25, D. C.

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BY

DATE

WHS/OSD
9/29/11

JAN 12 1955

Mr. Tolson
Mr. Boardman
Mr. Nichols
Mr. Belmont
Mr. Ladd
Mr. Clegg
Mr. Glavin
Mr. Rosen
Mr. Tamm
Mr. Sizoo
Mr. Winterrowd
Tele. Room
Mr. Holloman
Miss Gandy

Dear Mr. Hoover:

The inclosure is a draft memorandum on the subject of the Ultra-sonic Listening Device for signature by the Secretary of Defense which has been informally agreed to during staff level coordination between representatives of the Federal Bureau of Investigation and the Department of Defense.

I would appreciate confirmation that the included discussion of national policy coincides with your understanding thereof and that the Bureau has no objection to the content of the inclosure so that I may assure Mr. Wilson on these points upon forwarding the inclosure for his signature.

Sincerely yours,

G. B. ERSKINE
General, USMC (Ret)
Assistant to the
Secretary of Defense
(Special Operations)

1 Incl

Mr. J. Edgar Hoover, Director
Federal Bureau of Investigation
Washington 25, D. C.

ENCL

X-125

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MEMORANDUM FOR THE SECRETARY OF THE ARMY
THE SECRETARY OF THE NAVY
THE SECRETARY OF THE AIR FORCE
THE ASSISTANT SECRETARY OF DEFENSE (M&P)
THE DIRECTOR, NATIONAL SECURITY AGENCY

SUBJECT: Ultra-Sonic Listening Device

1. Devices exist which, by sending an electrical impulse of ultra-sonic frequency through a telephone circuit by tapping, will permit remote surveillance of any office in which a telephone is located by utilizing the telephone microphone as a pick-up. Such eavesdropping may be accomplished without additional wires and is possible even though the handset is in a "hung-up" position. Physical access to the instrument itself is not required to put the technique into operation. The technique is applicable anywhere between the instrument and the exchange or switchboard which serves it, and where the line exists as a physical entity. It is ordinarily used within a distance of about 1000 feet from the telephone. There are certain special applications of existing techniques possible on the remote side of switchboards such as that which serves the Pentagon when a telephone conversation is not promptly broken off, but these are possible for such limited periods of time that they may be ignored. The existing technique in its present stage of development is not effective against certain model telephone instruments, among which is the Model 500 telephone instrument.

2. On 23 August 1950, a Presidential Directive, which was not circulated, was issued containing the following information: It stated that the Ultra-sonic Listening Device and all of its developments,

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together with any discussions regarding the device, were classified TOP SECRET. Its use would be limited to matters of "vital importance to national security." The Secretaries of Treasury and Defense, the Attorney General and the Director of Central Intelligence Agency are the exclusive agents for its classification and control. The Department of Justice is the sole Agent for contracting for the acquisition of such devices for use inside the Continental United States. The Central Intelligence Agency is the sole Agent for contracting for the acquisition of such devices for use outside the Continental United States. Such devices shall not be used by any Agency of the Treasury, Defense or Justice Department or by Central Intelligence Agency without the personal approval of the Head thereof. The Secretaries of Defense, Treasury, the Attorney General and the Director of the Central Intelligence Agency shall respectively be personally and individually responsible for constant supervision of the control and use of the device. All discussions regarding this Ultra-sonic Listening Device will be strictly confined to "need-to-know" and limited to U. S. Government employees.

3. Within the government, there has been considerable uncertainty and differing practices in classification of counter-devices. It is now clear, however, that all of the counter-devices tabulated in Paragraph 4, below, are classified SECRET, since they afford protection against a variety of techniques, and do not disclose the inherent nature of the ultra-sonic device. Only those counter-measures, such as an ultra-sonic filter, which would by their nature

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disclose the inherent nature of the ultra-sonic listening device, require a TOP SECRET classification.

4. Several countermeasures which have been designed are briefly described below:

(a) Research Products Company has developed a mercury switch about the size of a peanut which shorts out the telephone microphone when the hand-set is in a horizontal or "hung-up" position. The device is inexpensive and easy to install or remove.

(b) The FBI has developed a technique in which an additional contact is installed in the base of the telephone. This is also inexpensive. It takes longer to install or remove; perhaps 30 minutes. Unlike the mercury switch, however, it is unlikely to be detected except by dismantling the base and its effectiveness can be tested only by inducing an outside current into the circuits.

(c) The now defunct Physical Security Equipment Agency, developed a countermeasure which involved separate installation of the telephone bell and instrument with the telephone operational only when plugged into a wall socket. This plug was so devised as to disengage automatically upon completion of any outgoing or incoming call. The device would be materially more expensive than either of the two above.

5. Cooperation with commercial telephone companies in application of Secret counter-devices is permissible if conducted in accordance with regulations for safeguarding of information of that classification.

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6. In order to minimize as far as possible the amount of speculation as to the nature of the threat against which safeguards are being taken, it is desirable, if possible, that a counter-device be employed whose presence does not require to be generally known. In any event, only counter-devices of Secret classification which do not inherently reveal the nature of the ultra-sonic listening device are to be employed.

7. Simple techniques are available to detect efforts to employ the device. Spot checks can be made of telephone instruments to determine whether an extraneous current is present in the line. Security of exterior cables may be improved by requesting the appropriate telephone company to eliminate multiple appearances of lines. Such requests can be explained as a normal security precaution against wire-tapping, thereby avoiding disclosure of the specific technique feared.

8. The Secretaries of the Army, Navy and Air Force are authorized to divulge the contents of this letter as necessary to their respective Directors of Intelligence, and to comparable officers charged with Departmental security, counterintelligence and special investigation functions. The Secretaries are also authorized to request procurement of such devices through the DCI for employment outside the U.S. and its territories where matters of vital importance to national security are involved.

9. The Director, NSA, is granted the authority requested in his Memorandum of 16 June 1954, Subject: Ultra-sonic Listening Device.

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10. The Assistant Secretary of Defense, Manpower and Personnel, is requested to initiate a study in conjunction with the Military Departments and the National Security Agency to determine the magnitude of the security threat which the device poses to Defense installations, and to initiate adequate countermeasures at a classification level of SECRET. The concurrence of the Federal Bureau of Investigation should be obtained in advance, if assistance from commercial telephone companies is considered necessary. In addition, the Federal Bureau of Investigation is to be informed of the countermeasures selected prior to any extensive use being made thereof.

(For signature of Secretary of
Defense)

cc: OASD (R&D)
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THE SECRETARY OF DEFENSE OFFICE

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MEMORANDUM FOR THE SECRETARY OF THE ARMY
THE SECRETARY OF THE NAVY
THE SECRETARY OF THE AIR FORCE
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THE DIRECTOR, NATIONAL SECURITY AGENCY

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Intelligence Agency without the personal approval of the Head thereof. The Secretaries of Defense, Treasury, the Attorney General and the Director of the Central Intelligence Agency shall respectively be personally and individually responsible for constant supervision of the control and use of the device. All discussions regarding this Ultra-sonic Listening Device will be strictly confined to "need-to-know" and limited to U. S. Government employees.

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6. In order to minimize as far as possible the amount of speculation as to the nature of the threat against which safeguards are being taken, it is desirable, if possible, that a counter-device be employed whose presence does not require to be generally known. In any event, only counter-devices of Secret classification which do not inherently reveal the nature of the ultra-sonic listening device are to be employed.

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C. E. WILSON

cc: OASD(P&D)

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