



Exploding The Phone

db373

www.explodingthephone.com

Bibliographic Cover Sheet

Title	FBI File 65-HQ-71516, Unknown Subject; possible compromise of Armed Forces AUTOVON network, espionage
Date	1967-04-24
Abstract	Investigation into touch-tone dialpad modified to produce AUTOVON frequencies found in basement of a fraternity at Jefferson Medical College, Philadelphia, PA.
Keywords	AUTOVON
Source	FBI via FOIA

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U.S. Department of Justice

Federal Bureau of Investigation

Washington, D.C. 20535

November 24, 2006

Subject: AUTOVON

FOIPA No.

Dear Requester:

The enclosed documents were reviewed under the Freedom of Information/Privacy Acts (FOIPA), Title 5, United States Code, Section 552/552a. Deletions have been made to protect information which is exempt from disclosure, with the appropriate exemptions noted on the page next to the excision. In addition, a deleted page information sheet was inserted in the file to indicate where pages were withheld entirely. The exemptions used to withhold information are marked below and explained on the enclosed Form OPCA-16a:

Section 552

☐ (b)(1)

☐ (b)(2)

☐ (b)(3) _____

☐ (b)(4)

☐ (b)(5)

☒ (b)(6)

☐ (b)(7)(A)

☐ (b)(7)(B)

☒ (b)(7)(C)

☐ (b)(7)(D)

☐ (b)(7)(E)

☐ (b)(7)(F)

☐ (b)(8)

☐ (b)(9)

Section 552a

☐ (d)(5)

☐ (j)(2)

☐ (k)(1)

☐ (k)(2)

☐ (k)(3)

☐ (k)(4)

☐ (k)(5)

☐ (k)(6)

☐ (k)(7)

86 page(s) were reviewed and 85 page(s) are being released.

☐ Document(s) were located which originated with, or contained information concerning other Government agency(ies) [OGA]. This information has been:

☐ referred to the OGA for review and direct response to you.

☐ referred to the OGA for consultation. The FBI will correspond with you regarding this information when the consultation is finished.

☒ You have the right to appeal any denials in this release. Appeals should be directed in writing to the Director, Office of Information and Privacy, U.S. Department of Justice, 1425 New York Ave., NW, Suite 11050, Washington, D.C. 20530-0001 within sixty days from the date of this letter. The envelope and the letter should be clearly marked "Freedom of Information Appeal" or "Information Appeal." Please cite the FOIPA number assigned to your request so that it may be easily identified.

☐ The enclosed material is from the main investigative file(s) in which the subject(s) of your request was the focus of the investigation. Our search located additional references, in files relating to other individuals, or matters, which may or may not be about your subject(s). Our experience has shown, when ident, references usually contain information similar to the information processed in the main file(s). Because of our significant backlog, we have given priority to processing only the main investigative file(s). If you want the references, you must submit a separate request for them in writing, and they will be reviewed at a later date, as time and resources permit.

☐ See additional information which follows.

Sincerely yours,

A handwritten signature in black ink, appearing to read "D. Hardy", with a stylized flourish at the end.

David M. Hardy
Section Chief
Record/Information
Dissemination Section
Records Management Division

Enclosure(s)

EXPLANATION OF EXEMPTIONS

SUBSECTIONS OF TITLE 5, UNITED STATES CODE, SECTION 552

- (b)(1) (A) specifically authorized under criteria established by an Executive order to be kept secret in the interest of national defense or foreign policy and (B) are in fact properly classified to such Executive order;
- (b)(2) related solely to the internal personnel rules and practices of an agency;
- (b)(3) specifically exempted from disclosure by statute (other than section 552b of this title), provided that such statute (A) requires that the matters be withheld from the public in such a manner as to leave no discretion on issue, or (B) establishes particular criteria for withholding or refers to particular types of matters to be withheld;
- (b)(4) trade secrets and commercial or financial information obtained from a person and privileged or confidential;
- (b)(5) inter-agency or intra-agency memorandums or letters which would not be available by law to a party other than an agency in litigation with the agency;
- (b)(6) personnel and medical files and similar files the disclosure of which would constitute a clearly unwarranted invasion of personal privacy;
- (b)(7) records or information compiled for law enforcement purposes, but only to the extent that the production of such law enforcement records or information (A) could be reasonably be expected to interfere with enforcement proceedings, (B) would deprive a person of a right to a fair trial or an impartial adjudication, (C) could be reasonably expected to constitute an unwarranted invasion of personal privacy, (D) could reasonably be expected to disclose the identity of confidential source, including a State, local, or foreign agency or authority or any private institution which furnished information on a confidential basis, and, in the case of record or information compiled by a criminal law enforcement authority in the course of a criminal investigation, or by an agency conducting a lawful national security intelligence investigation, information furnished by a confidential source, (E) would disclose techniques and procedures for law enforcement investigations or prosecutions, or would disclose guidelines for law enforcement investigations or prosecutions if such disclosure could reasonably be expected to risk circumvention of the law, or (F) could reasonably be expected to endanger the life or physical safety of any individual;
- (b)(8) contained in or related to examination, operating, or condition reports prepared by, on behalf of, or for the use of an agency responsible for the regulation or supervision of financial institutions; or
- (b)(9) geological and geophysical information and data, including maps, concerning wells.

SUBSECTIONS OF TITLE 5, UNITED STATES CODE, SECTION 552a

- (d)(5) information compiled in reasonable anticipation of a civil action proceeding;
- (j)(2) material reporting investigative efforts pertaining to the enforcement of criminal law including efforts to prevent, control, or reduce crime or apprehend criminals;
- (k)(1) information which is currently and properly classified pursuant to an Executive order in the interest of the national defense or foreign policy, for example, information involving intelligence sources or methods;
- (k)(2) investigatory material compiled for law enforcement purposes, other than criminal, which did not result in loss of a right, benefit or privilege under Federal programs, or which would identify a source who furnished information pursuant to a promise that his/her identity would be held in confidence;
- (k)(3) material maintained in connection with providing protective services to the President of the United States or any other individual pursuant to the authority of Title 18, United States Code, Section 3056;
- (k)(4) required by statute to be maintained and used solely as statistical records;
- (k)(5) investigatory material compiled solely for the purpose of determining suitability, eligibility, or qualifications for Federal civilian employment or for access to classified information, the disclosure of which would reveal the identity of the person who furnished information pursuant to a promise that his/her identity would be held in confidence;
- (k)(6) testing or examination material used to determine individual qualifications for appointment or promotion in Federal Government service the release of which would compromise the testing or examination process;
- (k)(7) material used to determine potential for promotion in the armed services, the disclosure of which would reveal the identity of the person who furnished the material pursuant to a promise that his/her identity would be held in confidence.

FEDERAL BUREAU OF INVESTIGATION
FOIPA
DELETED PAGE INFORMATION SHEET

Serial Description ~ COVER SHEET

04/24/1967

Total Deleted Page(s) ~ 1
Page 87 ~ b6, b7C

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X Deleted Page(s) X
X No Duplication Fee X
X for this Page X
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UNITED STATES GOVERNMENT

Memorandum

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED
DATE 09-05-2006 BY 60324 AUC/BAW/CPB/YMW

TO : DIRECTOR, FBI
ATTENTION: FBI LABORATORY

FROM : SAC, PHILADELPHIA (65-6111) (P)

SUBJECT: UNSUB; Possible Compromise
of ~~Armed Forces~~ Autovon
Network
ESPIONAGE - X

DATE: 4/24/67

Re: PH tel to Director, 4/20/67

Enclosed herewith for the Bureau are the following items, obtained from the Bell Telephone Company Security Office:

1. Standard 10 key touch-tone pad;
2. One grey cover pad for touch-tone system;
3. RCA mercury battery VS312A;
4. One telephone hand set and dial;
5. One Ace lock, Ace key, and Ace key blanks, 34 other keys, one rubber stamp with arrow, and one mike pin. Master lock #27 (sawed open), one Murray seal N1 PS Co., combination instructions and key for Sergeant and Greenleaf, Inc., lock, broken key (2 pieces) for key switch;
6. Five Polaroid color prints of equipment; pictures taken by Bell Telephone Laboratories, no additional copies available;
7. One IBM card with typed notations on rear;
8. Bell Telephone Company memo dated 4/21/67 and Schematic drawing of modification 25B3 dial and associated wiring and components.

3 - Bureau (RM)
1 - Package
1 - Philadelphia (65-6111) (P)

EAS:pck
(4)

71516 -

9 APR 25 1967

85 JUN 12 1967

Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

PH 65-6111

The olive drab oil gear metal box, 18x6x4, is being retained by the Philadelphia Office inasmuch as several latent prints of possible value have been obtained and will be sent to the Identification Division by separate communication.

The above equipment is being forwarded to the Bureau for analysis and possible discussion with the Defense Communications System, who have an interest in the Autovon Network. NISO has advised their Washington headquarters is extremely interested in looking at the equipment. NISO has been advised that this equipment is being forwarded to the FBI Laboratory and that any arrangements to observe the equipment should be made through liaison channels.

The FBI Laboratory is requested to examine the enclosed IBM card, which was found in the gear box containing the above equipment. Bell Telephone has advised that it has no particular significance in the Bell System computers. Local intelligence agencies are analyzing copies of the IBM card to see if it has military application.

The Bell Telephone Company engineers are of the personal and unofficial opinion that attached communications equipment could possibly have been made by a Bell Telephone employee or one highly skilled in the electronics and wiring field. Bell has also advised that all keys found in the box containing the above equipment have been checked by Bell Telephone security and with the exception of the Ace lock, none fit Bell Telephone Company of Pennsylvania equipment. Among the keys found by Bell was one that had been soldered and filed so that it would open the upper housing of any of Bell's coin telephones but not the coin boxes.

Bell has advised that any additional analyses or reports will be promptly forwarded to the FBI

4/26/67

b6
b7C

1 -

AIRTEL

To: SAC, Philadelphia (65-6111)

From: Director, FBI 65-71516-2

UNKNOWN SUBJECT; Possible
Compromise of Armed Forces
Autovon Network
ESPIONAGE - X

EX-103

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED
DATE 09-05-2006 BY 60324 AUC/BAW/CPB/YMW

Reurtel 4/24/67.

Bureau does not desire you to conduct investigation requested in retel at this time. Upon receipt of your LHM and the report of the FBI Laboratory, this matter will be referred to the Department of Defense for the purpose of determining the significance of the instrument found in basement of Phi Chi medical fraternity of Jefferson Medical College. As indicated in your teletype of 4/20/67, the Autovon system is not classified and so it would appear that this is a matter for administrative handling by the military if it is determined that the instrument found, in fact, belongs to the military.

ARJ:ngp
(4)

NOTE: Telephone equipment believed to be property of Army was found in basement of medical fraternity of Jefferson Medical College, Philadelphia, on 4/14/67 and turned over to the Bell Telephone Company. Bell Company believes equipment is part of armed service's automatic voice network called Autovon which is similar to WATS (wide area telephone service - domestic-civilian) with world-wide military application. The military services in Philadelphia area have been alerted and are checking their equipment for possible loss or tampering. Autovon system is not classified; however, contract and development work are classified "Secret."

Philadelphia requested permission to conduct extensive investigation at Jefferson Medical College including crime scene search, interview of students and possibly professors and taking elimination fingerprints of those handling the equipment found. This appears to be primarily matter for Army and we should not get involved in an investigation on a college campus in the absence of information indicating there has been a compromise of classified information.

Tolson _____
DeLoach _____
Mohr _____
Wick _____
Casper _____
Callahan _____
Conrad _____
Felt _____
Gale _____
Rosen _____
Sullivan _____
Tavel _____
Trotter _____
Tele. Room _____
Holmes _____
Gandy _____

56 JUN 15 1967

TELETYPE UNIT ☐

ARJ



FEDERAL BUREAU OF INVESTIGATION
WASHINGTON, D. C.

To: **FBI, Philadelphia (65-6111)**

Date: **May 18, 1967**

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED
DATE 09-05-2006 BY 60324 AUC/BAW/CPB/YHW

Re **UNKNOWN SUBJECT;
POSSIBLE COMPROMISE OF ARMED
FORCES AUTOVON NETWORK;
ESPIONAGE - X**

J. Edgar Hoover
John Edgar Hoover, Director

(OO: **PHILADELPHIA**)

REC-121

FBI File No. **65-71516-2**
Lab. No. **E-456 HZ**

Examination requested by: **FBI, Philadelphia**

Reference: **Letter 4/24/67**

Examination requested: **Engineering, Miscellaneous**

Remarks:

Q1, Q2, Q3, and Q4 were previously examined by an Engineer of the Bell Telephone Company, Philadelphia, Pennsylvania. The results of the examination are contained in a Bell Telephone Company memorandum dated 4/21/67, and schematic drawing of the modified 25B3 dial and associated wiring and components which were furnished with the specimens submitted. The frequencies generated by the modified 25B3 touch-tone dial were verified in the Laboratory in the presence of [redacted] Bell Laboratory, Indianapolis, Indiana, and [redacted] Government Communications, AT&T Long Lines Department, Washington, D. C. Two copies of the report made by [redacted] on the modified 25B3 dial are enclosed.

Enclosures (11) (2 Lab report, 2 copies of report of [redacted] and 7 photographs)

(continued on next page)

Page 1 ENCLOSURE

Tolson _____
DeLoach _____
Mohr _____
Wick _____
Casper _____
Callahan _____
Conrad _____
Felt _____
Gale _____
Rosen _____
Sullivan _____
Tavel _____
Trotter _____
Tele. Room _____
Holmes _____

1-Mr. Sullivan (Attn: [redacted])

RPS:ed (7)

330
84 JUN 1 1967

DO NOT INCLUDE ADMINISTRATIVE
PAGE (S) IN INVESTIGATIVE REPORT

ADMINISTRATIVE PAGE

☒ TELETYPE UNIT ☐

MAILED 2
MAY 18 1967
COMM-FBI

In addition to being able to make priority calls, on the proper telephone company lines, with additional equipment and the necessary number information, this dial could be used to transmit information on data lines or call computers.

The handset with the extra wire attached to one of the terminals could be used to circumvent paying for local calls at a coin station with the upper housing removed and the telephone network exposed. This handset could also be used in conjunction with the 25B3 dial as a means of providing voice on the lines.

For your information, in the event further investigation is indicated in this case, the Baltimore Office may be able, by contacting Jack's Key Shop located at 1613 W. Pratt Street, Baltimore, Maryland, to further identify the source of the key having part of this address stamped in the bow.

Photographs of Q1 through Q13 are being furnished to the Philadelphia Office as an enclosure.

The specimens submitted are being forwarded under separate cover to the Philadelphia Office.

7-1b

REPORT
of the



b6
b7C

FEDERAL BUREAU OF INVESTIGATION
WASHINGTON, D. C.

To: **FBI, Philadelphia (65-6111)**

Date: **May 18, 1967**

FBI File No. **65-71516**

Lab. No. **E-456 HZ**

Re: **UNKNOWN SUBJECT;
POSSIBLE COMPROMISE OF ARMED
FORCES AUTOVON NETWORK;
ESPIONAGE - X**

Specimens received **4/27/67**

- Q1 Standard 10-key touch-tone pad**
- Q2 One gray cover pad for touch-tone system**
- Q3 RCA mercury battery VS312A**
- Q4 One telephone handset and dial**
- Q5 One Ace lock, Ace key, and Ace key blanks**
- Q6 34 other keys**
- Q7 One rubber stamp with arrow**
- Q8 One mike pin hapel**
- Q9 Master lock #27 (sawed open)**
- Q10 One Murray seal N1 PS Co.**
- Q11 Combination instructions and key for Sergeant and Greenleaf, Inc., lock**
- Q12 Key, (2 pieces), for key switch**
- Q13 One IBM card with typed notations on rear**

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED
DATE 09-05-2006 BY 60324 AUC/BAW/CPB/YMW

ALSO SUBMITTED: 5 Polaroid color prints of equipment; pictures taken by Bell Telephone Laboratories, and Bell Telephone Company memo dated 4/21/67, and schematic drawing of modification 25B3 dial, and associated wiring and components.

Tolson _____
DeLoach _____
Mohr _____
Wick _____
Casper _____
Callahan _____
Conrad _____
Felt _____
Gale _____
Rosen _____
Sullivan _____
Tavel _____
Trotter _____
Tele. Room _____
Holmes _____

Page 1

(continued on next page)

1-Mr. Sullivan (Attn:)

RPS:ed (7)

MAIL ROOM ☐

TELETYPE UNIT ☐

b6
b7C

Result of examination:

Q1, a standard 10-button telephone company (Western Electric) touch-tone dial, Type 25B3, had been modified using two microswitches to generate the additional frequencies used on a 16-button 66-type touch-tone dial. The modified 25B3 dial was tested and found to produce the frequencies within the parameters necessary to make it compatible with the Automatic Voice Network (Autovon) including the ability to make top priority (Flash Override) calls.

Q2 appears to be a standard telephone company can. No additional examination was made on this item.

No examination was conducted on the battery designated as Q3.

Q4 is a telephone handset and handset dial made by Western Electric Company. The handset was possibly manufactured for the Bell System, since part of the markings had been scraped off where the Bell System label would normally have appeared on the handset. An extra length of wire was attached to one of the handset terminals. The handset and handset dial were found to pulse telephone line voltage for correct dialing of telephone numbers.

Specimen Q5 is an "Ace" lock of the type used on telephone boxes. The two "Ace" keys in Q5 are cut to fit this type of lock. One of these keys is cut to the code of the "Ace" lock in Q5. The other "Ace" key is cut to a different code.

Also attached to these two "Ace" keys is a key to a lever tumbler-type lock used on telephone boxes. This key has been fashioned by soldering metal to a key blank in order to make the bit sufficiently wide to fit this type of lock.

The keys in Q6 consist of the following:

(1) Keys to "Best" pin tumbler door locks and/or padlocks. (These "Best" keys are cut for differently coded locks.)

(2) One key for a lock made by Solon Super Lock Company, Washington, D. C. (The bow of this key is stamped with the words "withdraw" and "withdrawal.") This lock is designed to permit withdrawal of the core or mechanism of a lock or group of locks so set up to accommodate this key.

(3) Two flat keys cut to simple lever tumbler- or ward-type locks found on desks, furniture, metal boxes, etc.

(4) Keys having the same key blank numbers as those used on 1949-1955 Chrysler product cars and/or trucks.

(5) A key having the same key blank number as those used on 1935-1966 General Motors cars and/or trucks.

(6) Yale keys for cabinet- and desk-type locks.

(7) Keys of the type designated to fit Yale door and padlock pin tumbler locks.

(8) An "Ilco" key blank number 01122C. Stamped in the bow is "ACK'S -- 13 W. PRATT S BA---, MD." It was determined that there is a Jack's Key Shop, located at 1613 W. Pratt Street, Baltimore, Maryland. Stamped over this and inverted is the following: "LOC---ARE, BALTO 23, MD."

(9) Two Master padlock keys. These keys will not fit Q9.

(10) A National key for a cabinet- or desk-type lock.

The specific use of Q7 in connection with the other specimens submitted, if any, is not known.

Q8, a lapel pin in the shape of a microphone, is of an older design ribbon microphone common to the broadcast industry a number of years ago.

Q9 is a common-type lock available in numerous outlets.

Q10 is similar to the seal used as a key ring in connection with Q6. This type seal is used on power company meters, etc.

Contained in specimen Q11 is a change key and instructions for a "S & G" combination padlock. The penciled notation "65-83-97" appears on this instruction sheet. This could be a set of numbers to a combination lock. However, they are not for a "S & G" padlock because "S & G" padlocks can only be set on numbers "0" through "49."

Some effort has been made on Q12 to make a key to operate a key switch by soldering two altered keys together. Key switches are commonly used in public buildings and industrial areas to operate lights, equipment, alarms, etc.

Specimen Q13, an unpunched IBM card, number 5081, is a common-type used with IBM computer equipment. The information on the back of the card appears to be key code numbers. The first column could refer to codes for keys to "Best" locks. It is noted that two of the "Best-type" lock keys are cut to the first two codes listed in this column, namely "181432" and "181436."

In the second column of Q13 there is a notation "1199a 51 57 51 50 37." One of the keys submitted is a 1199a key blank cut to agree with this code. By multiplying each of the numbers by .004 (51 X .004 = .204", 57 X .004 = .228", etc.), you arrive at the approximate depths of the cuts in the key blank 1199a.

The significance of the letters prefixing these numbers could not be determined. However, they may refer to the location of the locks.

Recorded
4/27/67
bwd

FEDERAL BUREAU OF INVESTIGATION
UNITED STATES DEPARTMENT OF JUSTICE

NO LAB FILE

Laboratory Work Sheet

Re:

**UNSUB; Possible Compromise of
Armed Forces Autovon Network
ESPIONAGE - X**

File #

Lab. #

65-71516-2
E-456 HZ

AR

pc-98939

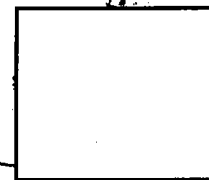
Examination requested by: **Philadelphia (letter 4/24/67)**

Examination requested: **Engineering
Miscellaneous - ~~ESP~~**

Result of Examination: _____

Date received: **4/25/67**

Examination by: _____



b6
b7C

*see Dictation attached
to M/S.*

*ok
4/10/67*

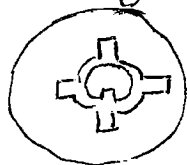
Specimens submitted for examination

- Q1 Standard 10 key touch-tone pad
- Q2 One grey cover pad for touch-tone system
- Q3 RCA mercury battery V8312A
- Q4 One telephone hand set and dial
- Q5 One Ace lock, ~~Ace keyboard~~ *and 3 keys*
- Q6 34 other keys
- Q7 One rubber stamp with arrow
- Q8 One mike pin lapel
- Q9 Master lock #27 (sawed open)
- Q10 One Murray seal N1 PS Co.
- Q11 Combination instructions and key for Sergeant and Greenleaf, Inc., lock
- Q12 ~~Broken~~ keys (2 pieces) for key switch
- Q13 One IBM card with typed notations on rear

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DATE 09-05-2006 BY 60324 AUC/BAW/CPB/YMW

Also submitted are 5 Polaroid color prints of equipment; pictures taken by Bell Telephone Laboratories, and Bell Telephone Company memo dated 4/21/67 and Schematic drawing of modification 25B3 dial and associated wiring and components.

Q5- Type of lock made specifically
for telephone Company.
Det. by small pin between
2 regular size pins & keyway.



3 Ace key blanks - Not cut -
Taylor blanks - Blank #137 S.

Two Ace keys - Cut - One of
these keys fits lock in Q5 - Other
one does not.

Also attached to ring in ^{metal} key
protector is a pay telephone key
to upper box lock. Subj. took same
Also blank #1014A & soldered metal
to the bit to make it wide enough
so that it could be fashioned into
tel. box lock key.

(2)

Q6- 2 Best lock keys on ring

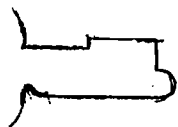
- 1- Star blank 6 BE 1 ^{1114A} Best lock key
 - 1- Also "E" key - solder has been put in some of cuts + refilled. (Best lock)
- Door lock or padlock possibly

known as 'Nix Pix' type key. Now known as ^{Bow} Super Lock Co.

One side WITHDRAWAL ^W

Opposite side WITHDRAW ^{or much}
This key used to remove core of lock.

Ring containing 5 key blanks -
Flat - Small.



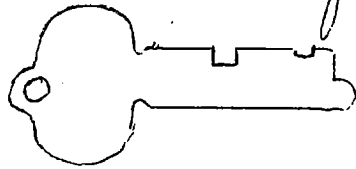
Uncont

- 1 Also "E" key for Best lock
Different cuts from other 2
above.

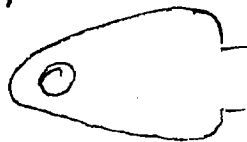
(3)

1 Original Best key -
Stamped H B I in bow
Cut differently than Best
keys -
Same keyway as other
Best lock type keys above.

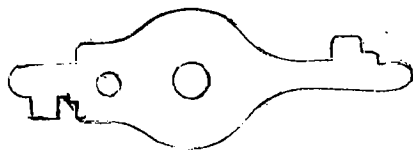
1 flat key - Simple lever or
ward lock - wooden furniture lock or lock
on metal box.



1 flat key cut as flat key above
Diff bow shape



(4)



Possibly some type of pick key However
specific use not determined.

2 Curtis keys-blank # Y 131
cut - Rotary type cutter.

Both keys cut to same code.
made to fit 1949-1955 Chrysler
Product cars.

Five keys on chain - All cut
Curtis blank IN 3 = 1054K Decbl.no..
Independent locks (door)

Curtis blank B10 - 1935-1966
LM cars

Curtis blank Y-139 = 1703K Decbl.no..
1957-1958 Chrysler Product Cars.

Yale key - Code LL 441 in bow
Cabinet locks - w oper

Yale key - Code LL 287 in bow ^{Cabinet} locks

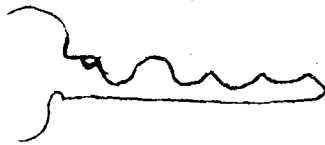
(5)

Five keys attached to a ring
"Murray Seal NI PS Co."

2 Star blank # 64A3 = 998 Ileo bl. no.
Yale locks (door)

~~Both~~ Keys cut differently

1 Flat key - door



Note - 2 Star keys are for 6 pin
tumbler lock -

Cuts 1 thru 5 - Bow to top, same -

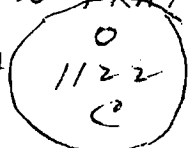
Cuts #6 different.

1 Ileo blank # 01122 C

Stamped in bow

ACK'S

13 W PRATT ST.

BA  MD

From Balto. Phone Book

Jack's Key Shop
1613 W Pratt St.
Baltimore, Md.

(6)
 stamped over address and
 reversed or upside down.

LOC 2211 ARE
 BALTO V3 MD.
 BALTO V3 MD.

1 key Ileo blank #1092
 master padlock - will not
 fit padlock in Q9

3 Acclok Blanks Taylor #1375

1 Key Code no. A15535
 Key cut to this code.
 Blank 999 - Yale lock.

(7)

5 keys on Ring

1- Yale PE501- Cabinet, desk etc.
type key

1 - Yale LP4749 - no code located
in code book for this.

1- Ilco 1092- Master Padlock -
small pc. of adhesive tape on bow
will not fit padlock 99.

1 Ilco blank 1198A - Possibly
key to Chrysler Products car.

1 National key - National Lock
Co. Rockford, Ill. .

(8)

Q9- Master padlock (small) No 7
Pin tumbler Code - P214
Shackle cut (sawed)

Q11- Change key and instructions
for an S & G Combo padlock.
Pencilled notation - 65-83-97

Key	1	2	3	4	5	6
#1 Star 6YA3	306	221	306	270	282	295
#2 Star 6YA3	305	221	306	270	281	244

These are keys to Best Lock

Best guide keys -

0	1	2	3	4	5	6	7	8
.326	.310	.298	.288	.276	.259	.250	.232	.226

9

.214

Star key #1 above - code 181432
 Star key #2 above - 181436

Best HB1	1	2	3	4	5	6
	.320	.307	.257	.273	.282	.270

015434

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Bow to Trip

1	2	3	4	5
6	7	<u>5</u> <u>6</u>	3 4	7
(6)	(7)	(5)	(4) 3	4
<u>.22</u>	<u>.21</u>	<u>.24</u>	<u>.27</u>	<u>.22</u>
.225	.21	.24	.25	.27

231
246
265
270
285

3 .281
2 .300
1 .315

675 46
675 47
56435
56436

67
5
d

Star 6 BE1

1	2	3	4	5	6
270	200	248	244	280	265

4 9 ⑥ 6 ³ 4 5 may be 495634 -
However key hand filed + may be
slightly off.

4	5
3 3 4 1 2 3	

Curtis	1	2	3	4	5
1199A Bl	202	224	202	195	145
line 2	204	228	204	200	148

Blank 1199A prob. cut to code
on chart - 1199a 51 57 51 50 37
x4 = line 2

Administrative Page

The Baltimore office may be able,
by contacting Jack & Key Shop
located at 1613 W. Pratt St,
Baltimore, Md. To further identify
the source of the key having part of
this address stamped in the bow.

3/10 [Signature]

Result of Examination

Q1, Q2, Q3 and Q4 were previously examined by an Engineer of the Bell Telephone Company, Philadelphia, Pa. The results of their examination are contained in a Bell Telephone Company memorandum dated 4-21-67 and schematic drawing of the modified 25B3 dial and associated wiring and components which were furnished with the specimens submitted for examination. ~~Visual inspection of the specimens~~

The following information is furnished concerning Q5 and Q6:

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Q7 is a common item used for ~~any~~ ~~number~~ numerous ~~other~~ purposes such as routing mail, showing direction, etc. Its use in connection with other specimens submitted, if any, is not known.

Q8, a lapel pin in the shape of a microphone, is of an older design ribbon microphone common to the broadcast

2
industry a number of years ago.

Q9 is a common lock available in numerous retail outlets which had been sawed open. ~~One of the keys listed as Q6 opened this lock.~~

Q10 is similar to the seal used as a key ring in connection with Q6.

Q11 Combination instructions with 3 groups of two digit numbers written on it, a possible combination lock combination, and a key used for changing the combination on some types of combination locks. From the photograph of the box ~~in which~~ containing the submitted specimens it appears the combination of the lock on this box could be changed with this combination changing key. It is necessary to ~~the~~ know the combination of a lock before this key can be used to

change the combination.

Q 12 Some effort has been made to make a Key to operate a Key switch by soldering two altered Keys, ^{together} shaped to operate a Key switch. ~~together~~ Key switches are commonly used in public buildings and industrial areas to operate lights, equipment, alarms etc.

Q 13 The ~~IBM~~ unpunched IBM card IBM is a common type used with IBM computer equipment.

Recorded
4/27/67
bwd

FEDERAL BUREAU OF INVESTIGATION
UNITED STATES DEPARTMENT OF JUSTICE

NO LAB FILE

Laboratory Work Sheet

Re: **UNSUB; Possible Compromise of
Armed Forces Autovon Network
ESPIONAGE - X**

File # **65-71516-2**
Lab. # **E-456 HZ**

Examination requested by: **Philadelphia (letter 4/24/67)**

Examination requested: **Engineering
Miscellaneous - P & C**

Date received: **4/25/67**

Result of Examination:

Examination by:

b6
b7C

See note - attached

Specimens submitted for examination

- Q1 Standard 10 key touch-tone pad
- Q2 One grey cover pad for touch-tone system
- Q3 RCA mercury battery VS312A
- Q4 One telephone hand set and dial
- Q5 One Ace lock, Ace key and Ace key blanks
- Q6 34 other keys
- Q7 One rubber stamp with arrow
- Q8 One mike pin lapel (*lapel*)
- Q9 Master lock #27 (sawed open)
- Q10 One Murray seal N1 PS Co.
- Q11 Combination instructions and key for Sergeant and Greenleaf, Inc., lock
- Q12 ~~Broken~~ Keys (2 pieces) for key switch
- Q13 One IBM card with typed notations on rear

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Also submitted are 5 Polaroid color prints of equipment; pictures taken by Bell Telephone Laboratories, and Bell Telephone Company memo dated 4/21/67 and Schematic drawing of modification 25B3 dial and associated wiring and components.

*Lab report 5/15/67
K.P. 100*

Result of examination:

Q1, a standard ten button Telephone Company (Western Electric) touch-tone dial, 25B3, had been modified using two micro-switches to generate the additional frequencies used on a sixteen button 66-type touch-tone dial.

The modified 25B3 dial was tested and found to produce the frequencies within the parameters necessary to make it compatible with the Automatic Voice Network (AUTOVON) including

the ability to make top priority (Flash Override) calls.

Q2 appears to be a standard Telephone Company can. No additional examination was made on this item.

Q3 No examination was conducted on this battery.

Q4, ^{MANUFACTURED}a telephone handset and ^{HANDSET}dial made by Western Electric ^{COMPANY}. ~~THE HANDSET WAS~~ possibly ^{NORMALLY} for the Bell System, since part of markings had been scraped off where the Bell System label would have appeared on the handset. ~~was in operating condition.~~ An extra length of wire was attached to one of the ^{HANDSET} terminals. ~~THE HANDSET HAD HUNG~~

DIAL WERE FOUND TO PULSE TELEPHONE LINE VOLTAGE FOR CORRECT DIALING.

~~(cont. on next page)~~

OF TELEPHONE NUMBERS

(cont. on next page)

Dictation

Specimen Q5 is an "Ace" lock of the type used on telephone boxes. The two "Ace" keys in Q5 are cut to fit this type of lock. One of these keys is cut to the code of the "Ace" lock in Q5. The other "Ace" key is cut to a different code.

Also attached to these two "Ace" keys is a key to a lever tumbler type lock used on telephone boxes. This key has been fashioned by soldering metal to a key blank in order to make the bit sufficiently wide to fit this type of lock.

The keys in Q6 consist of the following:

(1) Keys to "Best" pin tumbler door locks & padlocks.

(1) (2)
 (These "Best" keys are ~~all~~ cut ~~to~~
 for differently coded locks.)

(2) One key for a lock made
 by Solon Snyper Lock Company,
 Washington, D.C., (The bowt of
 this key is stamped with the
 words "Withdraw" and "Withdrawal.")
 This lock is designed to permit
 withdrawal of the core or
 mechanism ^{of a lock or group of locks so set up to accomodate} ~~of this~~ ~~key~~ ^{key}.

(3) Two flat keys cut to
 simple lever, tumbler or ward
 type locks found on desks, furniture
 metal boxes, etc..

(4) Keys having the same
 key blank numbers as those
 used on 1949-1955 Chrysler
 product cars and/or trucks.

(5) A key having the same
 key blank numbers as those
 used on 1935-1966 General Motors
 cars and/or trucks.

(2)

(6) Yale keys for cabinet, desk, type locks.

(7) Keys of the type designed to fit Yale door and padlock pin tumbler locks.

(8) An "Ileo" key blank number 01122 C. Stamped in the bow is "ACK'S -- 13 W. PRATTS BA ---, MD." It was determined that there is a Jack's Key Shop, located at 1613 W. Pratt St., Baltimore, Md. Stamped over this and inverted is the following: "LOC --- ARE, BALTO 23, MD"

(9) Two Master Padlocks keys. These keys will not fit 99.

(10) A National key for a cabinet, desk, etc. type lock.

6

~~Q7~~ The specific use of ^{Q7} ~~this item~~ in connection with the other specimens submitted, if any, is not known.

Q8, a lapel pin in the shape of a microphone, is of an older design ribbon microphone common to the broadcast industry a number of years ago.

Q9 is a common-type lock available in numerous outlets.

Q10 is similar to the seal used as a Key ring in connection with Q6. This type seal is used on power company meters etc.

Contained in specimen Q11
is a change key and instructions

for a "S + S" combination padlock.
 The pencilled notation "65-83-97"
 appears on this instruction sheet.
 This could be a set of numbers
 to a combination lock. However,
 they are not for an "S + S"
 padlock because "S + S" padlocks
 can only be set on numbers
 '0' through '49'.

on Q12
~~Some~~ Some effort has been made to make a
 key to operate a key switch by soldering to
 altered keys together. Key switches are commonly
 used in public buildings and industrial areas to
 operate lights, equipment, alarms etc.

(Next page)

Specimen Q 13, an unpunched IBM card number 5081, is a common type used with IBM computer equipment. The information on the back of the card

(~~Specimen Q 13~~) appears to be key code numbers. The first column could refer to codes for keys to "Best" locks. It is noted that two of the "Best" type lock keys are cut to the first two codes listed in this column, namely "181432" and "181436".

In the second column of Q 13 there is a notation "1199a 51 57 51 50 37". One of the keys submitted is an

(Z)
 1199 a key blank cut to agree with
 this code. By multiplying each
 of the numbers by .004 ($51 \times .004 =$
 $.204"$, $57 \times .004 = .228"$, etc.)
 you arrive at the approximate
 depths of the cuts in the key
 blank 1199 a.

The significance of the letters
 prefixing these numbers could not
 be determined. However they
 may refer to the location of
 the locks.

Jim
 H

on envelope

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207

65-91546-2

LONG LINES

Washington, D. C., May 10, 1967

OUR FILE
IN REPLY TO
YOUR FILEPRIVATEALL INFORMATION CONTAINED
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MEMORANDUM FOR [REDACTED]

The attached Engineering Notes prepared by [REDACTED] of the Indianapolis BTL accurately reflects the results of our latest contact with the FBI concerning the company property recovered in the medical school in Pennsylvania. The technical memorandum covers that aspect quite well, but fails to set out several points which are of particular interest to ourselves and the FBI:

b6
b7c

- (1) The equipment worked fine! The probability is that it has already been used.
- (2) Could only have been used on AUTOVON; access to AUTODIN via AUTOVON possible but not likely.
- (3) Probably used icw other equipments. FBI particularly interested in DATA aspects wherein suspect might have been able to gain access to a DoD computer and record the output on tape.
- (4) Suspect knew where to go on 25B3 Dial to pick up the 1631 hz frequency. This frequency is only used to derive the four Dual Frequency/TOUCHTONE signals for MLPP.
- (5) Even though the 1631 hz punching is not used on standard TT sets, every set in the field and every dial in manufacture has the punching readily available and identifiable. Suspect could steal any TT set and construct another one of these devices.

I have [REDACTED] concurrence to furnish a copy of his notes to the FBI and the Bell of Pennsylvania. FBI advises that they plan to return the equipment to their field office in Philadelphia this week. I assume they will return it to Bell of Pennsylvania.

b6
b7cJWP:BR
Attachment

SERVICE WITH SAFETY

~~CONFIDENTIAL~~

Subject : Comments on modified 25B3 dial
for [redacted], A.T. & T.
Washington, D.C.

Case : 33737-33

Engineering Notes.

On May 8, 1967 I visited [redacted]

[redacted], D.C.S.

Plans Group, Long Lines - Government
Communications, A.T. & T. Co., Washington
D.C. to inspect with him a punch tone dial
that the Federal Bureau of Investigation
had received from the Bell Telephone
Company of Pa.

b6
b7C

Two documents were given to
me to read on the subject dial and
copies are attached ^{1,2}.

The preliminary notes by [redacted]
Bell Telephone Co of Pa. were quite detailed
and definitely indicated a modified
25B3 dial was involved.

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1. The Bell Telephone Co. of Pa, Preliminary Memo 4-21-67 [redacted]
2. Schematic Drawing of modified 25B3 Dial and
Associated Wiring and Components, 4-23-67

[redacted] and it then met with [redacted]
[redacted] and [redacted] at the
FBI Radio Laboratory to examine
the dial.

b6
b7C

Examination of the dial verified the
comments made by [redacted]
concerning the dial hardware. Other
observations made are:

- 1) The printed wiring board (PWB)
was the original design for the
25B3 dial with the designation "2-4"
printed on the board. The designation
identifies the location for access
to the 1631 Hz frequency.
- 2) A wire had been
soldered to the under side of the
PWB at the "2-4" location. This
wire was then connected to one of
the micro switches identified by
[redacted]. This wire was a
stranded type but of heavier gaw. than
is used in standard dial wiring.
It had red plastic insulation and
appeared to be common hook up
wire.

- 3) The PWB was lifted and the solder joint inspected. The wire had been laid flat across the "2-4" pad and soldered. The solder joint filler was not gross indicating some experience with soldering. There were black corrosion deposits on the solder joint which could indicate a very corrosive flux type solder was added at the time of making the joint.
- 4) The 2 ty-raps were still in place. Generally these are removed to gain access to the rear of the PWB. This could indicate a lack of knowledge of how to disassemble the dial.
- 5) The upper left mounting screw used at the time of manufacture was missing and a common type wood screw had been inserted. The screw was quite loose. There is no reason that comes to mind why the mechanical assembly would be taken apart except that a person unfamiliar with the

dial might remove the wrong screws to get at the PCB.

- 6) The dial had no date of manufacture stamped on it. However the coils were marked 4-6-65 for the 2597A and 4-7-65 for the 2597B. These dates are approximately two weeks ahead of dial manufacture. The vertical cranks were coated with an epoxy varnish which was used for a very short period and could help to pin point the dial manufacture date.
7. The dial was connected to a test circuit as shown in attachment #3 to measure its frequency output. Frequencies obtained were:
- | | | |
|----|---|---------|
| L1 | - | 693 Hz |
| L2 | - | 767 Hz |
| L3 | - | 846 Hz |
| L4 | - | 936 Hz |
| H1 | - | 1210 Hz |
| H2 | - | 1336 Hz |
| H3 | - | 1477 Hz |
| H4 | - | 1625 Hz |

3. Test Circuit - 5/8/67



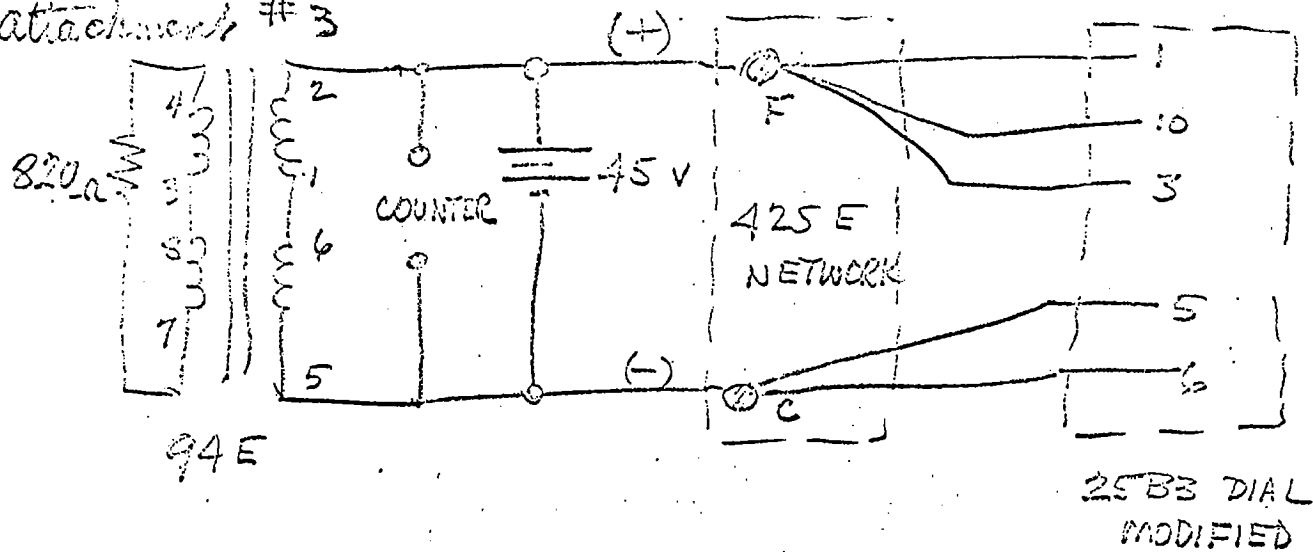
b6
b7C

The 44 and 49 single frequencies were obtained by using the micro switches that had been added to the dial.⁽¹⁾ The values are well within limits and suitable for dialing any of the 10 frequency combinations. No amplitude measurements were made.

The schematic shown in the second memorandum attached does not provide a working unit per se, since no connection is shown between the minus side of the battery and terminals 5 and 6 of the dial. This was also pointed out in comment 2 of that memorandum.

Both output devices with the equipment were co-axial type plugs which would be difficult to use with standard line terminations and again indicate some other apparatus could have been used in conjunction with this equipment. The adapter for polarity reversal of the output plug possibly indicates some experience with Touch Tone Dials.

attachment # 3



TEST CIRCUIT

5/3/67
14/25

This is a verbatim copy of handwritten Engineering
Notes of [] Bell Telephone Laboratory, Indianapolis,
Indiana:

Subject - Comments on Modified 25B3 Dial for []
AT&T. Washington, D. C.

Case : 38737-33

Engineering Notes

On May 8, 1967, I visited []
[], D.C.S. Plans Group, Long Lines - Government
Communications, A.T.&T. Co., Washington D. C. to inspect with
him a Touch Tone dial that the Federal Bureau of Investigation
had received from the Bell Telephone Company of Pa.

Two documents were given to me to read on the subject
dial and copies are attached 1,2.

b6
b7C.

The preliminary notes by [] Bell
Telephone Co. of Pa. were quite detailed and definitely indicated
a modified 25B3 dial was involved.

[] and I then met with []
[] and [] at the FBI Radio
Laboratory to examine the dial.

Examination of the dial verified the comments made by
[] concerning the dial hardware. Other
observations I made are:

1. The Bell Telephone Co. of Pa., Preliminary memo, 4/21/67,
by []
2. Schematic Drawing of modified 25B3 Dial and Associated
Wiring and Components. 4/23/67.

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- 1) The printed wiring board (PWB) was the original design for the 25B3 dial with the designation "2-4" printed on the board. The designation identifies the location for access to the 1631 Hz frequency.
- 2) A jumper wire had been soldered to the under side of the PWB at the "2-4" location. This wire was then connected to one of the micro switches identified by This wire was a stranded type but of heavier ga. than is used in standard dial wiring. It had red plastic insulation and appeared to be common hook up wire.
- 3) The PWB was lifted and the solder joint inspected. The wire had been laid flat across the "2-4" pad and soldered. The solder joint fillet was not gross indicating some experience with soldering. There were black corrosion deposits on the solder joint which could indicate a very corrosive flux type solder was added at the time of making the joint.
- 4) The 2 tyropes were still in place. Generally, these are removed to gain access to the rear of the PWB. This could indicate a lack of knowledge of how to disassemble the dial.
- 5) The upper left mounting screw used at the time of manufacture was missing and a common type wood screw had been inserted. The screw was quite

b6
b7C

loose. There is no reason that comes to mind why the mechanical assembly would be taken apart except that a person unfamiliar with the dial might remove the wrong screws to get at the PWB.

6) The dial had no date of manufacture stamped on it. However the coils were marked 4-6-65 for the 2597A and 4-7-65 for the 2597B. These dates are approximately two weeks ahead of dial manufacture. The vertical cranks were coated with an epoxy varnish which was used for a very short period and could help to pin point the dial manufacture date.

7. The dial was connected to a test circuit as shown in attachment #3 to measure its frequency output. Frequencies obtained were:

L1	-	693 Hz
L2	-	767 Hz
L3	-	846 Hz
L4	-	936 Hz
H1	-	1210 Hz
H2	-	1336 Hz
H3	-	1477 Hz
H4	-	1625 Hz

3 Test Circuit - 5/8/67



b6
b7C

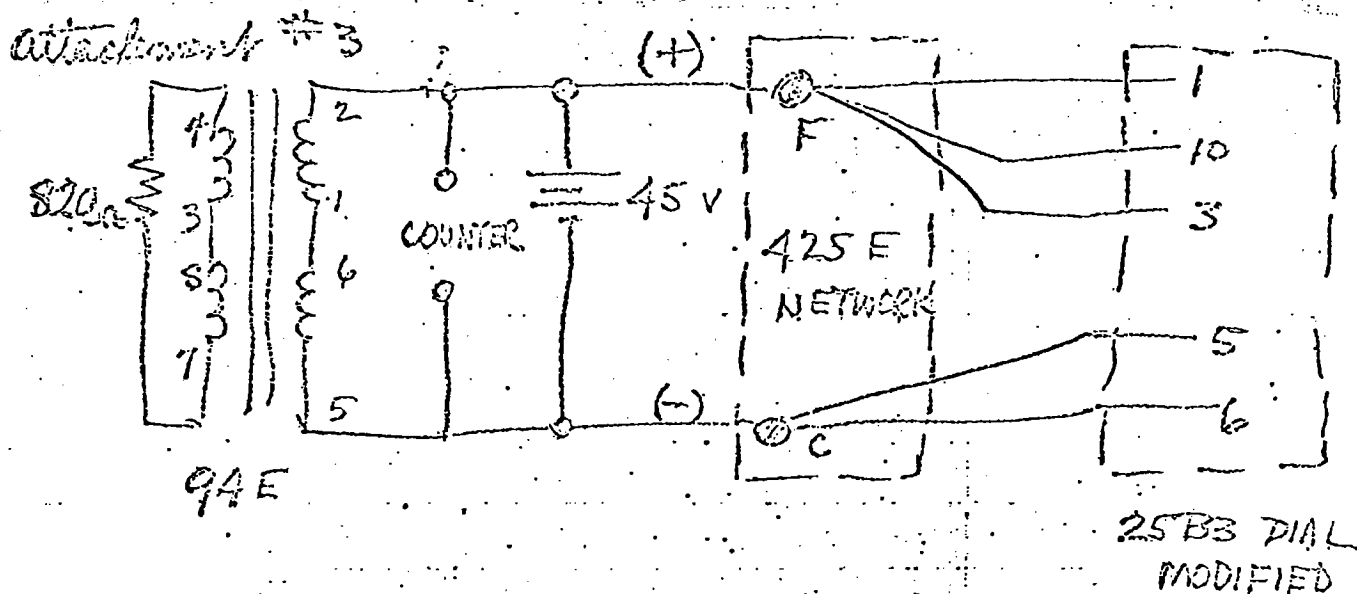
The H4 and L4 single frequencies were obtained by using the micro switches that had been added to the dial (1). The values are well within limits and suitable for dialing any of the 16 frequency combinations. No amplitude measurements were made.

The schematic shown in the second memorandum attached does not provide a working unit per se, since no connection is shown between the minus side of the battery and terminals 5 and 6 of the dial. This was also pointed out in comment 2 of that memorandum.

Both output devices with the equipment were co-axial type plugs which would be difficult to use with standard line terminations and again indicate some other apparatus could have been used in conjunction with this equipment. The adapter for polarity reversal of the output plug possibly indicates some experience with Touch Tone Dials.

[redacted]
BTL [redacted]

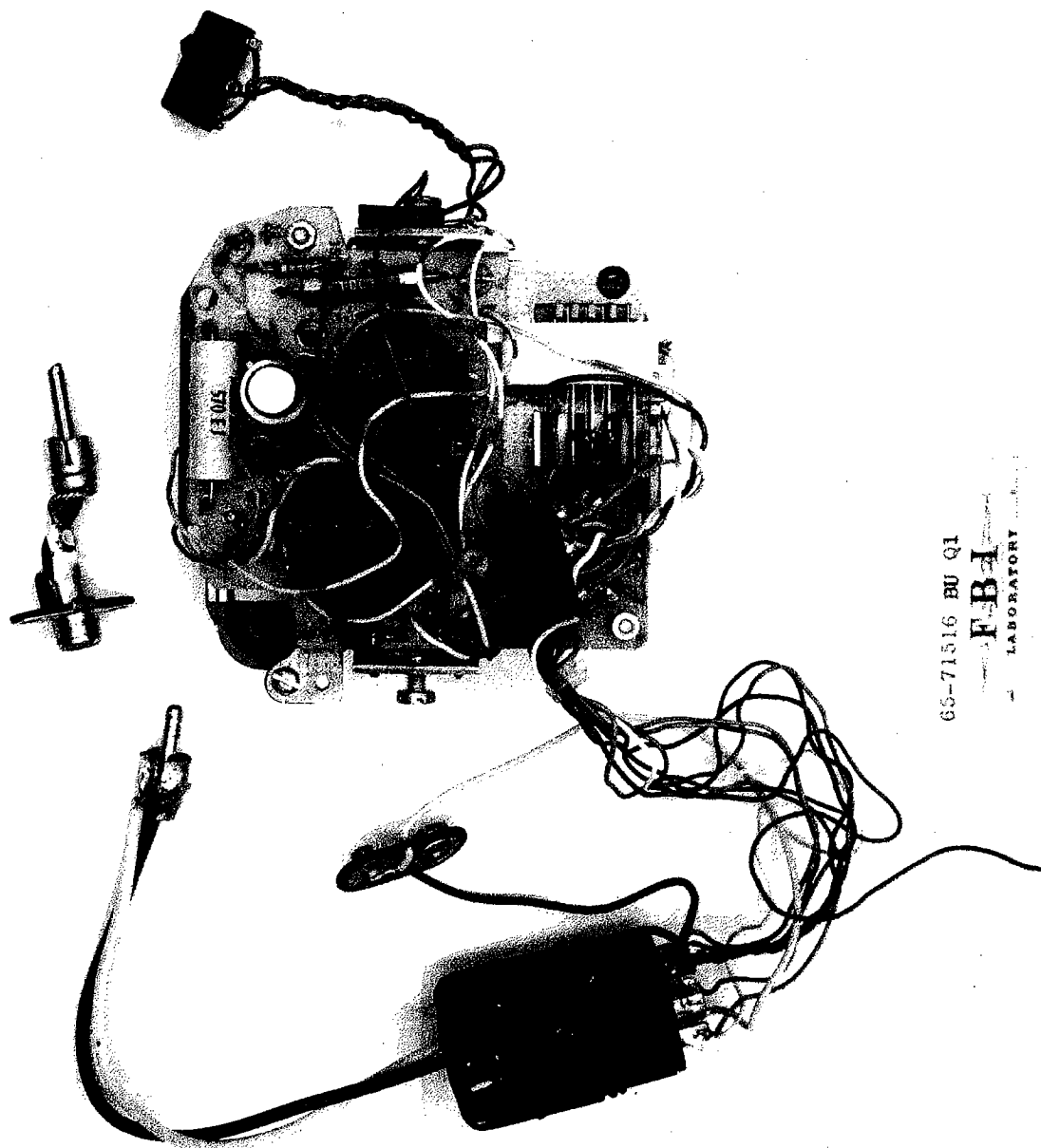
b6
b7C



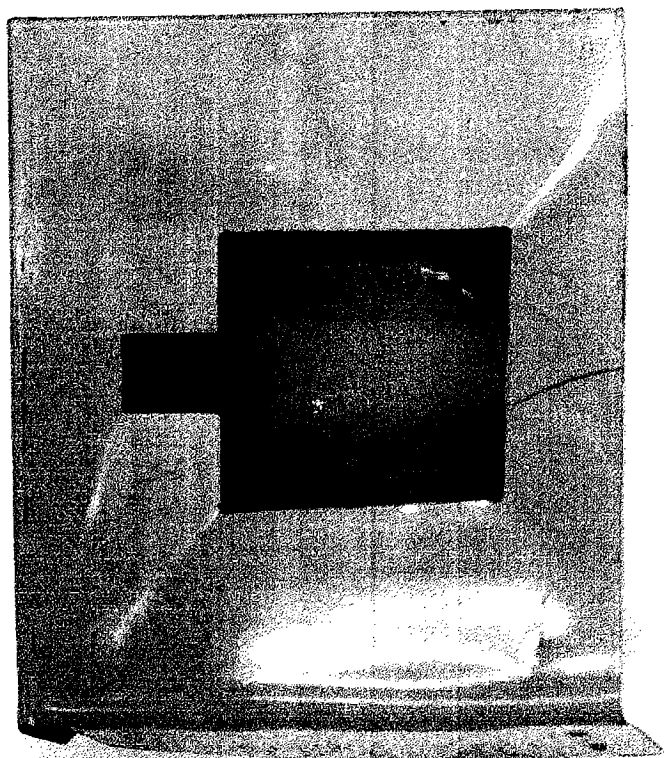
TEST CIRCUIT

5/8/67
 4/RT

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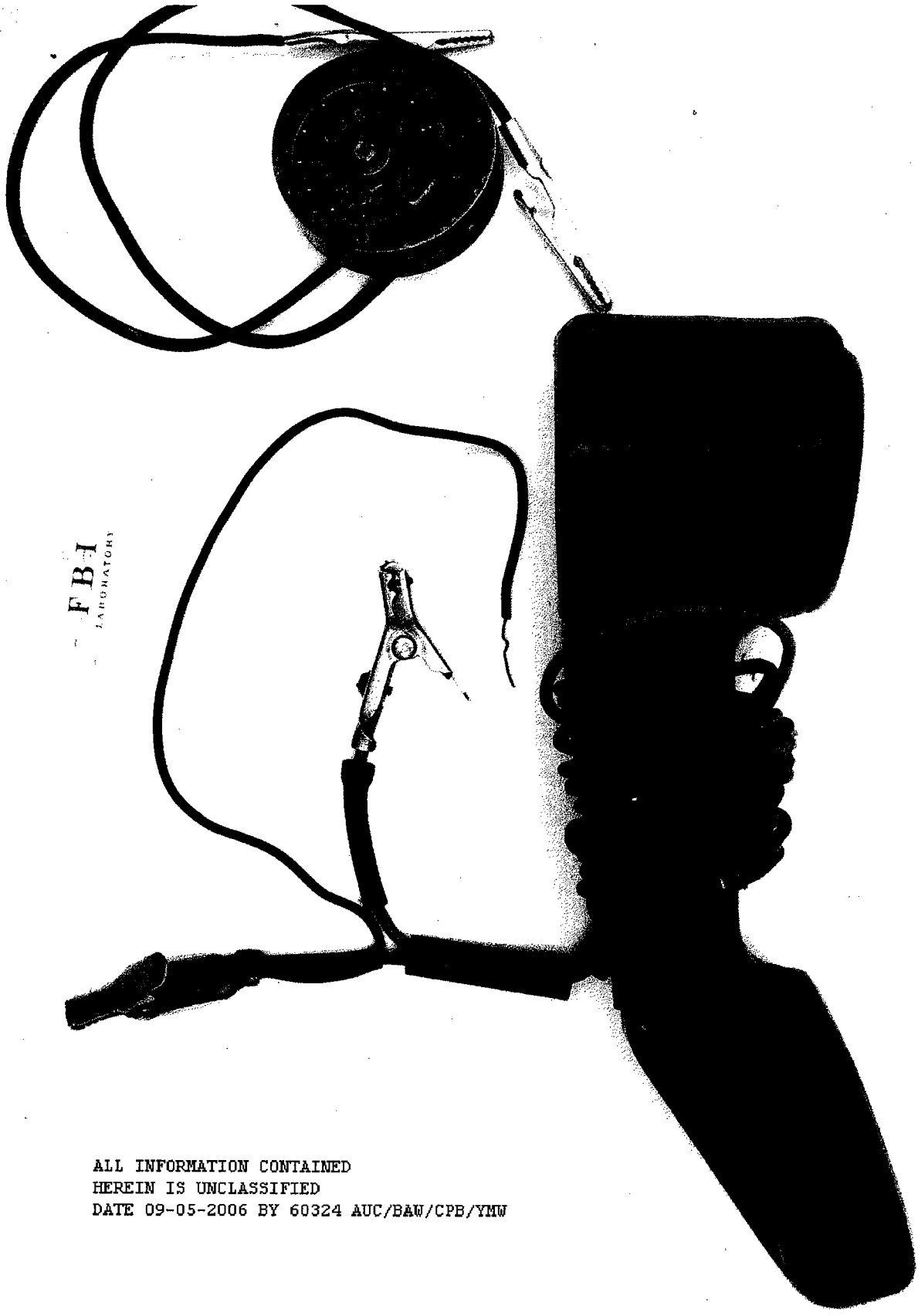
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65-71516 BU Q2
FBI
LABORATORY

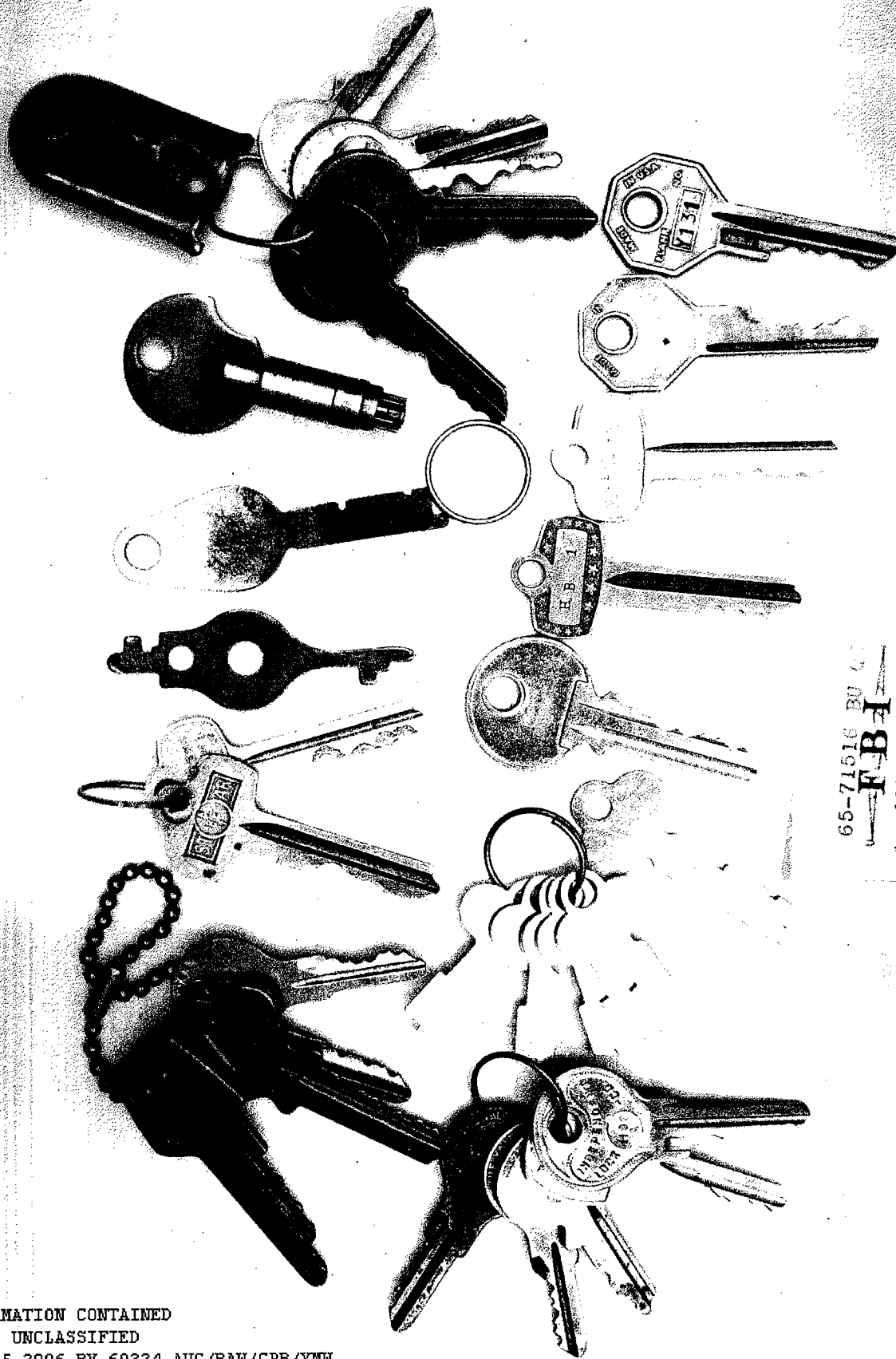


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FBI
LABORATORY

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65-71516 BU 4
FBI
LABORATORY

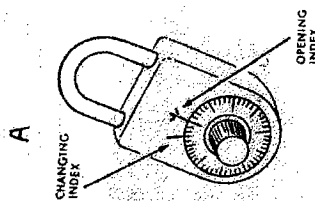
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1 8 5 7

ROCKWELL, INC. U.S.A.

TO CHANGE THE COMBINATION:

6. Dial to unlock and pull shackle open.
7. Slide changing button up, and hold while closing shackle. (See fig. b)
8. Using changing index, dial old combination as in steps 1 thru 3. (See fig. a)
9. Insert changing key in back and turn clockwise. (See fig. c)
10. Using changing index, dial new combination of your choosing as in steps 1 thru 3.
11. Turn change key back and remove.
12. Using new combination as in steps 1 thru 3.



65-71516 BU Q11
FBI
LABORATORY

65-71516 BU Q5
FBI
LABORATORY

65-71516 BU Q10
FBI
LABORATORY

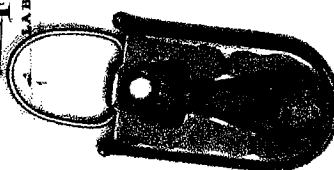
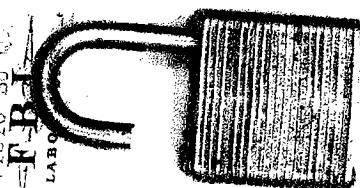
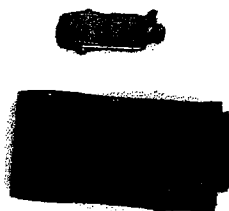
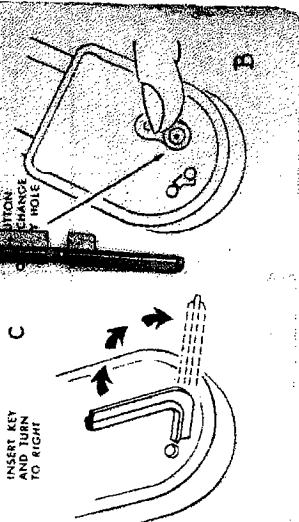
65-71516 BU Q6
FBI
LABORATORY

65-71516 BU Q8
FBI
LABORATORY

65-71516 BU Q12
FBI
LABORATORY

65-71516 BU Q7
FBI
LABORATORY

65-71516 BU Q3
FBI
LABORATORY



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DATE 09-05-2006 BY 60324 AUC/BAW/CPP/YMM
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 ALL INFORMATION CONTAINED

Re H 181432 Gru.e 74 56 75 51 78 0
 L 181436 RZru4 56 56 75 51 82 47
 P 469064 CTy4 61 65 64 61 53 62
 Af M2123478 TFR
 P 409345 10541b 56 52 63 55 59
 OTDs43 70 70 49 54 54
 Mf M 180795 TLS
 P 1199a 51 57 51 50 37
 Me M 123470
 P 359454
 Rh SM 909034 FB 76 59 69
 O 790904 81 44
 P 476681
 Jd M 123478
 P 569087
 Sef 123475
 Da M 619812
 P 495634
 Dg M 410153
 P 854796
 RMCDe P 51--24
 RBTH#3 P 069004

65-71516 BU Q13
 FBI
 LABORATORY

FBI WASH DC

FEDERAL BUREAU OF INVESTIGATION
U. S. DEPARTMENT OF JUSTICE
COMMUNICATION SECTION

APR 24 1967

TELETYPE

Mr. Tolson	_____
Mr. DeLoach	_____
Mr. Mohr	_____
Mr. Wick	_____
Mr. Casper	_____
Mr. Callahan	_____
Mr. Conrad	_____
Mr. Felt	_____
Mr. Gale	_____
Mr. Rosen	_____
Mr. Sullivan	_____
Mr. Tavel	_____
Mr. Trotter	_____
Tele. Room	_____
Miss Holmes	_____
Miss Gandy	_____

FBI PHILA

113PM URGENT 4-24-67 MCS

TO DIRECTOR

FROM PHILADELPHIA (65-6111)

UNSUB; POSSIBLE COMPROMISES OF ARMED FORCES AUTOMON NETWORK,

ESP - X. OO-PH

RE PHTEL APRIL TWENTY LAST.

BUREAU PERMISSION REQUESTED TO CONDUCT INVESTIGATION ONE ZERO TWO FIVE SPRUCE STREET, PHILA., PHI CHI MEDICAL FRATERNITY OF JEFFERSON MEDICAL COLLEGE. PHILA. ANTICIPATES CRIME SCENE SEARCH OF BASEMENT WITH CONSENT OF PERSON IN CONTROL, INTERVIEW OF STUDENTS AND POSSIBLY PROFESSORS AND POTENTIAL INTERVIEWS AND ELIMINATION PRINTS OF INDIVIDUALS WHO HANDLED EQUIPMENT.

b6
b7C

END

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MXS

FBI WASH DC

REC-41

NO APR 24 1967

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286 OCT 5 1970

F B I

Date: 4/27/67

Transmit the following in _____
(Type in plaintext or code)Via AIRTEL REGISTERED MAIL
(Priority)

TO: Director, FBI

FROM: SAC, Philadelphia (65-6111) (P)

SUBJECT: UNKNOWN SUBJECT;
POSSIBLE COMPROMISE OF ARMED
FORCES AUTOVON NETWORK;
ESPIONAGE - X

OO: Philadelphia

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HEREIN IS UNCLASSIFIED
DATE 09-05-2006 BY 60324 AUC/BAW/CPB/YMW

Re Philadelphia teletype to Bureau, dated 4/20/67;
Philadelphia airtel to Bureau, dated 4/24/67; and Bureau
airtel to Philadelphia, dated 4/26/67.

Enclosed herewith for the Bureau are seven copies
of a letterhead memorandum, dated and captioned as above.

It should be noted that at the liaison meeting
with the intelligence agencies on 4/20/67, Xerox copies
of the preliminary memorandum furnished by Bell Telephone
Company were distributed to the interested intelligence
agencies.

In accordance with instructions in referenced
Bureau airtel, no investigation will be conducted, UACB.

3 - Bureau (Encls. 7)
1 - Philadelphia (65-6111)

EAS:BSM
(4)

AGENCY PHILADELPHIA, INT, OSI, A-2, NED, LIAISON
REQ. REC'D _____
DATE FORW. 5/3/67
HOW FORW. _____
BY ARJ/EBB

APR 28 1967
FBI - PHILADELPHIA

REC-31
SEC.

Approved: [Signature]
Special Agent in Charge

Sent _____ M Per _____

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UNITED STATES DEPARTMENT OF JUSTICE

FEDERAL BUREAU OF INVESTIGATION

Philadelphia, Pennsylvania

April 27, 1967

In Reply, Please Refer to
File No.

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED
DATE 09-05-2006 BY 60324 AUC/BAW/CPB/YMW

UNKNOWN SUBJECT; POSSIBLE COMPROMISE OF
ARMED FORCES AUTOVON NETWORK

On April 19, 1967, [redacted]
[redacted], Philadelphia Area, Bell Telephone Company of
Pennsylvania, advised the Philadelphia Office of the Federal
Bureau of Investigation that the Telephone Company had
recovered some electronic equipment, which they had just
discovered had been assembled to simulate the Automatic
Voice Network (Autovon) which was used solely by the Armed
Services.

On April 20, 1967, [redacted] made available to
a Special Agent of the Federal Bureau of Investigation the
box in which the above-mentioned electronic equipment was found.
He stated that on Friday evening, April 14, 1967, Bell
received a call at approximately 8:00 p.m., informing them
that a box was found in the basement of 1025 Spruce Street,
Philadelphia, Pa., containing telephone company equipment.
The house at 1025 Spruce Street is listed as a fraternity
residence for the Phi Chi Medical Fraternity of the Jefferson
Medical College of Philadelphia. At 8:15 p.m., that
evening, [redacted] recovered a box
and left it at the Bell Company Headquarters until Monday,
April 17, 1967, at which time it was turned over to Bell
Telephone Security Officers.

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Examination of this box by Bell Security reflected
it to be olive drab steel, approximately 18" by 6" by 4",
hinged at one end, and secured by two locks, one of which had
been cut. The hasp attached to this box had also been cut.
Bell ascertained that the finder of the box had cut through
the hasp and lock with a hacksaw. Inside the container
were a telephone handset, a dial, a homemade pushbutton
dial pulsating unit, a cord which plugged into this unit

65-11516-3

ENCLOSURE

UNKNOWN SUBJECT; POSSIBLE COMPROMISE
OF ARMED FORCES AUTOVON NETWORK:

with a mole fitting on the other end which would plug into a wall or phone jack. In addition, there were two Ace key blanks, a new Ace lock, and an Ace key that would open Bell security locks. In addition there was a tool used by locksmiths in the making of Ace lock keys, as well as 37 keys, one of which had been soldered and filed so that it would open the upper housing on any Bell coin telephones. This key would not open the Bell coin boxes. Examination of the keys by Bell locksmiths failed to reflect that they would open any locks presently in possession of the Bell Telephone Company of Pennsylvania.

[redacted]
[redacted] was interviewed by Bell Security on April 17, 1967, and could offer no pertinent information other than three people, two men and a girl, were at the house [redacted]

[redacted]

The premises at 1025 Spruce Street were visited by [redacted] on April 17, 1967, at which time the front door was closed but unlocked. [redacted]

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[redacted]

[redacted] and could not remember any strangers in the residence, with the exception of two telephone men, who had been working there the previous week. [redacted] indicated that believing there

UNKNOWN SUBJECT; POSSIBLE COMPROMISE
OF ARMED FORCES AUTOVON NETWORK:

[REDACTED]

[REDACTED] inspected the entire basement at this time, but failed to locate any additional equipment.

On Tuesday, April 18, 1967, [REDACTED] and [REDACTED] were interviewed by Bell Security, and indicated they were at 1025 Spruce Street for

[REDACTED]

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On April 18, 1967, the pushbutton dial pulsating unit was transmitted to Bell Engineering Department for testing and evaluation.

On April 19, 1967, the Engineering Department indicated that preliminary tests developed that the pushbutton unit had possibly been modified in conjunction with the Armed Forces Autovon Network. At this time, a representative of the Bell Telephone Company notified the [REDACTED] Philadelphia, Pa., as well as the Philadelphia Office of the Federal Bureau of Investigation.

On April 20, 1967, representatives of the Bell Telephone Company Security Department, as well as the Engineering Department, met with a representative of the Federal Bureau of Investigation, and advised that a preliminary examination of the touch tone pad in question reflected that

UNKNOWN SUBJECT; POSSIBLE COMPROMISE
OF ARMED FORCES AUTOVON NETWORK:

it was a conventional ten-button touch tone pad used in subscribers' sets. It had been modified by inserting two microswitches into the circuit, which opened up the main frequency leads and substituted other frequency leads for them. On the surface of the pad to the right of the third vertical row of buttons were faintly discernible designations in pencil indicating FO, F, I, and P. The two spaces in the bottom row on either side of the zero key were designated by a star and the letter "A." According to Bell, the vertical designations FO, F, I, and P are used to indicate level of priority on the Autovon service of the Armed Forces which is not considered classified.

The preliminary examination reflected that whoever modified this set was aware of the Autovon priority designations, and by use of the microswitches, would be able to transfer the priority level frequencies to that row of keys on this otherwise conventional touch tone pad. The preliminary examination did not indicate by what method these microswitches were to be operated.

A copy of this preliminary memorandum is attached hereto.

On April 20, 1967, representatives of the Bell Telephone Company of Pennsylvania met with representatives of the Military Intelligence, Office of Special Investigations, and Naval Investigative Service Office, and briefed representatives of these agencies concerning the above equipment. At this time it was agreed that all branches of the services represented would return to their respective units and have visual inspection conducted of all appearances of the Autovon Network pairs at all Government installations involved.

Bell advised that approximately 200 Autovon circuits were located in the Greater Philadelphia area with only 14 multilevel priority (MLP) units adaptable to the above equipment and all located in military and naval installations in the Philadelphia area.



UNKNOWN SUBJECT; POSSIBLE COMPROMISE
OF ARMED FORCES AUTOVON NETWORK:

On April 21, 1967, Bell Engineering concluded tests on the touch tone pad, a copy of which is attached hereto. The laboratory also made available an IBM card, not previously noted, which had been found in the box containing the electronic equipment. Analyses of this card by Bell IBM Systems Specialists reflected it had no practical application to any Bell Telephone function.

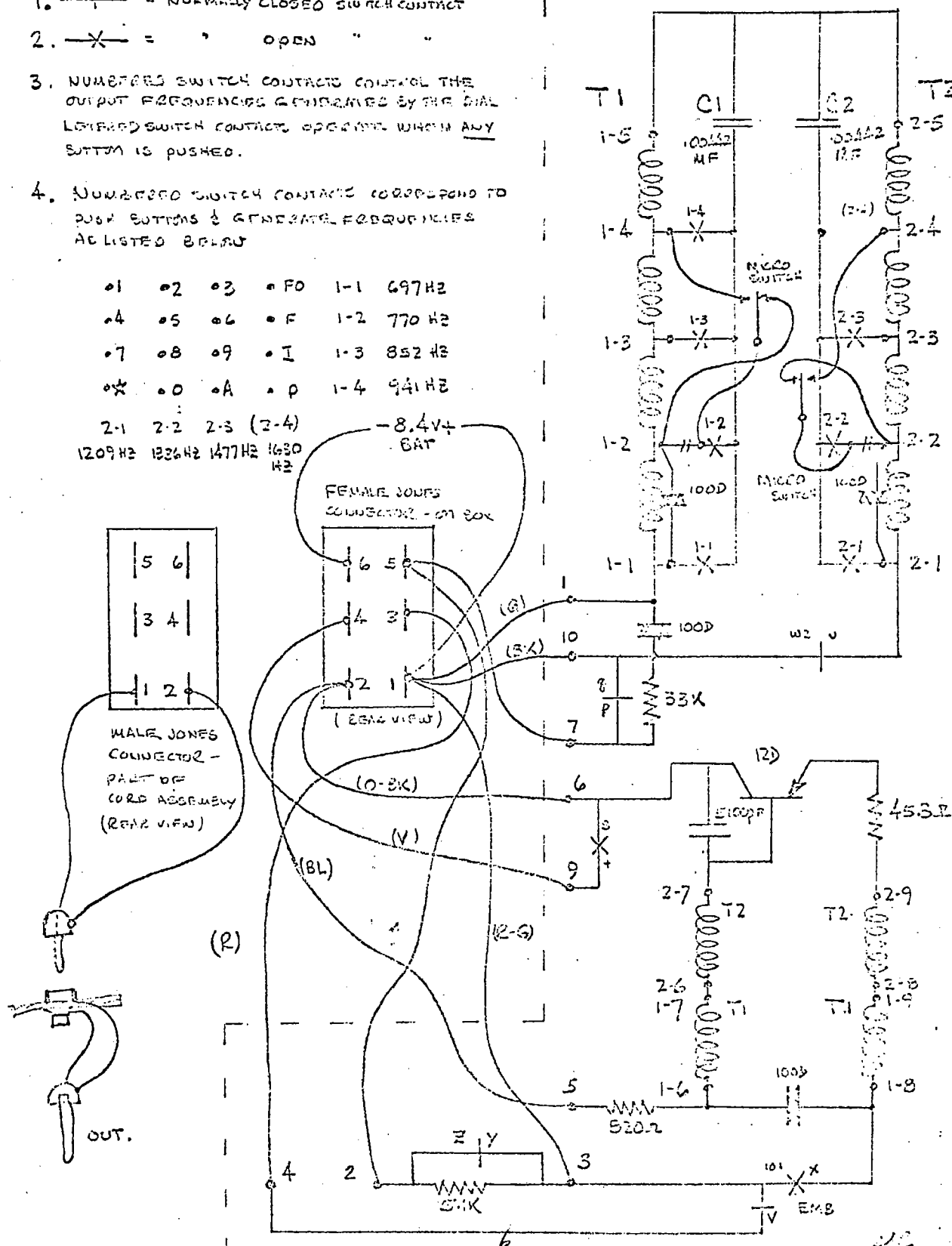
A copy of this IBM card is attached hereto.

SCHEMATIC DRAWING OF MODELS 2553 DIAL AND ASSOCIATED
WIRING & COMPONENTS.

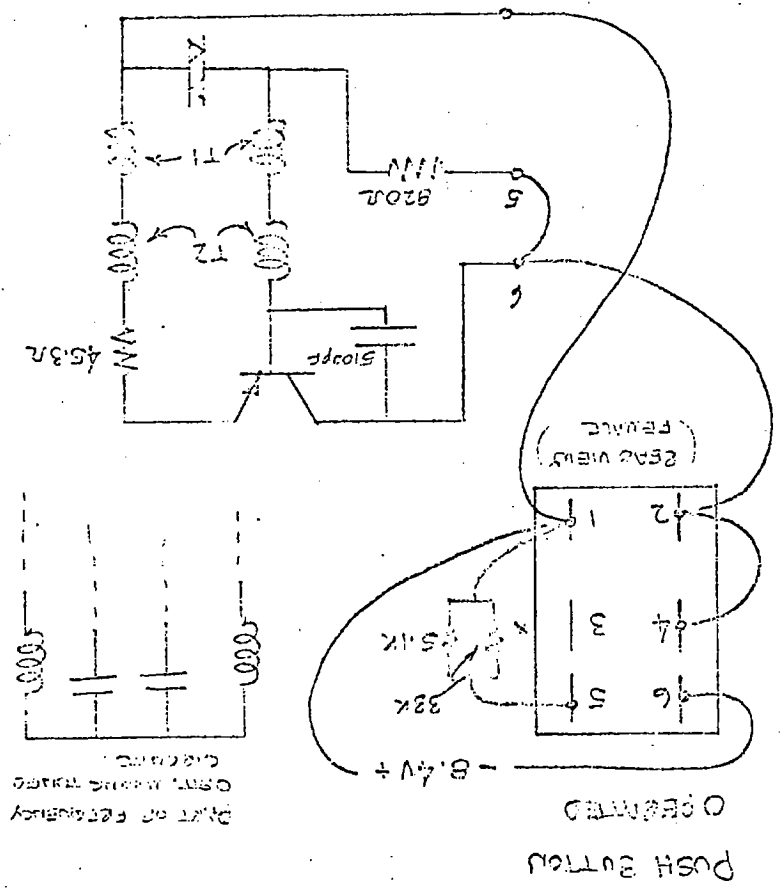
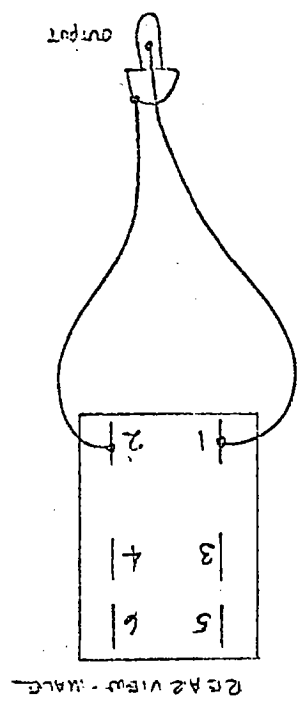
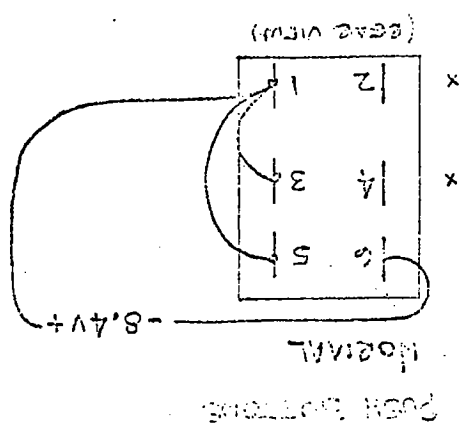
No. 5.

1.  = NORMALLY CLOSED SWITCH CONTACT
2.  = " open " "
3. NUMBERED SWITCH CONTACTS CONTROL THE OUTPUT FREQUENCIES GENERATED BY THE DIAL LOCKED SWITCH CONTACT OPERATED WHEN ANY BUTTON IS PUSHED.
4. NUMBERED SWITCH CONTACTS CORRESPOND TO PUSH BUTTONS & GENERATE FREQUENCIES AS LISTED BELOW

01	02	03	0 F0	1-1	697 HZ
04	05	06	0 F	1-2	770 HZ
07	08	09	0 I	1-3	852 HZ
0*	00	0A	0 p	1-4	941 HZ
2-1	2-2	2-3	(2-4)		-8.4V+
1209 HZ	1234 HZ	1477 HZ	1630 HZ		BAT



SIMPLIFIED SCHEMATIC OF THE CIRCUIT
 AS SEEN FROM THE FRONT OF THE BOARD



ADDITIONAL COMMENTS

1. CONNECTION OF THE OUTPUT LEADS TO A TELEPHONE LINE (CENTER PIN OF OUTPUT PLUG TO "+" SIDE OF LINE, SHELL OF OUTPUT PLUG TO "-" SIDE OF LINE) WILL CAUSE THE DIAL CIRCUITRY AND CAUSE THE DIAL PULSES TO BE GENERATED WHEN A PUSH BUTTON IS OPERATED.

THE "QUICK DIAL" CIRCUITRY ASSOCIATED WITH DIAL TERMINALS 1 & 10 AND SWITCH CONTACT U2W2 IS NOT OPERATIONAL. THIS TERMINAL WILL APPEAR TO BUILD UP SLOWLY WHEN A BUTTON IS PUSHED.
2. THE 6.4V BATTERY COULD BE USED TO POWER THE DIAL IN THE PULSED EXTENSION WIRING IS PROPOSED.

THE WIRING OF THIS JONES CONNECTION SUGGESTS THAT THE BOX WAS DESIGNED TO OPERATE WITH OTHER CIRCUITRY OR IN SOME OTHER MANNER — OTHERWISE, WHY PROVIDE THE BATTERY AND THE WIRING ON PINS 3, 4 & 5 OF THE CONNECTION?
3. THE SOLAR JONES SHOW SOME DEGREE OF WEAR & DISCOLORATION IN WIRING & COLORING.
4. RCA MERCURY BATTERIES ARE NOT TOO COMMON — ONE POSSIBLE SOURCE IS U.S. 22 C 218 SUI AT IN DALL.

Re H 181432	Gru.e 74 56 75 51 78 0
L 181436	RZru4 56 56 75 51 82 47
P 469064	CTy4 61 65 64 61 53 62
Af M2123478	TFR
P 409345	10541b 56 52 63 55 59
	OTDs43 70 70 49 54 54
Mf M 180795	TLS
P	1199a 51 57 51 50 37
Me M 123175	
P 359454	
Rh SM 909034	FB <u>76</u> <u>59</u> <u>69</u>
O 790904	81 44
P 470681	
Jd M 123478	
P 569087	
Sef 123475	
Da M 619812	
P 495634	
Dg M 410153	
P 854796	
RMCDc P 51--24	
RBTH#3 P 069004	

[illegible]

April 21, 1967

THE BELL TELEPHONE COMPANY OF PENNSYLVANIA

PRELIMINARY - MEMORANDUM

The following notes and attachments summarize the results of a preliminary examination of a box containing a TOUCH-TONE dial and other miscellaneous components which was suspected of having been modified to permit fraudulent use of Telephone Company message telephone facilities.

The box was received from [redacted] of the Headquarters Security Organization, as the afternoon of April 18, 1967. An examination of the box reveals the following points:

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1. The box itself appears to be a standard Telephone Company (TELCO) can cover used to protect strips of relays or other telephone components which has been cut down from its original size. This is inferred from the construction and demensions and the color and appearance of the gray paint.
2. The TOUCH-TONE dial is a standard TELCO dial, type 2SB3, which has been modified as discussed later and as shown in Attachment 1.
3. Two micro-switches found attached inside the open side of the box were connected to the dial as discussed later and as shown in Attachment 1.
4. A 6-terminal female Jones connector was also attached inside the open side of the box and was connected as shown in Attachment 1.
5. An 8.4V RCA merc. battery, type (exhausted) was also found in the box and connected as shown in Attachment 1.
6. Penciled lightly on the surface of the box was the designation ~~A~~, A, F, I and two other letters which could not be identified. The location of the symbol and letters corresponded to that shown on Attachments 2 and 3 which describe 66 type TOUCH-TONE dials used in the AUTOVON network. This is the only known use of these symbols and of the 4th row of push buttons. Standard TOUCH-TONE dials have 10 buttons and some few special types have 12.
7. The circuitry of the box as found is shown on Attachment 1. The standard 10 button TOUCH-TONE dial generates a different combination of two frequencies for each button pushed. The 16 button AUTOVON dial is similar except that an additional frequency is present for the 4th row as shown on Attachment 3.

The modification is such that pushing one or the other of the micro-switch transfers the internal connections of the dial in such a way that the standard 10 button dial can generate all 16 combinations of frequencies which can be generated by an AUTOVON dial. For example, pushing one micro-switch allows the "4", "5", "6" push buttons to generate the K, O and A combination respectively. In the same manner, pushing the other micro-switch allows the 2, 5, 8 and O push buttons to generate the frequency combinations FO, F, I and P respectively. In summary, it appears that the modified dial is capable of generating the same frequencies as an AUTOVON telephone set.

8. A 2-conductor cord having a 6 terminal male Jones connector on one end and a male RCA-type phono plug on the other, together with an adapter consisting of a female RCA-type jack and a modified RCA-type plug was also examined. The connections and purpose have not yet been analyzed.
9. It would appear that other equipment might be involved since several wires from the dials and one side of the RCA battery was brought out to the Jones connector but were not connected in the matching cord discussed in item 9.
10. The ability of the person who modified the TOUCH-TONE dial to find the proper connection needed to generate the frequency corresponding to the 4th row of buttons suggests possession of Bell System drawings, opportunity to examine the wiring of an AUTOVON dial or a high degree of electronic intelligence. This was not a "hit or miss" modification.
11. The 25B3 dial has only limited use in 3A speaker phone sets or perhaps other specialized applications, therefore it might be traced. The dates on several components indicated that the dial was manufactured after April, 1965 - probably in the second quarter of 1965.
12. While it is felt that there was no further modification, an opportunity to actually determine how the dial might have been connected and to measure the actual output frequencies was not available.
13. This memorandum is preliminary. Additions or changes may be necessary after further study.

Attachment

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MODIFIED 258B TOUCHTONE DIAL

ION-501-164-105-

REVISION 10 6 1964
PARTS LIST: KS-13490, LI
TO 1, 0, A

() INDICATES CURRENT COLOR CODE.
[] INDICATES MD COLOR CODE.
* SPADE TIPPED LEADS.

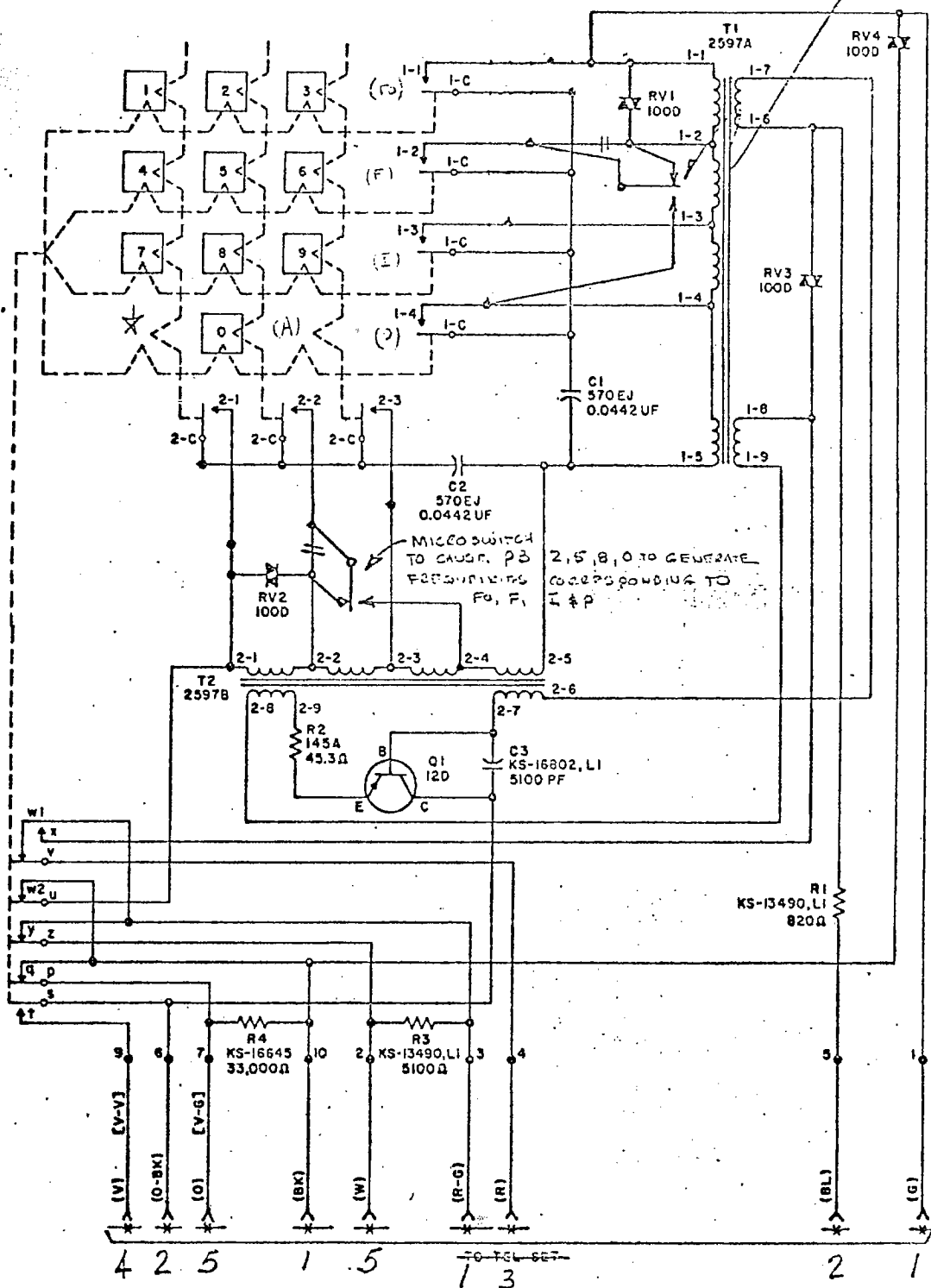


Fig. 10 — 25B and A Dials

NOTE — POINTERS NUMBERED REFER TO JONES CONNECTOR TERMINAL NUMBERS.

BAT
1
6

1 13

STATION DIALS

66-TYPE

IDENTIFICATION, OPERATION, AND MAINTENANCE

1. GENERAL

1.01 The 66-type dial has sixteen pushbuttons; ten used in "number-letter" dialing and six used to provide special service features.

1.02 The 16 pushbuttons and multifrequency oscillator are a unit. Flat tabs extending from each side of the unit provide facilities for mounting the dial in the associated telephone sets.

1.03 Photos of dials used in this section are of shop models, production units may differ slightly.

2. IDENTIFICATION

66A3A DIAL

2.01 The 66A3A dial (Fig. 1) is initially intended for use in the 3568HT-, 3640A1A-, and 3641A1A-type telephone sets for the Automatic Voice Network (AUTOVON) project.

2.02 The 66A3A dial may also be used in a standard telephone set circuit using a 425E or equivalent network. The necessary switching for use with speakerphone is provided. Eleven spade-tipped leads extend from the dial to connect to telephone set terminals.

2.03 The six special service buttons have snap-on caps which may be removed and replaced with caps having other designations.

2.04 The right-hand row of pushbuttons are red. All other pushbuttons, including the "A" and "star ☆" special service buttons, are medium gray.

66A4B DIAL

2.05 The 66A4B dial (Fig. 2) is initially intended for use in telephone sets in the AUTOVON project where a lighted dial is de-

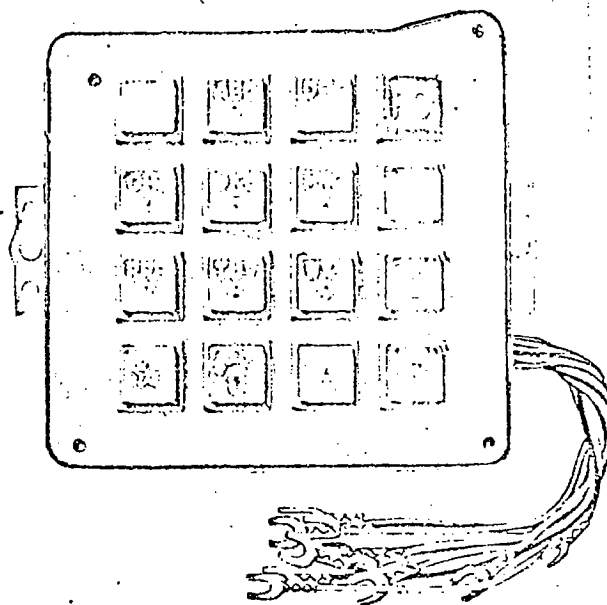


Fig. 1 — 66A3A Dial — Front View

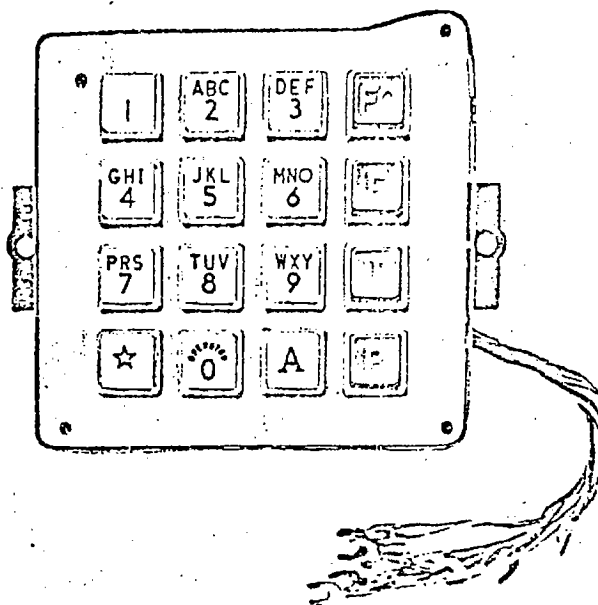


Fig. 2 — 66A4B Dial — Front View

3.03 The oscillator generates selected frequencies and feeds them over the line to the central office. In the central office, the two frequency signals are received by a converter unit. This converter unit translates the frequencies into codes suitable to the particular central office.

3.04 The relationship of pushbuttons to available frequencies is shown in Fig. 7. A pushbutton located at a specified intersection selects those two frequencies. For example, depressing button 9 selects and transmits 851 and 1477 cycles to the central office.

4. WIRING SCHEMATIC

4.01 Connections to and schematics for the 66-type dials are shown in the following wiring schematics:

Fig. 8 — 66A3A Dial — Wiring Schematic

Fig. 9 — 66A4B Dial — Wiring Schematic

Fig. 10 — 66B3A Dial — Wiring Schematic

Fig. 11 — 66B4B Dial — Wiring Schematic

Fig. 12 — 66C3A Dial — Wiring Schematic

Fig. 13 — 66D3A Dial — Wiring Schematic

Fig. 14 — 66D4B Dial — Wiring Schematic

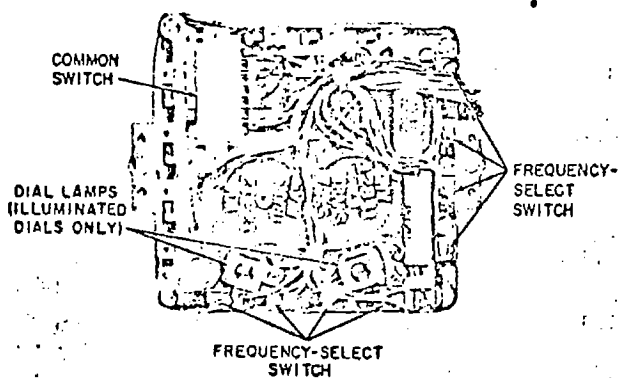


Fig. 6 — 66-Type Dial — Rear View

5. MAINTENANCE

5.01 Replace defective dials.



Maintenance of 66-type dials consists only of determining if the dial is defective. Do not attempt adjustments of the dial in the field.

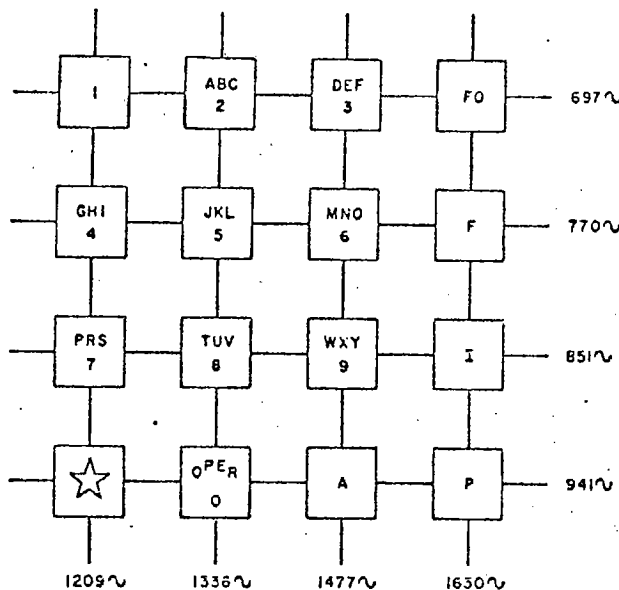


Fig. 7 — Dial Frequencies

5.02 If unable to dial, proceed as follows:

- (1) Check all connections between dial and telephone set circuit.



The 66-type dial will function only when the orange-black dial lead is negative (-) and the green lead is positive (+).

- (2) Check for presence of dial tone. If no dial tone is heard, make check with 1011B test set at connecting block. Make normal test of telephone set components as described in appropriate sections.

- (3) Break dial tone by depressing button 2. If unable to break dial tone, restore switch hook and connect 1011B test set across incoming line terminations of network. Using the

TABLE A

DIALS

DIAL NUMBER	PUSHBUTTON CHARACTERS	USES	REMARKS	FIG. NO.
25A1	Numbers only	General purpose; in desk, wall, and panel mounted telephone sets	Has standard common switch. Cannot be used with 3A speakerphone.	1
25A3	Letters and Numbers	In telephone sets for 3A speakerphone systems	Similar to 25A3 dial but has an expanded common switch and additional leads.	2 & 3
25B3		Forms part of the 26B dial (MD)	Similar to 25A3 dial but has expanded common switch and additional leads to card reader.	4
25D3 (MD)		In 1A2, 2A2, and 1235 coin telephone	Similar to 25A3 dial but has modified circuit for use with coin telephones.	5
25E3		In Data system	Similar to 25A1 but has an expanded common switch and a modified circuit board.	11
25F1		Forms part of 26C dial	Similar to 25F1 dial but has additional leads to card reader.	12
25G1	Numbers only	For use in PRINCESS sets	Dial light illuminates the pushbuttons by means of a clear plastic light guide mounted within the dial.	12
25H4	Letters and Numbers	In sets associated with 757A PBX	Has expanded common switch providing additional functions necessary for use with 757A PBX.	6
25J3		May be used on all switchboards	Plug ended — to mount on switchboard, a 50A dial mounting must be used.	4
25K3		1234G-type coin collector telephone	Similar to 25A3 dial but has modified circuit for use with coin telephones.	7 & 8
25L3		Forms part of the 26D dial	Similar to 25D3 but with minor common switch wiring changes. Has additional leads to card reader. Replaces the 25D3 dial.	11
25M3		Forms part of the 26E card dialer on 557A and B PBX's	Plug ended to mount on switchboard card dialer.	5
25N3	Letters and Numbers	May be used on all switchboards	Plug ended to mount on switchboard, use a 50A dial mounting. Replaces the 25K3 dial.	14
25S3		Forms part of the 26G card dialer on 557A and B PBX's	Plug ended to mount on switchboard card dialer. Replaces the 25N3 dial.	15
25T3		For use in "CALL-A-MATIC" telephone set	Spade tip leads connect to telephone circuit and plug ended to connect to 51A CALL-A-MATIC dial.	16
25U3				17

* Dials are available in gray only.

Re H 181432 Gru.e 74 56 75 51 78 0
 L 181436 RZru4 56 56 75 51 82 47
 P 469064 CTy4 61 65 64 61 53 62
 Af M2123478 TFR
 P 409345 10541b 56 52 63 55 59
 OTDs43 70 70 49 54 54
 Mf M 180795 TLS
 P 1199a 51 57 51 50 37
 Me M 123478
 P 359454
 Rh SM 909034 FB 76 59 69
 O 790304 81 44
 P 476631
 Ud M 123478
 P 569087
 Sef 123475
 Da M 619812
 P 495634
 Dg M 410153
 P 854796
 RMCDc P 51--24
 RBTH#3 P 069004

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FEDERAL BUREAU OF INVESTIGATION
WASHINGTON, D. C. 20535

DATE: 5/22/67

TO: SAC, PHILADELPHIA

Re: TECHNICAL EQUIPMENT
UNKNOWN SUBJECT
POSSIBLE COMPROMISE OF ARMED
FORCES AUTOVON NETWORK;
ESPIONAGE-X

Invoice of Contents

ONE EACH Q1, Q2, Q3, AND Q4.

718756

☐ Crypt.-Trans.
☐ Document
☒ P. 809
☒ Radio Engineering
☐ LFPS

EVIDENCE

EVIDENCE

EVIDENCE

EVIDENCE

Special Instructions:

Mail Room: Show shipment date and registry number.
Shipping Room: Show shipment date; bill of lading number;
initial invoice; return to Section checked in block; after
initialing in block, invoice to be placed in administrative file.

FBI File No. 65-71516

REBULET 5/18/67

MAILED 6

MAY 23 1967

COMM-FBI

VIA REGISTERED MAIL
5 MAY 23 1967

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED
DATE 09-05-2006 BY 60324 AUC/BAW/CPB/YMW

FEDERAL BUREAU OF INVESTIGATION
U. S. DEPARTMENT OF JUSTICE
COMMUNICATION SECTION

APR 20 1967

TELETYPE

017(13b) to PH
com 1 Baw
8/1/67

Mr. Tolson	✓
Mr. DeLoach	✓
Mr. Mohr	✓
Mr. Bishop	✓
Mr. Casper	✓
Mr. Callahan	✓
Mr. Conrad	✓
Mr. Felt	✓
Mr. Gale	✓
Mr. Rosen	✓
Mr. Sullivan	✓
Mr. Tavel	✓
Mr. Trotter	✓
Tele. Room	✓
Miss Holmes	✓
Miss Gandy	✓

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FBI WASH DC

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED
DATE 09-05-2006 BY 60324 AUC/BAW/CPB/YMW

FBI PHILA

812 PM 4/20/67 URGENT EJG

TO DIRECTOR

FROM PHILADELPHIA /65-NEW/

UNKNOWN SUBJECT

UNSUB ; POSSIBLE COMPROMISE OF ARMED FORCES AUTOVON NETWORK; ~~ESP-X~~

ESPIONAGE

RE PH TEL CALL TO BUREAU THIS DATE.

BELL TELEPHONE SECURITY PHILA. ADVISED TODAY CALL

RECEIVED EIGHT PM, APRIL FOURTEEN LAST THAT TELEPHONE EQUIPMENT FOUND
IN BASEMENT OF MEDICAL FRATERNITY, ONE ZERO TWO FIVE SPRUCE ST. PHILA.
REPAIRMAN PICKED UP U.S. ARMY METAL BOX, EIGHTEEN BY SIX BY FOUR INCHES,
SECURED BY TWO LOCKS, ONE OF WHICH HAD BEEN SAWED OFF. BOX TURNED
OVER TO BELL SECURITY OFFICE, APRIL SEVENTEEN LAST WHEN FOUND TO CONTAIN
TELEPHONE HANDSET, DIAL, HOMEMADE PUSH-BUTTON DIAL PULSATING UNIT
OR PAD, CORD THAT PLUGS INTO WALL OR PHONE JACK, THIRTYSEVEN TELEPHONE
TYPE KEYS, BLANKS USED TO MAKE KEYS, ACE LOCK AND KEY BLANKS,
ACE KEY WHICH WOULD OPEN BELL TELEPHONE HOUSING BUT NOT COIN BOX.

CONTACTED

END PAGE ONE.
COPIES DESTROYED

286 OCT 13 1967 MAY 25 1967

MCT-6

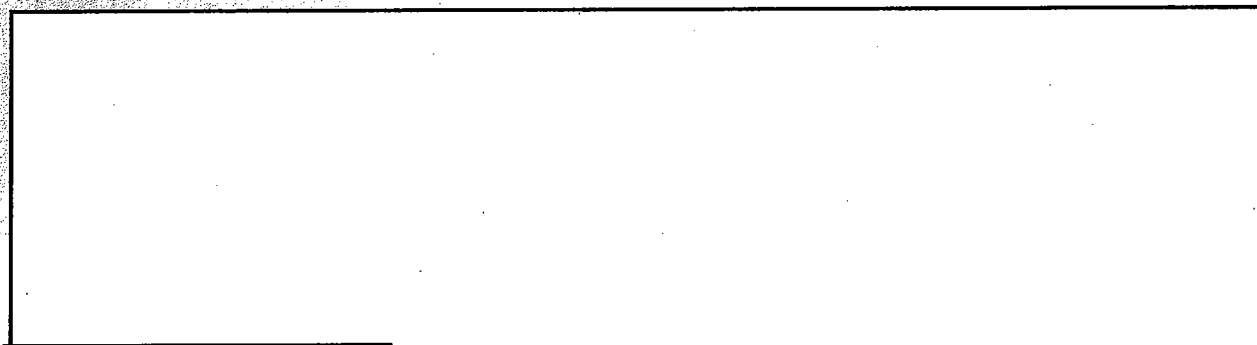
11 MAY 19 1967


71605

NAT. SEC. REG.

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PAGE TWO



 EQUIPMENT TURNED OVER TO BELL'S LAB FOR TESTING SINCE SECURITY BELIEVED IT TO BE USED TO DEFRAUD PHONE COMPANY. ANALYSIS OF PUSH-BUTTON DIAL PULSATING UNIT OR PAD REFLECTED IT TO BE MODIFIED BY INSERTING TWO MICRO-SWITCHES INTO CIRCUIT WHICH OPENED UP MAIN FREQUENCY LEADS AND SUBSTITUTED OTHER FREQUENCY LEADS FOR THEM. FAINT MARKINGS ON PAD REFLECTED LETTERS FO, F, I AND P WHICH ACCORDING TO BELL HAVE UNIQUE FUNCTION ON AUTOMATIC VOICE NETWORK USED SOLELY BY ARMED SERVICES. WHEN SECURITY ASPECT DISCOVERED, FBI NOTIFIED. AUTOVON SIMILAR TO WATS* WITH WORLDWIDE MILITARY

END PAGE TWO

*WATS = WIDE AREA TELEPHONE
SERVICE (DOMESTIC CIVILIAN)

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PAGE THREE

APPLICATION WITH PRIORITY BUTTONS WHICH
OVERRIDE ALL OTHER CALLS. BELL ENGINEERS BELIEVE WHOEVER MODIFIED
UNIT OR PAD WAS AWARE OF PRIORITY DESIGNATIONS AND BY USE OF MICRO-
SWITCHES WOULD BE ABLE TO TRANSFER PRIORITY LEVEL TO ADAPTED TOUCH TONE
PAD. ENGINEERS OF OPINION IF USER HAD ACCESS TO AUTOVON CIRCUIT, HE COULD
UTILIZE TOP PRIORITY BUTTON TO KNOCK OUT ALL OTHER MESSAGES AND WITH
SUCH ACCESS, COULD MONITOR AUTOVON CALLS WITH EQUIPMENT AVAILABLE.

AUTOVON SYSTEM NOT CLASSIFIED: HOWEVER CONTRACT AND DEVELOPMENT CLASSI-
FIED SECRET. TWO HUNDRED AUTOVON CIRCUITS IN PHILA AREA WITH ONLY FOUR-
TEEN MULTI-LEVEL PRIORITY UNITS (MLP) ADAPTABLE TO ABOVE EQUIPMENT
AND ALL MILITARY AND NAVAL INSTALLATIONS IN PHILA AREA. REPRESENTATIVES
OF BELL, ^{NAVY INTELLIGENCE} NISO, ^{AIR FORCE} ARMY INTELLIGENCE, ^{OSI} OSI, AND COMMUNICATIONS OFFICER,
FOURTH NAVAL DISTRICT, MET AT PHILA. BY REQUEST IN ^{Bureau} ~~BU~~ OFFICE THIS
AFTERNOON AND ADVISED OF ABOVE. BELL SECURITY RECOMMENDED IMMEDIATE
CHECK OF AUTOVON EQUIPMENT AND TERMINALS AS TO POSSIBLE TAMPERING.
END PAGE THREE

PAGE FOUR

AGENCIES ADVISED THEY WOULD COMPLY AND ALERT THEIR COMMUNICATIONS FACILITIES.

PHILA RECOMMENDS CONTACT THROUGH ^ILIASON WITH MILITARY TO INSURE NECESSARY CHECKS BEING UNDERTAKEN. PAD WILL BE MADE AVAILABLE TO PHILA TOMORROW AND WILL BE FORWARDED TO LABORATORY WITH TECHNICAL REPORT. PHILA FOLLOWING MATTER CLOSELY IN EFFORT TO DEVELOP OWNER OF EQUIPMENT. BUREAU WILL BE KEPT ADVISED OF ALL PERTINENT DEVELOPMENTS.

LETTERHEAD MEMORANDUM
LHM FOLLOWS.

CORR LO HOLD PLEASE

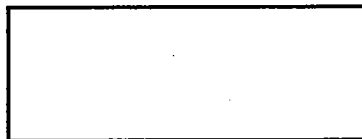
CORR PAGE ONE LINE ELEVEN AFTER WORD SEVEN INSERT WORD PHONE,
PAGE THREE LINE THIRTEEN DELETE WORD SEVEN ,ALSO
PAGE FOUR LINE ONE WORD FIVE SHOULD BE COMPLY
ENDMXS

FBI WASH DC

Rec'd received
by Branigan

Xerox copies to : Messers -

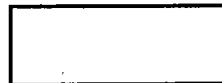
cc - Rosen &



DELOACH

Rosen

SULLIVAN



b6
b7C

UNITED STATES GOVERNMENT

Memorandum

TO : DIRECTOR, FBI (65-71605)

FROM : SAC, PHILADELPHIA (65-6111) (P)

SUBJECT: UNSUB; Possible Compromise of
Armed Forces Autovon Network
ESPIONAGE - X
(OO: Philadelphia)

DATE: 7/13/67

Re Laboratory report dated 5/18/67.

Material originally obtained from Bell Telephone
was returned to them on 6/2/67.

NISO and Army Intelligence locally have made
routine inquiries concerning status of case and were advised
that case was referred to Department of Defense for opinion
as to whether or not equipment belongs to military.

Bureau is requested to advise if such an opinion
has been received to date.

2- Bureau (65-71605)
1- Philadelphia (65-6111)

EAS/mcd
(3)

EX-108

REC 31

JUL 14 1967

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED
DATE 09-05-2006 BY 60324 AUC/BAW/CPB/YMW



5010-108

Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

Domestic Intelligence Division

INFORMATIVE NOTE

Date 4/20/67

Autovon is the military name for the Armed Forces Automatic Voice Network, which is a world-wide military telephone system used solely by the Armed Forces.

The information in attached will be furnished to the Defense Department to determine the significance of the instrument described in attached.

Upon examination by the FBI Laboratory, determination will be made as to what investigation will be required by the Bureau.

TJS:ts

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED

b6
b7C

SAC, Philadelphia (65-6111)

8/2/67

b6
b7C

Director, FBI

65-71516-5

1 -

[Redacted Box]

Cal

REC-134

UNKNOWN SUBJECT; Possible Compromise of
Armed Forces Autovon Network
ESPIONAGE - X

EX-113

Reurlet 7/13/67.

Bureau has not received opinion from
Department of Defense as to whether equipment involved
in this matter belongs to the military. You will be
advised upon receipt of same.

ARJ:ngp *mgp*
(4)

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED
DATE 09-05-2006 BY 60324 AUC/BAW/CPB/YMW

204/3

MAILED 9
AUG 2 1967
COMM-FBI

Tolson _____
DeLoach _____
Mohr _____
Wick _____
Casper _____
Callahan _____
Conrad _____
Felt _____
Gale _____
Rosen _____
Sullivan _____
Tavel _____
Trotter _____
Tele. Room _____
Holmes _____
Gandy _____

SE
AK

VNE 3 6 10 67

9/11

55 AUG 10 1967
AUG 29 1967

MAIL ROOM ☐ TELETYPE UNIT ☐

SAC, Philadelphia (65-6111)

8/17/67

Director, FBI (65-71605)

1 -

b6
b7C

UNKNOWN SUBJECT; Possible
Compromise of Armed Forces
Autovon Network
ESPIONAGE - X

ReBulet 8/2/67.

On 8/14/67 it was determined through liaison channels that according to the Security Officer, Defense Communications Agency (DCA), this matter was referred by DCA headquarters to the appropriate Philadelphia office (presumably the Army) for handling.

In view of this, no further action appears warranted and you should advise NISO and Army Intelligence locally that no further action is contemplated by Bureau concerning this matter.

ARJ:ngp *ngp*
(4)

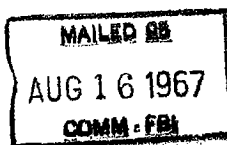
REC 30 *65-71576-6*

EX-113

18 AUG 16 1967

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED
DATE 09-05-2006 BY 60324 AUC/BAW/CPB/YMW

Tolson _____
DeLoach _____
Mohr _____
Bishop _____
Casper _____
Callahan _____
Conrad _____
Felt _____
Gale _____
Rosen _____
Sullivan _____
Tavel _____
Trotter _____
Tele. Room _____
Holmes _____
Gandy _____



ARJ
57 AUG 22 1967

MAIL ROOM ☐ TELETYPE UNIT ☐

UNITED STATES GOVERNMENT

Memorandum

TO : DIRECTOR, FBI (65-71605)

FROM : SAC, PHILADELPHIA (65-6111) (P)

SUBJECT: UNKNOWN SUBJECT;
POSSIBLE COMPROMISE OF ARMED FORCES
AUTOVON NETWORK
ESPIONAGE - X

DATE: 10/25/67

Re Bureau letter to Philadelphia 8/17/67, indicating that the Security Officer, Defense Communications Agency (DCA), had referred this matter to the appropriate Philadelphia Office (presumably the Army) for handling. The above information was furnished to NISO and Army Intelligence locally on 8/29/67.

Since receipt of referenced letter, information has been received concerning the arrest of [redacted] suspect in instant case, at West Chester, Pa., in connection with telephone coin-box robberies in Pennsylvania and New Jersey. This information was immediately furnished to NISO and Army Intelligence for information purposes.

On 10/13/67, the 109th Military Intelligence Group advised that they had no indication as to what unit or department was conducting captioned investigation.

b6
b7C

Request of Bureau

The Bureau is requested to determine through liaison channels to which organization the [redacted] DCA, referred above case to in order that he may be furnished information concerning [redacted].

2- Bureau (65-71605) (RM)
1- Philadelphia (65-6111)
EAS/hn
(3)

REC 46

11516-7

15 OCT 25 1967

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED
DATE 09-05-2006 BY 60324 AUC/BAW/CPB/YMW

NAT. SEC. REG.

NOV 6 1967



5010-108

Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

1 - Liaison

1 - [REDACTED]

REC-42 516-8
(NR) 65-71605

Date: November 7, 1967

To: Assistant Chief of Staff for Intelligence
Department of the Army

Attention: Director of Security

From: John Edgar Hoover, Director

b6
b7C

Subject: UNKNOWN SUBJECT; Possible
Compromise of Armed Forces
Autovon Network
ESPIONAGE - X

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED
DATE 09-05-2006 BY 60324 AUC/BAW/CPB/YMW

Reference is made to your communication dated
October 30, 1967, captioned [REDACTED]

[REDACTED]
your reference ACSI-DSCO.

This Bureau interposes no objection to your
interviewing [REDACTED].

- Philadelphia (Enclosure) 65-6111)
(Army communication dated 10/30/67)

NOTE:

Telephone equipment was found in basement of Jefferson
Medical College, Philadelphia, and turned over to Bell Telephone
Company. Bell Company believed equipment was part of armed services'
automatic voice network called Autovon. Autovon system is not
classified and matter was referred to Army. We are not investigating
and Army requests our concurrence to interview individual [REDACTED]
who may be knowledgeable of matter.

Tolson _____
DeLoach _____
Mohr _____
Bishop _____
Casper _____
Callahan _____
Conrad _____
Felt _____
Gale _____
Rosen _____
Sullivan _____
Tavel _____
Trotter _____
Tele. Room _____
Holmes _____
Gandy _____

ARJ:mea (6)

62 NOV 16 1967

TELETYPE UNIT ☐