NATIONAL SECURITY AGENCY
WASHINGTON 25, D. C.

Serial: 000539-S
8 Dec 54

## POP-GACREM

SUBJECT: Report of. Cormunications Security Violations
TO: Commander
U. S. Air Force Security Service

San Antonio, Texas

1. Attached is the quarterly (April through June 1954) compilation of commanications security violations reported to or noted by this Agency which occurred in communications of those Air Force stations which handle COMINT traffic. You have been notified of completed evaluations of possible compromises which are reported herein as violations.
2. This report is furnished primarily for guidance in improving the security of COMINT communications. Similar reports are forwarded to Chief, Army Security Agency, and Chief of Naval Operations. Upon request, additional copies of this report will be provided in sufficient quantity for dissemination to those activities under your command engaged in COMINI operations.
3. Extracts from this quarterly summary may be classified SECRET if the extracts are restricted to lists of violations which involve messages classified no higher than SECRET. For example, the list of violations committed by an activity which originates messages classified no higher than SECRET may be extracted and forwarded to that activity as SECRET material. The key list is SECRET in classification.
4. This correspondence may be downgraded to SECRET upon removal of Inclosure 1 .

FOR THE DIRECTOR:


GEO. E. CAMBBELL
Colonel AGC
Adjutant General
Declassified and approved for release by NSA on 05-15-2014 pursuant to E.O. 13526
2 Incls:

1. Communications Security violationdoPSECRETCONTROLNUMBER $5 y-3396$ by Air Force Stations.
2. Key List of Air Force Violations. PAGE

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## TOP SEGRET

TOP-SEGAT
000539-s
8 Dec 54
ce:
NSA Europe
NSA United Kingdom
NSA Far East
NSA Alaska
NSA Pacific
AG
C/S
COMSEC (3)
S/ASST $\rightleftarrows$
COM
PROD
06B
411
412
413
$\mathrm{M} / \mathrm{R}$ : This is a compilation of communications security violations committed by Air Force COMINT stations during April, May, and June 1954. A similar report will be forwarded to Chief, ASA and CNO.
10 copies furnished USAFSS.

$\qquad$ COPIES

COMMUNICAIIONS SECURITY VIOLATIONS BY AIR FORCES STATIONS

DIG TRIGRAPH KFY NO. | REMARKS |
| :---: |
| ASA-33 |
| APRIL |

| $011300 Z$ | ADK |  |
| :--- | :--- | :--- |
| $020515 Z$ | AGN | $3 a$ |
| $130845 Z$ | CEY | 3 c |
| $232232 Z$ | DOB | $3 c$ |
| $262220 Z$ | EBM |  |
| $280045 Z$ | irR |  |

MAY
0608202
$A O N$

050030Z AIX
36
8

24 April
11

1
3d
$3 a$
7
3d
3d
$3 d$.
MAY
APRIL

USA-38
APRIL

| $101215 Z$ | COJ |
| :--- | :--- |
| $121720 Z$ | DFP |
| $141530 Z$ | DRY |
| 18064 OZ | FBI |
| $222213 Z$ | GUL |
| $250420 Z$ | FNY |
| $271715 Z$ | IDG |

Broke on VEQEU vice VEQEK Broke on FSPPZ vice FSPOC Broke on QVIBQ vice QBIVQ Broke on CRGCX vice CRGZX Omitted traffic type designator Broke on HPWQB vice APWQB

Broke using trigraph AQE

Broke on UWDRN vice UMDRN Used multiswitch setting 12345 Used multiswitch setting 12345

USA-34C

| $051215 Z$ | BAO |
| :--- | :--- |
| $120305 Z$ | $B W D$ |

$3 c$
32

Operator failed to switch to cipher

Broke on AM rotor arrangement
Broke on NIYIV vice NIQLV
Broke on WXGZN vice WXZGN
Brokie using trigraph FBT
Broke on ZQROY vice ZGROY
Broke on QQEYW vice QYEYW Broke on STZKZ vice STQKZ

Broke on ALIYJ vice LHIYJ Broke on MLUNP vice TLUNP


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TOP-SEGRET
VIOLATIONS (ContPd)
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    DTG
        TRIGRAPH
        KEY NO.
        REMARKS
        USA-38 (Cont'd)
        MAY (Cont?d)
        \(190120 Z \quad\) DGG 3 3b
    $301305 Z$ нBM
3d

| $011700 Z$ | APA | 16 |
| :--- | :--- | :---: |
| $011700 Z$ | AFF | 16 |
| $021855 Z$ | ALQ | 3 d |
| $032030 Z$ | AQZ | 3 d |
| $092015 Z$ | BXT | 16 |

091320Z BWQ 16
211920Z EWG 3d

Broke on FZKKY vice DZKKV Broke on CYWCB vice CYFGB

JUNE
Third rotor failed to step as scheduled Third rotor failed to step as scheduled Broke on RBHUR vice RBHUU Broke on VWQOK vice VWQOF Third rotor failed at counter reading 626, second rotor failed at counter reading 1276
First and third rotors failed at counter reading 1821, second rotor failed at counter reading 2471 Broke on PHDJA vice PHDJZ

## USA-38B

## APRIIL

3d 3d

Broke on VJDGY vice VJDGH Broke on XMVCF vice YAVCF

## MAY

171854 DED 3a
$192050 Z \mathrm{DPQ}$
211825 Z ECD
2617102 FHE
3c
$3 a$
3b

Broke on KYXSU vice KYSXU Broke on LBHTB vice LPHTB Broke on HNFHW vice HNHFW Broke on PTABZ vice PTAYX

JUNE

190220Z HTO 7
$222040 Z$ IUW 3d

Broke using trigraph HTN
Broke on KVYRD vice KNYRD

## TOP-SEERET

## -ODRSECHET-

Nop-9ment
VIOLATIONS (Contrd)
DTG TRIGRAPH
KEY NO.
REMARKS
USA-51
APRIL

| $010100 Z$ | AAD | 10 |
| :--- | :--- | ---: |
|  |  |  |
| $030115 Z$ | AVF | 3 d |
| $032315 Z$ | BFO | 3 d |
| 6 April |  | 11 |
| $070945 Z$ | CNK | 3 d |
| 071600 Z | CYE | 3 d |
| 130005 Z | EKN | 3 d |

## MAY

| $012335 Z$ | AKP | 3 a |
| :--- | :--- | :--- |
| $020340 Z$ | AMQ | 3 d |
| $030735 Z$ |  | 9 a |
| $030800 Z$ | AFS | 9 a |
| $030816 Z$ | AFH | 9 a |
| $030831 Z$ | AHP | 9 a |
| $121042 Z$ |  | 9 a |
| $121044 Z$ |  | 9 a |
| $121048 Z$ |  | 9 a |
| $121051 Z$ |  | 9 a |
| $200233 Z$ | DDN | 3 c |
| $200820 Z$ | FDG | 7 |
| $201545 Z$ | DHX | 3 c |
| $201545 Z$ | DJA | 3 a |

JUNE

| 1410452 | 6 |
| :--- | ---: |
| 20 June | 13 |
| 30 June | 14 |6

20 June 13
30 June

Alignment in clear AGFOR Used incorrect codeword TOP SECRET codeword message enciphered in non-COMINT system


## 108-32Cnini <br> VIOLATIONS (Cont'd)

DTG TRIGRAPH KEY NO. REMARKS
USA-52
APRIL

| $021240 Z$ | AIW | 1 |
| :--- | :--- | :--- |
| $160120 Z$ | CTR | 3 d |
| $230200 Z$ | DWT | 2 |
| $2304.30 Z$ | DWV | 2 |
| $230815 Z$ | DXD | 2 |
| $230911 Z$ | DXG | 2 |
| $250100 Z$ | EFN | $3 d$ |

$270210 Z$ DLX 3d

USA-53

APRII

| $021900 Z$ | ARC | $3 d$ |
| :--- | :--- | :--- |
| $030930 Z$ | AYL | $3 d$ |
| $032330 Z$ | BKG | 7 |
| $050200 Z$ | BRJ | $3 d$ |
| $070045 Z$ | CJW | $9 b$ |
| $070210 Z$ | CKV | $9 b$ |
| $070230 Z$ | CIR | $9 b$ |
| $110430 Z$ | EHJ | $3 d$ |
| $111700 Z$ | ERE | $3 d$ |
| $121500 Z$ | FDY | $3 d$ |
| $141915 Z$ | GBA | $3 d$ |
| $161800 Z$ | GOH | $3 c$ |
| $300245 Z$ | MDO | $3 d$ |

## MAY

$020105 Z \quad$ AGS
13 May

270540Z BTJ 3d

7
14

Broke on AM rotor arrangement Broke on ZFZZS vice ZFZZB Used key list assigned to USA-51 Used key list assigned to USA-51 Used key list assigned to USA-51 Used key list assigned to USA-51 Broke on JKIPI vice JKIPO

Broke on IJIBN vice ISIBN

Broke on RGHBX vice QGHQX Broke on VKRTD vice VKRTY Broke using trigraph BGK Broke on LGCQJ vice LGCQT Broke on AA vice BB Broke on AA vice BB Broke on AA vice BB Broke on WASXZ vice WASXS Broke on WYFIT vice WYOIT Broke on GKJOF vice GPJOF Broke on RPEIW vice YPEIW Broke on YCRQG vice YCRQJ Broke on HTTCQ vice HTTCD

Broke using trigraph AGE TS CW info enciphered in non-COMINT system Broke on SPTXO vice SPTXF


## - ORESECTET

## TOP SAFGRTM <br> VIOLATIONS (Cont'd)

DTG TRIGRAPH KEY NO. | REMARKS |
| ---: |
| USA-53 (Cont 1 d ) |

| $160301 Z$ |  | 1 |
| :---: | :---: | :---: |
| $.160915 Z$ | CMC | 1 |
| $201307 Z$ | $3 \alpha$ |  |

Broke on PM rotor arrangement Broke on PM rotor arrangement Broke on VSFIG vice VSFXG

USA-54
APRII

| $042345 Z$ | BXM | $3 d$ |
| :--- | :--- | :---: |
| $050420 Z$ | BZB | 10 |
| $081020 Z$ | DUT | $3 d$ |
| $240845 Z$ | HCL | $3 b$ |

1107502 CHW 3d
MAY
Broke on YRKLI vice YKKLI Message indicator was derived using deciphering procedure Broke on MVJST vice WVJST Broke on SJCVS vice SJCUS

JUNE

| $041540 Z$ | CKJ | 3 d |
| :--- | :--- | :---: |
| $091401 Z$ | EDV | 9 a |
| $130615 Z$ | EWP | 7 |
| $151040 Z$ | FFJ | 2 |
|  |  |  |
| $171025 Z$ | FQZ | 3 d |
| $190835 Z$ | GBQ | 3 d |
| $271530 Z$ |  | 16 |

Broke on TJAMO vice TJAMD Broke on $B B$ vice AA Broke using trigraph ENF 13 messages enciphered using key list assigned to USA-54A Broke on WWJUX vice WWZUX Broke on HFCNB vice JFDNB Random rotor failed to advance

## USA-54A

## APRII

| $030245 Z$ | AID | $3 c$ |
| :--- | :--- | :--- |
| $040030 Z$ | ANQ | 2 |
| $040510 Z$ | ANS | 2 |

Broke on LDRWN vice LDRWM Used key list assigned to USA-59 Used key list assigned to USA-59

mor peany
VIOLATIONS (Contid)



## TOP SHGRET <br> VIOLATIONS (Cont'd)

| DTG | TRIGRAPH | KEY NO. |  | RENARKS |
| :---: | :---: | :---: | :---: | :---: |
|  | USA-55 (Cont Pd) |  |  |  |
|  |  |  | MAY |  |
| 0700052 | AON | 3d |  | Broke on VSQEP vice VSTET |
| $220030 Z$ | CJV | 3d |  | Broke on RKGBA vice RRGBA |
|  |  |  | JUNE |  |
| 2121152 | BSI | 3b |  | Broke on KFNHO vice KFOHO |
|  |  |  | USA-56 |  |
| $\bullet$ |  |  | APRIL |  |
| 0211172 | ALU | 3d |  | Broke on SJRDJ vice RDRDJ |
| 060805Z | BJQ | 5 |  | Deciphered to YRZNV - broke on YRZNW |
| 0621472 | BNG | 10 |  | Enciphered message indicator using decipher procedure |
| 0622087 | BPI | 3d |  | Broke on SZQWR vice SZSYI |
| 12 April |  | 11 |  | Transmitted clear text tape |
| 1821002 | ERW | 7 |  | Broke using trigraph EXW |
| $192103 Z$ | FCR | 9 a |  | Broke on BB vice AA |
| 2108277 | FOQ | 10 |  | Message indicator derived using deciphering procedure |
| $291002 Z$ | HYR | 5 |  | Alignment derived using procedure for first message of cryptoperiod |

## MAY

| $062352 Z$ | BTN | 1 |
| :--- | :--- | :--- |
| $090700 Z$ | CSF | 1 |
| $090705 Z$ | CSD | 1 |
| $090710 Z$ | CSH | 1 |
| $090715 Z$ | CSK | 1 |
| $090920 Z$ | CSO | 1 |
| $090855 Z$ | CSS | 1 |
| $090900 Z$ | CST | 1 |

Broke on AM rotor arrangement Broke on PM rotor arrangement Broke on PM rotor arrangement Broke on PM rotor arrangement Broke on PM rotor arrangement Broke on PM rotor arrangement Broke on PM rotor arrangement Broke on PM rotor arrangement


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VIOLATIONS (Contrd)

| DTG TRIGRAPH KEY NO. | REMARKS |
| ---: | :--- |
| USA-56 (Contid) |  |
| MAY (Contid) |  |


| $090905 Z$ | CSV | 1 |
| :--- | :--- | :--- |
| 090910 Z | CTA | 1 |
| $090915 Z$ | CTB | 1 |
| $090926 Z$ | CTC | 1 |
| $090927 Z$ | CTL | 1 |
| $090930 Z$ | CTG | 1 |
| $090928 Z$ | CTN | 1 |
| $090931 Z$ | CTP | 1 |
| $152127 Z$ | EGP | 3 b |
| $242124 Z$ | GIR | 3 c |


| $200600 Z$ | EQV 3c |  |
| :--- | :--- | :--- |
| $302139 Z$ |  | 16 |3 c

3021392

170540Z
ETX
2802402
$280250 Z$
$280300 Z$ 2803102

GRV
GRW
GSA
GSB
$220515 Z$
KIG

051105 Z BXF
3a
161530Z
GST

Broke on PN rotor arrangement Broke on PM rotor arrangement Broke on PM rotor arrangement Broke on PM rotor arrangement Broke on PM rotor arrangement Broke on PM rotor arrangement Broke on PM rotor arrangement Broke on PM rotor arrangement Broke on WKLJE vice WKKJE Broke on EOTOV vice BOTOV

## JUNE

Broke on QINCU vice QYNCU Fourth rotor failed to step as scheduled

USA-57
APRIL

MAY

JUNE
Broke on TKDJQ vice GKDJQ
Broke on AA vice BB
Broke on AA vice BB Broke on $A A$ vice $B B$ Broke' on AA vice BB

Broke on MSLZL vice MJLZL

Broke on ONXSY vice ONSXY Broke on $\operatorname{BDQXF}$ vice BDQFX

for

## VIOLATIONS (Cont? ${ }^{\text {d }}$

| DTG | TRIGRAPH | KEY NO |  | REMARKS |
| :---: | :---: | :---: | :---: | :---: |
|  | USA-57A |  |  |  |
|  | APRII |  |  |  |
| 0123402 | ADE | 3d |  | Broke on LANFA vice LANEX |
| 092350Z | BCZ | 3d |  | Broke on QYNXM vice QYWXM |
| 2804352 | DJP | 3d |  | Broke on VGRSQ vice VGRSY |
| MAY |  |  |  |  |
| 0206177 | AIJ | 4 |  | Reused indicator AAAIJRSWXLR |
| 042350Z | APO | 10 |  | Message indicator was derived using deciphering procedure |
| 0806152 | BJC | 3d |  | Broke on ESESF vice FSKSF |
| 2303502 | DNK | 10 |  | Message indicator was derived using deciphering procedure |
| JUNE |  |  |  |  |
| 1601152 | CUN | 3d |  | Broke on LJAWV vice LTAWV |
| 6910 th SG |  |  |  |  |
| APRIL |  |  |  |  |
| 18 April |  | 12 |  | Caused by faulty key tape |
| MAY |  |  |  |  |
| 1211002 |  | 1 |  | Broke on PM rotor arrangement |
| 121150Z |  | 1 |  | Broke on PM rotor arrangement |
| 301515 Z |  | 1 |  | Broke on AM rotor arrangement |
| 301515 Z |  | 1 |  | Broke on AM rotor arrangement |
| 3015152 |  | 1 |  | Broke on AM rotor arrangement |
| 3019352 | DSZ | 1 |  | Broke on AM rotor arrangement |
| 3019402 |  | 1 |  | Broke on AM rotor arrangement |
| 3021002 | DTH | 1 |  | Broke on AM rotor arrangement |
| 3022002 | DTJ | 1 |  | Broke on AM rotor arrangement |



9

VIOIATIONS (Cont'd)

| DTG | TRIGRAPH | KEY NO. |  | REMARKS |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 6910th SG (Cont'd) |  |  |
|  |  |  | JUNE | * |
| 2 June |  | 12 |  | Caused by torn tape |
| 3 June |  | 11 |  | Cause unknown |
| 1113002 | BEH | 1 |  | Broke on AM rotor arrangement |
| 1817302 | BXI | 3d |  | Broke on NGXGR vice NGMGR |
| 25 June |  | 12 |  | Tape contained consecutive blank characters |

6920th SG
APRII
$040455 Z 5$
2313302 I
23140021
$231_{4} 05 \mathrm{Z}$ I
2314502 I
Alignment derived using procedure for first message of cryptoperiod Broke on AM rotor arrangement Broke on AM rotor arrangement Broke on AM rotor arrangement Broke on AM rotor arrangement

## MAY

131320Z
14 May
19 May
290744Z EEA
3d

Broke on AM rotor arrangement COMINT info transmitted to weather station Switched to text before turning off TD
Broke on MMCIA vice MZCIA

JUNE
0914002 1
$100400^{7}$
8

Mep sengit
VIOLATIONS (Contid)
DTG TRIGRAPH
KEY NO. REMARKS
1st WEATHER WING
JUNE

0705082
072050Z
11
11

SSO 3RD AF
APRII.
6 April $\quad 11$
6 April
17
JUNE
9 June 13
TOP SECRET codeword transmitted
in clear at end of encrypted tape
TOP SECRET codeword transmitted
in clear at end of encrypted tape
Operator failed to switch to cipher Reuse of key tape
before turning off TD
Operator switched to "text" before turning off TD

## SSO SAC

JUNE

| 17 June |  |
| :--- | :--- |
| 23 June | 11 |

11 Key tape ran out
11 Operator failed to turn off TD before switching to text

SPECIAL OPERATING
CENTER HIGH WYCOMBE
APRIL
15 April 11
Operator in "text" while requesting a correction


Top-9mant

## VIOLATIONS (Cont'd)

DTG TRIGRAPH KEY NO. REMARKS

USAFSS
MAY
6 May
11
Operator in "text" while requesting a correction
JUNE
21. June
13
SECRET message delivered as unclassiffied

| CONTIROL NUMBER |  |  | 54-3396-A |
| :---: | :---: | :---: | :---: |
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| PAGE 12 | Or | 12 | PAGES |

## REF ID:A56996 SEGRET

# KEY LIST OF AIR FORCE VIOLATIONS <br> Apr., May., Jun., 1954 

## ROTOR ARRANGEMENT

1. Use of a rotor arrangement for an inappropriate cryptoperiod, day or month. (Reference AFSAG 1262, para 5006a(1))
2. Use of a rotor arrangement from a key list assigned to another station. (Reference AFSAG 1262, para 5003b)

## ROTOR ALIGNMENTS

3. Discrepancy between the message rotor alignment resulting from decipherment of the message indicator and the message rotor alignment actually required to decipher the message, although the latter was correctly derived. The discrepancy involved (a) transposition of letters, (b) substitution of a letter alphabetically adjacent to the correct letter, (c) substitution of a phonetically similar letter, or (d) errors in encipherment.
4. Identical message indicators appeared on different messages (or transmission sections) enciphered on the same machine. Use of the message rotor alignment resulting from decipherment of the message indicator allowed decipherment of the first but not the second message. The message rotor alignment actually used for encipherment of the second message was properly tailed to the final alignment of the first message.
5. Failure to tail previously enciphered message. (Reference AFSAG 1262, para 6002a(4))
6. The message rotor alignment was transmitted in the clear as the last five letters of the message indicator. (Reference AFSAG 1262, para 6002a(5))

## KEY GROUP

7. The trigraphic key-group indicator in the message indicator did not correspond to the key group actually used for encipherment. Reuse of a key group was not involved. (Reference AFSAG 1262, para 5004b)

## MACHINE DESIGNATOR AND MULTISWITCH SEITTING

8. Use of an unauthorized multiswitch setting. (Reference AFSAG 1262, para 6002a(2) or AFSAG 1231b, para 6003a(1))
