



REF ID: A67572
~~TOP SECRET~~

NATIONAL SECURITY AGENCY
WASHINGTON 25, D. C.

Serial: 3768
1 June 1955

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SUBJECT: Report of Communications Security Violations

TO: Commander
U. S. Air Force Security Service
San Antonio, Texas.

1. Attached is the quarterly (January through March 1955) compilation of communications 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 furnished completed evaluations of those cryptographic violations which were reported as possible compromises.

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 COMINT 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:

C. M. MILLER, Jr.
Major AGC
Asst. Adj. Gen.

2 Incls:

1. Communications Security Violations
by Air Force Stations (10)
2. Key List of Air Force Violations (10)

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- cc: NSA Europe
- NSA United Kingdom
- NSA Far East
- NSA Alaska
- NSA Pacific
- AG
- C/S
- COMSEC (2)
- S/ASST 
- COM
- PROD
- OGB
- 411
- 413

M/R: This is a compilation of communications security violations committed by Air Force stations during January, February, and March 1955. A similar report will be forwarded to Chief, ASA, and CNO. USAFSS furnished 10 copies. Furnish each internal addressee a copy of Incl 1 and 2.

M. M. Orris/4131-1/60454/mw

M. M. Orris

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COMMUNICATIONS SECURITY VIOLATIONS BY AIR FORCE STATIONS

<u>DTG</u>	<u>TRIGRAPH</u>	<u>KEY NO.</u>	<u>REMARKS</u>
		<u>USA-33</u>	
		<u>JANUARY</u>	
132121Z		11	Operator believed he was on room circuit
		<u>USA-34</u>	
		<u>JANUARY</u>	
02 JAN		11	Malfunction of equipment
		<u>FEBRUARY</u>	
220650Z		11	Keyboard operation
		<u>USA-38B</u>	
		<u>JANUARY</u>	
072035Z	CZZ	3a	Broke on DGVLI vice DVGLI
160124Z	EVB	3d	Broke on GJNHH vice NJNHH
180005Z	ETZ	3d	Broke on CJWQL vice CJWQY
		<u>MARCH</u>	
180945Z	BLF	2	Broke on PM rotor arrangement
		<u>USA-51</u>	
		<u>JANUARY</u>	
100850Z	AHR	5	Omitted letter in message indicator
		<u>FEBRUARY</u>	
081734Z	AEG	3b	Broke on FGHMD vice GGHMD
211420Z	BNF	3d	Broke on OZGFM vice OZYFM
282330Z	CCS	13	Random rotor overstepped at counter readings 059 and 065
		<u>MARCH</u>	
080717Z	AIE	2	Broke on <u>PM</u> rotor arrangement
131442Z	BKT	6	Broke using trigraph BKY

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<u>DTG</u>	<u>TRIGRAPH</u>	<u>KEY NO.</u>	<u>REMARKS</u>
		<u>USA-51</u> (Cont'd)	
		<u>MARCH</u> (Cont'd)	
161525Z	BRJ	3d	Broke on BPRDY vice BRRDY
182335Z	CDM	3d	Broke on GPFZL vice GPFZV
190045Z		15	Reuse of segment of key tape
191945Z	CGU	3d	Broke on PQUQX vice PQUCK
231255Z	CLC	2	Broke on AM rotor arrangement

USA-54

JANUARY

072315Z		11	Clear text tape
141445Z	BYV	2	Broke on AM rotor arrangement
171742Z	COP	2	Broke on AM rotor arrangement
201220Z	DAE	3d	Broke on EILPK vice ELLPK
290500Z	EHC	5	Omitted letter in message indicator

MARCH

232352Z	BUA	2	Broke on AM rotor arrangement
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USA-54K

FEBRUARY

252228Z	HHX	3b	Broke on RXCJD vice QXCJD
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MARCH

011540Z	ADZ	3d	Broke on EOUJR vice EOUJD
031115Z		11	Clear text tape
172045Z	DWF	3a	Broke on CXNBZ vice CNXBZ
250131Z	EXP	3d	Broke on DHTKI vice DHOKI

USA-56

JANUARY

012105Z	AJV	3d	Broke on AAJUF vice AOJUF
230920Z	ELU	3d	Broke on CJQZL vice CJQZG
231141Z		13	Random rotor failed to step at counter reading 913
251130Z		14	Correct DTG - 251630Z
292130Z	GJL	3b	Broke on FUFMP vice FUFPL

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<u>DTG</u>	<u>TRIGRAPH</u>	<u>KEY NO.</u>	<u>REMARKS</u>
<u>USA-56K</u>			
<u>JANUARY</u>			
041100Z	AGT	6	Broke using trigraph AGO
091415Z	ARZ	3c	Broke on ADEEF vice AGEEF
211910Z	CBA	5	Omitted letter in message indicator
<u>FEBRUARY</u>			
181300Z	CIF	3d	Broke on SYPJS vice UYOJY
282230Z		13	Random rotor failed to step at counter reading 2302
<u>MARCH</u>			
122200Z	BFW	3d	Broke on FPSYH vice FPSQH
160205Z		14	Correct DTG - 161205Z
180605Z	CLP	5	Omitted letter in message indicator
211430Z	CVP	3d	Broke on VCJVB vice VCTVB
<u>USA 56L</u>			
<u>FEBRUARY</u>			
122108Z		11	Operator believed he was transmitting test tape
<u>USA-57</u>			
<u>JANUARY</u>			
011145Z	ADW	3d	Broke on XQQUO vice XQQYO
072030Z	CZL	5	Omitted letter in message indicator
132150Z	FNS	3c	Broke on LOPPY vice LOPPI
152135Z	GBF	3b	Broke on NHBLX vice NHALX
161840Z	GIC	3d	Broke on DOAVE vice DOWVE
221620Z	IJE	3d	Broke on DNWQO vice DNTQO
231247Z	<u>IOS</u>	3a	Broke on MNHSA vice MNSHA
232325Z	ISE	3d	Broke on AQTNE vice FQTNE
<u>261852Z</u>	JLZ	3d	Broke on HSFEN vice CKFEN
300747Z	JZU	3d	Broke on SCQAL vice SOQAL
301310Z	KAB	4	AAKABMPPUXP

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<u>DIG</u>	<u>TRIGRAPH</u>	<u>KEY NO.</u>	<u>REMARKS</u>
<u>USA-57 (Cont'd)</u>			
<u>FEBRUARY</u>			
090602Z	BUT	3a	Broke on AZFIN vice AZIFN
<u>MARCH</u>			
081342Z	AUJ	3d	Broke on NYEET vice EYEET
120840Z	BFE	3d	Broke on KDBTK vice QRBTK
301440Z	DQC	10	Message indicator derived using deciphering procedure
<u>USA-57K</u>			
<u>JANUARY</u>			
050315Z	AHN	3c	Broke on TGWPW vice PGWPW
082359Z	ATB	3d	Broke on MUVUV vice MZVUV
091125Z	ATO	10	Message indicator derived using deciphering procedure
150830Z	BPA	3b	Broke on PZDZC vice PYDZC
160150Z	BQV	10	Message indicator derived using deciphering procedure
230002Z	CTV	3a	Broke on YRQUX vice RYQUX
<u>FEBRUARY</u>			
010115Z	AAA	5	Omitted machine designator
021708Z	AKQ	3d	Broke on ILUXB vice ILUQP
021845Z	ALL	3c	Broke on HNVLB vice HNVLZ
110140Z	BTV	3a	Broke on VDGPF vice <u>VDPGF</u>
111350Z	BWM	3d	Broke on INF'OD vice <u>INFOS</u>
200055Z	DQA	3d	Broke on, XQYQO vice XQYQU
<u>MARCH</u>			
091713Z	ATR	3d	Broke on QBKTI vice QBBTI
110405Z	AXY	2	Broke on PM rotor arrangement
110420Z	AXZ	2	Broke on PM rotor arrangement
110440Z	AYA	2	Broke on PM rotor arrangement
110738Z	AXO	3a	Broke on RVSRR vice RVRSG
120810Z	BAB	3d	Broke on QTMHG vice QXMHG
120921Z	BAM	3d	Broke on QPNOP vice QPNOR
121905Z	BAL	3c	Broke on EDGYR vice EDGIR
280130Z	BQO	3d	Broke on JIRCQ vice JIRCW
290440Z	BRA	3d	Broke on EXXZR vice URALU
301210Z	BSN	2	Broke on AM rotor arrangement

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<u>DTG</u>	<u>TRIGRAPH</u>	<u>KEY NO.</u>	<u>REMARKS</u>
<u>USA-57K (Cont'd)</u>			
<u>MARCH (cont'd)</u>			
301230Z	BSQ	2	Broke on AM rotor arrangement
301250Z	BSS	2	Broke on AM rotor arrangement
<u>USA-59</u>			
<u>JANUARY</u>			
04 JAN		11	Keyboard operation
140455Z		11	Keyboard operation
260100Z		12	AFSAK 2591
<u>FEBRUARY</u>			
13 FEB		11	Operator in "text" position
200627Z	GGM	3d	Broke on ZAMOW vice ZAWOW
202300Z	GKA	3d	Broke on JXUTQ vice JXUTO
220200Z	GYZ	3a	Broke on YSULT vice YSLUT
251601Z	IEZ	2	Broke on AM rotor arrangement
251700Z	IEV	2	Broke on AM rotor arrangement
251720Z	IFU	2	Broke on AM rotor arrangement
260152Z	IXA	3a	Broke on TJTLC vice TJLTC
261610Z	IWQ	3d	Broke on KRGRM vice KRARM
280020Z	JLF	3d	Broke on TCJKG vice TCJKQ
<u>MARCH</u>			
031830Z	BOQ	3d	Broke on TPWTM vice TPWAM
040458Z	BWW	3d	Broke on UQFEN vice UQVEN
041800Z	CIX	3b	Broke on CWADP vice DWADP
102218Z	GNE	3d	Broke on, TKEYR vice TKMYR
160205Z	IEP	6	Broke using trigraph IEQ
181930Z	JBY	3d	Broke on UAGGQ vice UAGGY
201430Z	JRR	3d	Broke on BLPUU vice BLPSU
211402Z	LEI	3a	Broke on ESZDI vice ESDZI
261632Z	PJM	3d	Broke on VQMSE vice VQMF E
261728Z	PKV	3d	Broke on KYKTE vice KYKLE
311041Z	QYB	3d	Broke on XKLGG vice XFLGG

6900 SCTY GP

MARCH

25 MAR 12 AFSAK 2700

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<u>DTG</u>	<u>TRIGRAPH</u>	<u>KEY NO.</u>	<u>REMARKS</u>
<u>6910 SCTY GP</u>			
<u>JANUARY</u>			
080900Z	BGH	2	Broke on PM rotor arrangement
101714Z	CAV	3d	Broke on HKELS vice HKEIS
151915Z	DUC	3d	Broke on EZWQV vice EZWYV
160009Z	DWJ	3d	Broke on WAYRM vice BAYRM
160225Z	XWV	10	Message indicator derived using deciphering procedure
181204Z	EIO	3d	Broke on QMOAC vice QMOOC
250106Z	FWD	3d	Broke on FYYKJ vice FYYKS
271644Z	HLZ	8a	Broke on BB vice AA
290015Z	IGT	13	Random rotor failed to step at counter reading 179
291500Z	IOT	3c	Broke on FKIRA vice FKYRA

FEBRUARY

021035Z	AHI	2	Broke on PM rotor arrangement
021044Z	AHD	2	Broke on PM rotor arrangement
030705Z		2	Broke on PM rotor arrangement
030849Z	ALA	2	Broke on PM rotor arrangement
030851Z	AKI	2	Broke on PM rotor arrangement
030855Z	AKY	2	Broke on PM rotor arrangement
030859Z	AKL	2	Broke on PM rotor arrangement
030917Z	AKV	2	Broke on PM rotor arrangement
031015Z		2	Broke on PM rotor arrangement
031030Z		2	Broke on PM rotor arrangement
041100Z		2	Broke on PM rotor arrangement
070820Z		2	Broke on PM rotor arrangement
121230Z	BSB	8b	Broke on CC vice BB
121230Z	BSJ	8b	Broke on CC vice BB
121230Z	BST	8b	Broke on CC vice BB
121230Z	BTN	8b	Broke on CC vice BB
121230Z	BTG	8b	Broke on CC vice BB
121230Z	BRZ	8b	Broke on CC vice BB
130120Z		11	Keyboard operation
140635Z	CBX	3b	Broke on CFVYO vice CEVYO
170920Z	CTH	8a	Broke on AA vice BB
171223Z	CTV	3a	Broke IYBMZ vice IYMBZ
190612Z	DNB	8a	Broke on BB vice AA

MARCH

031200Z		2	Broke on PM rotor arrangement
040622Z		11	Keyboard operation

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<u>DTG</u>	<u>TRIGRAPH</u>	<u>KEY NO.</u>	<u>REMARKS</u>
<u>6910 SCTY GP (Cont'd)</u>			
<u>MARCH (Cont'd)</u>			
101006Z	FQB	10	Message indicator derived using deciphering procedure
132012Z	GXS	3d	Broke on IXYFJ vice IJYFJ
161845Z	IBH	3c	Broke on XLCKP vice XICKB
160034Z	IBM	2	Broke on PM rotor arrangement
171255Z	IGG	7	Key group previously used for 170644Z
191212Z	JFH	3d	Broke on EXCJA vice EXOJY
241615Z	KRW	3d	Broke on AVIHD vice AVLHD
271010Z	LSQ	3a	Broke on MQBVW vice MQVBW
311200Z		2	Broke on PM rotor arrangement
<u>6950 SCTY GP</u>			
<u>FEBRUARY</u>			
282330Z		13	Random rotor overstepped at counter readings 58 and 64
<u>6961ST COMM SQ</u>			
<u>JANUARY</u>			
132255Z		11	Keyboard operation
220715Z		11	Keyboard operation
<u>FEBRUARY</u>			
17 FEB		11	Operator believed he was on room circuit
192255Z		11	Keyboard operation
240726Z		11	Keyboard operation
242114Z		11	Operator inadvertently hit magnet armature
<u>MARCH</u>			
101700Z		12	AFSAK 2700
<u>3RD WEATHER GP ENT AFB</u>			
<u>FEBRUARY</u>			
252045Z		9	Incorrect multiswitch setting _____ 41235

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<u>DTG</u>	<u>TRIGRAPH</u>	<u>KEY NO.</u>	<u>REMARKS</u>
			<u>AWS. SUTLAND</u>
			<u>FEBRUARY</u>
09 FEB		11	Operator believed he was on room circuit
			<u>SPECIAL OPERATING CENTER, TOKYO</u>
			<u>JANUARY</u>
290650Z		1	Arrangement previously used for 281930Z
			<u>FEBRUARY</u>
042033Z		1	Arrangement previously used for 020130Z

Incl 1

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KEY LIST OF AIR FORCE VIOLATIONS

Jan., Feb., & Mar., 1955

ROTOR ARRANGEMENT

- 1. Use for encipherment of an incorrect rotor arrangement and/or alignment. (Reference AFSAG 1262, para 5006a(1), and/or AFSAG 1231B, para 6002a(2), and/or AFSAG 1231B, para 6004a(1))
- 2. Use of a rotor arrangement for an inappropriate cryptoperiod, day or month. (Reference AFSAG 1262, para 5006a(1))

ROTOR ALIGNMENT AND MESSAGE INDICATOR

- 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 involves (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. Omission or addition of one or more letters to the message indicator.

KEY GROUP

- 6. 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)
- 7. Reuse of a key-group for encipherment. (Reference AFSAG 1262, para 6002b(4))

MACHINE DESIGNATOR AND MULTISWITCH SETTING

- 8. The machine designator in the message indicator did not correspond to the multiswitch setting used for encipherment. The messages were (a) correctly enciphered or (b) incorrectly enciphered. (Reference AFSAG 1262, para 6002a(1))
- 9. Use of an incorrect multiswitch setting. (Reference AFSAG 1262, para 6002a(2), and/or AFSAG 1231B, para 6003a(1), and/or AFSAG 1231B, para 6002a(4))

ENCIPHER-DECIPHER CARD

- 10. Incorrect use of an ORCUS enciphering card to produce a message indicator. (Reference AFSAG 1262, para 5005c)

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ADDITIONAL VIOLATIONS

11. Classified information in the clear
12. Use of an unauthorized cryptosystem to encipher COMINT information.
13. Transmission of a message in which there was faulty rotor stepping during encipherment. (Reference AFSAG 1262, para 6002a(3))
14. Transmission of a message containing an incorrect date-time group.
15. Reuse of one-time key tape for encipherment .

Incl 2

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