



NATIONAL SECURITY AGENCY WASHINGTON 25, D. C.

Serial: 000539-S

8 Dec 54

TOP SECRET

SUBJECT: Report of Communications Security Violations

TO:

Commander

U. S. Air Force Security Service

San Antonio, Texas

- 1. Attached is the quarterly (April through June 1954) 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 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 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:

GEO. E. CAMPBELL Colonel AGC Adjutant General

Walland Garrenge

Declassified and approved for release by NSA on 05-15-2014 pursuant to E.O. 13526

2 Incls:

1. Communications Security Violations OP SECRET CONTROL NUMBER 5/- 339 C by Air Force Stations. COPY 0F 0F 0F 0F 1E6

2. Key List of Air Force Violations. PAGE ______OF_____PAGES

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cc:

NSA Europe
NSA United Kingdom
NSA Far East
NSA Alaska
NSA Pacific
AG
C/S
COMSEC (3)
S/ASST COM
PROD
O6B
411
412
413

M/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.

TOP SECRET CONTROL NUMBER 54-3396-B
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PAGE 1 OF 1 PAGES

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COMMUNICATIONS SECURITY VIOLATIONS BY AIR FORCES STATIONS

DIG	IRIGRAPH	KEY NO.		REMARKS
			USA-33	
			APRIL	
011300Z 020515Z 130845Z 232232Z 262220Z 280045Z	ADK AGN CEY DOB EBM EFR	3d 3a 3c 3c 15 3a		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 AFWQB
			<u>WAY</u>	
060820Z	AON	7	-	Broke using trigraph AQE
		•	JUNE	
050030Z 251201Z 251201Z	AIX	3b 8 8		Broke on UWDRN vice UMDRN Used multiswitch setting 12345 Used multiswitch setting 12345
			USA-34C	
24 April		11	APRIL	Operator failed to switch to cipher
•			<u>USA-38</u>	•
			APRIL	
101215Z 121720Z 141530Z 180640Z 222213Z 250420Z 271715Z	COJ DFP DRY FBI GUL HNY IDG	1 3d 3e 7 3d 3d 3d		Broke on AM rotor arrangement Broke on NIYLV vice NIQLV Broke on WXGZN vice WXZGN Broke using trigraph FBT Broke on ZQROY vice ZGROY Broke on QQEYW vice QYEYW Broke on STZKZ vice STQKZ
			MAY	
051215Z 120305Z	BAO BWD	3 c 3d		Broke on ALIYJ vice ILIYJ Broke on MLUNP vice TLUNP
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VI	OLAT	IONS (Cont	(b)

							
DTG	TRIGRAPH	KEY NO.	REMARKS				
	USA-38 (Cont'd)						
		<u>MA</u>	Y (Cont'd)				
190120Z 301305Z	DGG rBM	3b 3d	Broke on FZKKV vice DZKKV Broke on CYWCB vice CYFCB				
		Ju	<u>VE</u>				
011700Z 011700Z 021855Z 032030Z 092015Z	APA AFF ALQ AQZ BXT	16 16 3d 3d 16	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				
091320Z 211920Z	BWQ EWG	16 3d	First and third rotors failed at counter reading 1821, second rotor failed at counter reading 2471 Broke on PHDJA vice PHDJZ				
		USA-3					
		APRI					
150114Z 260205Z	CPO EZJ	3d 3d	Broke on VJDGY vice VJDGH Broke on YMVCF vice YAVCF				
		MAY	:				
171854Z 192050Z 211825Z 261710Z	DED DPQ ECD FHE	3a 3c 3a 3b	Broke on KYXSU vice KYSXU Broke on LBHTB vice LPHTB Broke on HNFHW vice HNHFW Broke on PTABZ vice PTAYX				
		JUN	<u>E</u>				
190220Z 222040Z	HTO IUW	7 3d	Broke using trigraph HTN Broke on KVYRD vice KNYRD TOP SEGRET CONTROL NUMBER 54-3396 A COPY OF 27 COPIES PAGE 2 OF 12 PAGES				
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DTG	TRIGRAPH	KEY NO.		REMARKS
			<u>USA-51</u>	
			APRIL	
010100Z	AAD	10		Message indicator was derived using deciphering procedure
030115Z 032315Z 6 April	AVF BFO	3d 3d 11		Broke on UGSJU vice UUSJU Broke on EUXIQ vice EUXTQ Operator failed to switch to cipher
070945Z 071600Z 130005Z	CNK CYE EKN	3d 3d 3d		Broke on EXTHK vice EXTHR Broke on QYKEX vice OYKEX Broke on DVNYU vice DVNYW
			MAY	
012335Z 020340Z 030735Z	AKP AMQ	3a 3d 9a		Broke on YVKGC vice YVGKC Broke on AONMJ vice AONAJ Broke on BB vice FF
030800Z 030816Z 030831Z 121042Z 121044Z 121044Z	AFS AFH AHP	9a 9a 9a 9a 9a		Broke on BB vice FF Broke on BB vice FF Broke on BB vice FF Broke on GG vice HH
121051Z 200233Z 200820Z 201545Z 201545Z	DDN FDG DHX DJA	9a 3c 7 3c 3d		Broke on GG Vice hi Broke on DXGPB vice DXCPB Broke using trigraph DFG Broke on USHLO vice USHLU Broke on IBIYE vice IBIHE
			JUNE	
141045Z 20 June 30 June		6 13 14		Alignment in clear AGFOR Used incorrect codeword TOP SECRET codeword message enciphered in non-COMINT system

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VIOLATIONS (Cont'd)

DTG	TRIGRAPH	KEY NO.		REMARKS
			USA-52	
			APRIL	
021240Z 160120Z 230200Z 230430Z 230815Z 230911Z 250100Z	AIW CTR DWT DWV DXD DXG EFN	1 3d 2 2 2 2 3d		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
			MAY	•
270210Z	DLX	3 d		Broke on IJIBN vice ISIBN
			<u>USA-53</u>	
			APRIL	
021900Z 030930Z 032330Z 050200Z 070045Z 070210Z 070230Z 110430Z 111700Z 121500Z 141915Z 161800Z 300245Z	ARC AYL BKG BRJ CJW CKV CLR EHJ ERE FDY GBA GOH MDO	3d 3d 7 3d 9b 9b 3d 3d 3d 3d 3d		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
			MAY	
020105Z 13 May 270540Z	AGS BTJ	7 14 3d		Broke using trigraph AGE TS CW info enciphered in non-COMINT system Broke on SPTXO vice SPTXF
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VIOLATIONS (Cont'd)

DTG	TRIGRAPH	KEY NO.	REMARKS
		<u>U</u>	SA-53 (Cont'd)
			JUNE
160301Z .160915Z .201307Z	CMC	1 1 3d	Broke on PM rotor arrangement Broke on PM rotor arrangement Broke on VSFIG vice VSFXG
		<u>u</u>	SA-54
		Ā	PRIL
042345Z 050420Z	BXM BZB	3d 10	Broke on YRKLI vice YKKLI Message indicator was derived using deciphering procedure
081020Z 240845Z	DUT HCL	3d 3b	Broke on MVJST vice WVJST Broke on SJCVS vice SJCUS
			<u>MAY</u>
110750Z	CHW	3d	Broke on ANPRP vice ANORP
			JUNE
041540Z 091401Z 130615Z 151040Z	CKJ EDV EWP FFJ FQZ	3d 9a 7 2	Broke on TJAMO vice TJAMD Broke on BB vice AA Broke using trigraph EWF 13 messages enciphered using key list assigned to USA-54A Broke on WWJUX vice WWZUX
190835Z 271530Z	GBQ	3d 16	Broke on HFCNB vice JFDNB Random rotor failed to advance
2(1))00			6A-54A
	,		PRIL
030245Z 040030Z 040510Z	AID ANQ ANS	3c 2 2	Broke on LDRWN vice LDRWM Used key list assigned to USA-59 Used key list assigned to USA-59
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DTG	TRIGRAPH	KEY NO.	REMARKS
]	USA-54A (Cont'd)
			APRIL (Cont'd)
040510Z .040510Z 090615Z 110650Z 150130Z 260635Z 270620Z	ANY ANZ BJK BPT CEJ EFK EHD	2 3b 3d 3b 3a 3d	Used key list assigned to USA-59 Used key list assigned to USA-59 Broke on SWHIH vice RWHIH Broke on TOVVO vice TOVLO Broke on WXYGY vice WXXGY Broke on JUXLC vice JULXC Broke on OSNWY vice OSNWR
			MAY
020035Z 021930Z 061004Z	AEN AIG AXQ	3d 3b 10	Broke on DXUAH vice DXAVH Broke on IXNUZ vice IXBUZ Message indicator was derived using deciphering procedure
190335Z 200910Z	DKX DSM	3ъ 10	Broke on SDFHQ vice SDEHQ Message indicator was derived using deciphering procedure
260650Z 270115Z	FCA FFG	3a 3b	Broke on VUXRD vice VURXD Broke on XFAEY vice EFAEY
			JUNE
020530Z 040100Z 040920Z 132350Z 180356Z 251855Z	AHM BCG BFL DRM EPB GAT	3d 3c 3d 3d 3d	Broke on WYMUK vice WYMUX Broke on MSLIC vice MSLIP Broke on AOVLP vice APVLV Broke on BWTGB vice BWTGR Broke on XKJER vice CMJEM Broke on ANVCY vice FNVCY
		ı	USA-55
			APRIL
152110Z 260011Z 272135Z	BQR DEY DOJ	3b 3c 3d	Broke on IPZMO vice JPZMO Broke on TQFOI vice CQFOI Broke on WCHPT vice WCHPM
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VIOLATIONS (Cont'd)

DTG	TRIGRAPH	KEY NO.	REMARKS					
			USA-55 (Cont'd)					
	<u>MAY</u>							
070005Z 220030Z	CJV AON	3d 3d	Broke on VSQEP vice VSTET Broke on RKGBA vice RRGBA					
			<u>June</u>					
212115Z	BSI	3 b	Broke on KFNHO vice KFOHO					
			<u>USA-56</u>					
•		;	APRIL					
021117Z 060805Z	ALU BJQ	3d 5	Broke on SJRDJ vice RDRDJ Deciphered to YRZNV - broke on YRZNW					
062147Z	BNG	10	Enciphered message indicator using decipher procedure					
062208Z 12 April	BPI	3d 11	Broke on SZQWR vice SZSYI Transmitted clear text tape					
182100Z 192103Z	erw FCR	7 9a	Broke using trigraph EXW Broke on BB vice AA					
210827Z	FOQ	10	Message indicator derived using					
291002Z	HYR	5	deciphering procedure Alignment derived using procedure for first message of cryptoperiod					
			MAY					
062352Z 090700Z 090705Z 090710Z 090715Z 090920Z 090855Z 090900Z	BTN CSF CSD CSH CSK CSO CSS CST	1 1 1 1 1 1 1 1	Broke on AM rotor arrangement Broke on PM rotor arrangement					

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VIOLATIONS (Cont'd)

DTG	TRIGRAPH	KEY NO.	REMARKS
			USA-56 (Cont'd)
			MAY (Cont'd)
090905Z 090910Z 090915Z 090926Z 090927Z 090930Z 090928Z 090931Z 152127Z 242124Z	CSV CTA CTB CTC CTL CTG CTN CTP EGP GIR	1 1 1 1 1 3 3 3	Broke on PM rotor arrangement Broke on WKLJE vice WKKJE Broke on EOTOV vice BOTOV
			JUNE
200600Z 302139Z	EQV	3c 16	Broke on QINCU vice QYNCU Fourth rotor failed to step as scheduled
			<u>USA-57</u>
			APRIL
170540Z 280240Z 280250Z 280300Z 280310Z	etx Grv Grw GSA GSB	3c 9a 9a 9a 9a	Broke on TKDJQ vice GKDJQ Broke on AA vice BB Broke on AA vice BB Broke on AA vice BB Broke' on AA vice BB
			MAY
220515Z	KIG	3 đ	Broke on MSLZL vice MJLZL
051105Z 161530Z	BXF GST	3a 3a	Broke on ONXSY vice ONSXY Broke on BDQXF vice BDQFX

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DTG	TRIGRAPH	KEY NO.	REMARKS
•		USA	A-57A
		<u>A</u> 1	PRIL
012340Z 092350Z 280435Z	ADE BCZ DJP	3d 3d 3d	Broke on LANFA vice LANEX Broke on QYNXM vice QYWXM Broke on VGRSQ vice VGRSY
		1	<u>MAY</u>
020617Z 042350Z	AIJ APO	10	Reused indicator AAAIJRSWXLR Message indicator was derived using deciphering procedure
080615Z 230350Z	BJC DNK	3d 10	Broke on ESESF vice FSKSF Message indicator was derived using deciphering procedure
		<u>.</u>	JUNE
160115Z	CUN	3 d	Broke on LJAWV vice LTAWV
		<u>6910</u>	Oth SG
		AI	PRIL
18 April		12	Caused by faulty key tape
		<u>ī</u>	YAM
121100Z 121150Z 301515Z 301515Z 301515Z 301935Z 301940Z 302100Z 302200Z	DSZ DTH DTJ	1 1 1 1 , 1 1 1	Broke on PM rotor arrangement Broke on PM rotor arrangement Broke on AM rotor arrangement

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DTG	TRIGRAPH	KEY NO.	REMARKS			
		<u>6910t</u>	h SG (Cont'd)			
		<u>JU</u>	<u>NE</u>			
2 June 3 June 111300Z 181730Z 25 June	BEH BEH	12 11 1 3d 12	Caused by torn tape Cause unknown Broke on AM rotor arrangement Broke on NGXGR vice NGMGR Tape contained consecutive blank characters			
		6920t	h SG			
		APR	IL.			
0404552		5	Alignment derived using procedure for first message of cryptoperiod			
231330Z 231400Z		1	Broke on AM rotor arrangement Broke on AM rotor arrangement			
231400Z 231405Z 231450Z		i 1	Broke on AM rotor arrangement Broke on AM rotor arrangement Broke on AM rotor arrangement			
		MA	<u>¥</u> .			
131320Z 14 May		13 •	Broke on AM rotor arrangement COMINT info transmitted to weather station			
19 May		11	Switched to text before turning off TD			
290744Z	EEA	3d	Broke on MMCIA vice MZCIA			
	JUNE					
091400Z 1004007		1 8	Broke on AM rotor arrangement Used multiswitch setting 42135			

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VIOLATIONS (Cont'd)

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DTG	TRIGRAPH	KEY NO.		REMARKS			
1st WEATHER WING							
			JUNE	•			
070508Z		11		Operator switched to "text" before turning off TD			
072050Z		11		Operator switched to "text" before turning off TD			
SSO 3RD AF							
	APRII.						
6 April 6 April		11		Operator failed to switch to cipher Reuse of key tape			
			JUNE				
9 June		13		TOP SECRET codeword transmitted in clear at end of encrypted tape			
		ļ	SSO SAC				
			JUNE				
17 June 23 June		11 11		Key tape ran out Operator failed to turn off TD before switching to text			
			AL OPERA				
			APRIL				
15 April		11		Operator in "text" while requesting a correction			

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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 unclassified

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KEY LIST OF AIR FORCE VIOLATIONS

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

- 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 SETTING

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