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#### NATIONAL SECURITY AGENCY WASHINGTON 25, D. C.

Scrial:1605 14 Mar 55

TOP SECRET

SUBJECT: Report of Communications Security Violations

TO:

Commander

U. S. Air Force Security Service

San Antonio, Texas

- 1. Attached is the quarterly (October through December 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:

C. M. MILLER,

Major

Asst. Adj. Gen.

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

2 Incls:

1. Communications Security Violations by Air Force Stations. (10)

2. Key List of Air Force Violations.(10)

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Serial: 1605

14 Mar 55

cc: NSA Europe

NSA United Kingdom

NSA Far East

NSA Alaska

NSA Pacific

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COMSEC (2)

S/ASST\_

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M/R: This is a compilation of communications security violations committed by Air Force stations during October, November, and December, 1954. 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 Incl 2.

/s/ J. J. Martin, 4131-1, 60545, pa, la

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### TOP SECRET

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### COMMUNICATIONS SECURITY VIOLATIONS BY AIR FORCE STATIONS

DTG	TRIGRAPH	KEY NO.	REMARKS
		USA-33	
		OCTOBER	
082321Z		14	Keyboard operation
		NOVEMBER	
100755Z	OYA	16	Random rotor failed at counter reading 800
		DECEMBER	
220812Z		14	Keyboard operation
		<u>usa-38</u>	•
		OCTOBER	•
141445Z	BYZ	12	Message indicator derived
291850Z	EBR	4ъ	using deciphering procedure Broke on OLLKW vice OLLKV
		NOVEMBER	<u></u>
0904252	TVA		Broke using trigraph AYT
111000Z	BFC	9 1 4c	Broke on PM rotor arrangement  Broke on MIWZD vice MIWED
112215Z	BEY		
		DECEMBER	•
210445Z 240005Z	eet Elw	8 1	TCWWA Broke on rotor arrangement
282214Z	EUK	4d	for 25 Dec AM Broke on MNYRR vice MNYRW ·
		USA-38B	
		OCTOBER	
0900352	CAM	4a	Broke on XTMCW vice XIMCW
		NOVEMBER	
030334Z	AIL	4 <sub>b</sub>	Broke on ZWFWK vice ZWFWL
0802102	CEN	4 <b>a</b>	Broke on JSPCI vice JSPCB
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TOP SPERMI VIOLATIONS (Cont'd)

DIG	TRIGRAPH	KEY NO.	REMARKS	
		<u>U3A-38B</u> (	Çont'd)	
NOVEMBER (Cont'd)				
090005Z 210045Z 230515Z	CJY EOP EWZ	4а 4а 4ъ	Broke on PWYAW vice PWYAM Broke on DCMCC vice DCMCH Broke on STZIQ vice STYIQ	
		<u>USA-51</u>		
		OCTOBER		
030535Z 030902Z 080225Z 080445Z 281315Z	AOH APB BLS	4d 4d 4d 14 1	Broke on GGZMF vice GWZMF Broke on UAGYT vice RAGYT Broke on WMPUS vice WMPUO Keyboard operation Broke on AM rotor arrangement	
		NOVEMBER		
1916052 2904452		14 15	Keyboard operation Faulty key tape	
		<u>USA-53</u>		
		OCTOBER		
042250Z		11	Enciphered message using AFSAK 3424 (A), but used multiswitch	
220200Z		4a	setting assigned to AFSAK 3424 Broke on LJFNK vice LJFNS	
		<u>USA-54</u>	•	
		OCTOBER	•	
081616z	BWE	16	Random rotor failed to step at counter readings 1761 and 1823	
		NOVEMBER		
032125Z 061640Z 080520Z	AVF BOW BVQ	9 9 4d	Broke using trigraph AVE Broke using trigraph BOZ Broke on JAQLD vice JABLD	
DECEMBER				
2108402	E <b>VY</b>	Чc	Broke on MCGUP vice MCCUP	
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TOP SHÖRET (Cont'd)

DTG	TRIGRAPH	KEY NO.	REMARKS	
		USA-54A		
		OCTOBER		
011201Z	ACV	4a	Broke on YFPLU vice YLPLU	
020001Z 271127Z	AFP EYI	4а 4d	Broke on TKZPJ vice TKPZJ Broke on UCVGV vice UCUGY	
		. NOVEMBER		
061615Z	BWM	ųа	Broke on LSIGZ vice LSIZG	
101220Z	DBN	4a	Broke on WZCMS vice WZCMG	
		DECEMBER		
041927Z	$\mathbf{BQJ}$	4 <b>a</b>	Broke on SESUH vice SOSUH	
		<b>DSA-55</b>		
		OCTOBER		
010043Z 020426Z	AAG	4a 16	Broke on CKQQS vice AKQQS	
0204202	AEK	10	Random rotor failed to step at counter readings 841 through 843 and 872 through 874	
042126Z	АНХ	4a.	Broke on ACSMV vice ACMSV	
172122Z	BAX	4d	Broke on HYJHC vice HYJXC	
212138% 292224Z	BLF CJB	4d 8	Broke on YDKVC vice YDKOC DYEOD	
		NOVEMBER		
022120Z	AEI	46	Broke on FSNXA vice ESNXA	
070452Z	AYB	4a	Broke on DJNWC vice DJNRC	
220 <del>1</del> 312	NMD	4đ	Broke on IDZWD vice IDFWD	
220431Z	CMH	4a	Broke on UXRWR vice UIRWR	
DECEMBER				
040025Z	OUH	. 7	Omitted machine designator	
		<u>USA-56</u>		
		OCTOBER		
010005Z		3	Used superseded rotors with new key list	

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# TOP STREET VIOLATIONS (Cont'd)

DTG	TRIGRAPII	KEY NO.	REMARKO		
USA-56 (Cont'd)					
OCTOBER (Cont.'d)					
<b>010</b> 006Z		3	Used superseded rotors with new key list		
010007Z		3	Used superseded rotors with new key list		
010009Z		3	Used superseded rotors with new key list		
152105Z	CXI	μc	Broke on DBRIP vice DBRIB		
		NOVEMBER			
092115Z 180020Z 190013Z 240334Z	BXR DUA ESY	կർ 6 4d 12	Broke on GYNIO vice AYXIO Broke on MXKDA Broke on IIMYF vice IIHYF Message indicator derived using deciphering procedure	:	
		DECEMBER	<u>.</u>	•	
160011Z 280545Z 280711Z 282100Z	FEK INU IKS IQP	4d 1 4d 4d USA-56A	Broke on UDTHV vice UDTHM Broke on AM rotor arrangement Broke on CRIGW vice CRISW Broke on QGWBW vice QSWBW		
		OCTOBER			
111530Z 131330Z 202102Z 222102Z 241225Z	BAL BTL BWW	4d 10b 4d 4c 1	Broke on WKPTW vice LKPTW Broke on AA vice EE Broke on ELJJT vice QLJJT Broke on SQHHN vice SQHHM Broke on AM rotor arrangement		
NOVEMBER					
090745Z 180755Z 241225Z	ASE BJM BUY	4d. 4d 1 DECEMBER	Broke on GENFN vice GENON Broke on IZIFC vice HZIFC Broke on AM rotor arrangement		
0807 <sup>1</sup> 5Z	AUH	4c	Broke on QEJBS vice QBJBS		

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TOP SECRET (Cont'd)

DTG	TRIGRAPH	KEY NO.	REMARKS	
		<u>USA-56A</u>	(Cont'd)	
		DECEMBER	(Cont'd)	
132100Z		16	Fourth rotor failed at counter reading 800	
1.41300Z	BNX	4c	Broke on QEWYN vice QGWYN	
		USA-56B		
		0011 705		
	•	OCTOBER		
290420Z		17	DTG should have read 291420Z	
		DECEMBER		
		<del></del>		
29 DEC		14	Transmitted clear text tape	
		<u>USA-57</u>		:
	_	OCTOBER		•••
:	1	OCTOBER		•••
021440Z	ALK	4a	Broke on HBFAS vice HRFAG	
052335Z	BHJ	4d.	Broke on ONIVD vice ONUVD	
110710Z		2	Used keylist assigned to USA-57A	÷.
110840Z		2	Used keylist assigned to USA-57A	٠
110855Z		2	Used keylist assigned to USA-57A	•
1920452	GDW	4b	Broke on GUSXF vice GUTXF	
250949Z	HFX	1	Brokė on PM rotor arrangement	
	•	NOVEMBER		
091446z	DYN	Чđ	Broke on GLZPK vice GRZPK	
151306Z	FAD	4d	Broke on BVMGX vice GVMGH	
151434Z	FAL	4 <b>d</b>	Broke on KMFMH vice KDFMH	
1611152	FFJ	i	Broke on PM rotor arrangement	
202130Z	GEK	10a	Broke on BB vice AA	
210939Z	GMJ	4d.	Broke on ZWYTD vice ZMYTD	
290945Z	JAD	4d.	Broke on VVEHA vice VVELB	
-				
		DECEMBER		
0409252	SBD	4d.	Broke on VHQFU vice VHYFU	
100643Z	EAF	4b	Broke on DMQDV vice DMQDU	
221303Z	GSC	4d.	Broke on FLULW vice FBULW	
	4.50		220-20 OIL LEGEL TIOU I DOUBLE	

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TOP SECRET VIOLATIONS (Cont'd)

DTC	TRIGRAPH	KEY NO.	REMARKS
		<u>USA-57A</u>	
		OCTOBER	
040001Z 132300Z 260850Z 272224Z 300605Z	ATC BLZ DHM DQB DYN	4d 4d 4a 4d 4d	Broke on QYIDO vice OYIDO Broke on CGAWR vice GMAWR Broke on MXAOC vice MXOAC Broke on YIJSL vice YUJSL Broke on RFYIT vice RFYIO
		NOVEMBER	
010625Z 040600Z 070205Z 120437Z	ABC AJY AQS BDO	9 5 4a 4d	Broke using trigraph ABO Sent same message indicator for two messagesAAAJYTVIYOD Broke on ASPEA vice ASPEE Broke on NCDUZ vice NRDUZ
160542Z 160640Z	BOV BPA	7 12	Only four letters in rotor alignment groupXHDS Mcssage indicator derived using deciphering procedure
160725Z 161000Z 170605Z 210120Z 220640Z 240518Z 300455Z 301000Z	BPL BQH BSN CXA CLV CXA DNK DNU	4d 4c 4c 9 4a 4d 4d	Broke on LKUXC vice FJUKU Broke on VHWTT vice UHWTT Broke on YJLFE vice YJLFG Broke using trigraph CFA Broke on RYIRI vice RIYRI Broke on ZMCIH vice ZMXIH Broke on LLYCT vice LLLCT Broke on JHWVQ vice JHWVU
_		DECEMBER	<u>L</u>
010002Z 060930Z 110005Z	AAA APM AZD	13 46 12	Broke using set deciphered from February deciphering card Broke on UMDCE vice UMDDE Message indicator derived using
160001Z 230300Z 240530Z 271515Z	BMB CGB CTJ	. 4d 4d 4c 4d	dcciphering procedure Broke on MQBVM vice LQHVV Broke on AZNJR vice AZNTR Broke on BVRFV vice EVRFV Broke on RFCAI vice EGCAI
		85TH RENNOVEMBE	<del></del>
022155%		14	Clear text tape

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DIG	TRIGRAPH	KEY NO.	REMARKS		
DET 1, 85TH RSM					
		NOVEMBER			
14 nov		14	Classified operator chatter		
		6910TH SCTY	GP		
		OCTOBER			
021459z 231250z	АЈН	9 1.4	Broke using trigraph AJF Turned cipher switch on before removing message tape		
250910Z	EJM	4d	Broke on YVISA vice MVISA		
251330Z 291302Z	EKK FMQ	4d 4d	Broke on EWQSM vice EWTSM Broke on YKUWV vice YKUWC		
		NOVEMBER			
080442Z 101305Z	AYO	14 16	Clear text tape Random rotor failed at counter reading 800		
		DECEMBER			
260005Z 281015Z	,	15 2	Key tape stuck Broke on PM arrangement		
		6920TH SCTY	GP		
		NOVEMBER			
020102Z		14	Keyboard operation		
DECEMBER					
091550% 160700Z		14 14	Keyboard operation Keyboard operation		
6961ST COMM SQ					
DECEMBER					
060750z 211923z		14 14	Keyboard operation Keyboard operation		

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VIOLATIONS (Cont'd)

DTG TRIGRAPH KEY NO. REMARKS

6961ST COMM SQ (Cont'd)

(Cont'd) DECEMBER

291323Z 14 Keyboard operation 291515Z Keyboard operation 14 291908z 15 Key tape ran out

SSO AIR DEFENSE COMMAND, ENT AFB

OCTOBER

14 230500Z Keyboard operation

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#### KEY LIST OF AIR FORCE VIOLATIONS

### Oct., Nov., & Dec., 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)
- 3. Use for encipherment of superseded rotors.

### ROTOR ALIGNMENT AND MESSAGE INDICATOR

- 4. 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.
- 5. 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.
- 6. Failure to tail previously enciphered message. (Reference AFSAG 1262, para 6002a(4))
- 7. Omission or addition of one or more letters to the message indicator.
- 8. 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

9. 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

10. 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)



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

#### ENCIPHER DECIPHER CARD

- 12. Incorrect use of an ORCU3 enciphering card to produce a message indicator. (Reference AFSAG 1262, para 5005c)
- 13. Use for encipherment of a noneffective ORCUS enciphering card.

#### ADDITIONAL VIOLATIONS

- 14. Transmission in the clear of classified information.
- 15. Transmission of classified information in monoalphabetic substitution cipher.
- 16. Transmission of a message in which there was faulty rotor stepping during encipherment. (Reference AFSAG 1262, para 6002a(3))
- 17. Transmission of a message containing an incorrect date-time group.