# Series: AWM95 Australian Army commanders' diaries [Vietnam]

Signals units

Item number: 6/4/10

Item: 145 Signal Squadron

Narrative

Annexes

[1-30 Nov 1966]

#### **COVERING LETTER**

Reference No.....

To: OIC, Military History Section, AHQ.

I enclose Commanders Diary (AF C 2118) (Adapted) as indicated at Part 2.

Please return receipt below.

Appointment

(OC Unit or senior staff officer)

SECRET

ORIGINAL DUPLICATE Strike out where not applicable

## COMMANDERS DIARY

145 Sig Sqn Unit or Formation 1 Nov 66 30 Nov 66 From.

#### INDEX

Enclosure Numbers Narrative (AF C 2118) ANNEXES Duty officer's log Messages connected with log ..... to ...... Operation orders and instructions issued Operation orders and instructions received Sitreps issued ..... to ..... Orders of battle and location reports issued Intelligence reports and summaries issued; appreciations made Administrative orders and instructions issued ..... to ..... Administrative orders and instructions received ..... to ..... Administrative reports and bulletins; ammunition returns; field strength returns Standing orders issued ..... to ...... Commander's policy and demi-official letters ..... to ..... Action reports (if required) ..... to ..... Other papers, eg, maps and diagrams, air photos, reports from sub units ..... to ..... Periodical summaries of operations ....4 to ......

\* Only to be included during operations. † Cross out whichever is not applicable.

Top Secret Supplementary Diary

† NIL RETAINED † Despatched to

On.....

## COMMANDERS DIARIES INSTRUCTIONS

#### AIM

1. The aim of a Commanders Diary is to provide data on which to base future improvements in Army training, equipment, organization and administration, and to furnish historians with a record of the activities of units and formations in operational and non-operational periods in peace and in war.

#### GENERAL

- 2. Entries are to be made daily on AF C 2118 (Adapted) each entry being initialled by the officer detailed to keep it.
- Commanders Diaries will conform with the rules for drafting orders given in "Staff Duties (Australia)", Chapter 2, Section 12.

#### RESPONSIBILITY

#### **During Non-operational Periods**

4. A Commanders Diary is to be compiled by commanders of all formations.

#### **During Operational Periods** (1)

- 5. A Commanders Diary is to be compiled in duplicate by:
  - a. Commanders of all formations.
  - b. Each branch of the staff at formation headquarters commanded by a brigadier or above.
  - c. Heads of services not below the rank of lieutenant colonel.
  - d. Personal staffs and officers holding special appointments.
  - e. Unit commanders.
  - f. Commanders of a detachment of a unit when so ordered.

#### COMPILATION

- 6. Both original and duplicate copies are to consist of:
  - a. Cover (AF C 2119) (Adapted).
  - b. Index as printed on cover.
  - c. Narrative (AF C 2118) (Adapted).
  - d. Annexes as shown in the Index.
- 7. All details of the unit or formation (if a detachment is concerned, the name of the parent unit), period covered and enclosure numbers of the annexes are to be shown on the cover. If there has been a change of command since the last report, the date of assumption by the new commanding officer is to be included.
- 8. The annexes are to be assembled in the groups shown on the cover. If there are no enclosures for an annex NIL will be entered on the cover. If additional annexes are convenient for a particular headquarters. arting at B.

for operations form Annex "Z", "TOP SECRET the document. It is to be prepared and disposed of as

#### **TENTS**

es as well as map references), establishment, equipment

1 orders given.

ne day's fighting, including company movements.

nmander with regard to equipment, tactics, organization

tential importance.

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employed in the time not accounted for. The type of

and to save work as much information as possible is to iments issued and received, routine returns, etc. All and the time of receipt or despatch is to be given.

ne annexes, but need not give a precis of any of them.

(continued on back cover)

1 BP Coy-274/65-55m

#### DISPOSAL

- 13. Original Commander's Diary. This is to be forwarded monthly, unless otherwise ordered, by the seventh day of the succeeding month direct to AHQ.
- 14. Duplicate Commander's Diary. This must be clearly marked as a duplicate. It is to be sent separately from the original to AHQ one month after the original has been despatched but not before the former has been acknowledged.
- 15. When overseas, both copies of diaries are to be sent through the Army Records organization in the overseas theatre but at different times.

#### 16. TOP SECRET Supplementary Diaries.

- a. The documents referred to in Paragraph 9 together with a list of them made out on AF C 2118 (Adapted) must be placed in separate cover (AF C 2119) (Adapted). All details must be filled in and the cover clearly marked in red: "ANNEX Z OFFICER ONLY". It may be convenient to group the papers by appendices.
- b. Supplementary diaries must be forwarded under the normal rules for TOP SECRET correspondence, to AHQ. The inner envelope must be plainly marked:

## TOP SECRET ANNEX Z to

Commanders Diary of	(Formation or Unit)
From	to(Dates)

c. The duplicate supplementary diaries must be despatched as shown in Paragraph 14 as soon as receipt of the original has been acknowledged.

the dociment. It is to be prepared and disposed of as

to all well as man references; a subfationest, equipment

This form is to be enclosed with the annexes in AF-C 2119 (Adapted).

## COMMANDERS DIARY NARRATIVE

AF-C 2118 (Adapted)
Revised Jun, 1965

UNIT/FORMATION 145 Sig So-

COMMANDING OFFICER Maj J.H.A. BIRD

MONTH AND YEAR Nov 66

REFERENCE MAP

Place and grid reference	Date	Time	Event or information	Annex letter and enclosure number
SAIGON	1 Nov 66		HQ 145 Sig Sqn moved from FWMAO building 12 Tran Quoc Toan to AUSTCAN VIETNAM Site	
			PHU TO, GIA DINH	
VUNG TAU	2 Nov 66		RR det deployed in support of Op HAYMAN on LONG SON island PHUOC TUY Province	D 2
SAIGON	7 Nov 66		Construction of poles and power lines from HQ AFV generator building FWMAO building to	
***************************************			HQ AFV COMCEN	
PHU TO	10 No 2 66		Insulation for air conditioning of transmitter building commenced	D 2
	13 Nov 66		ISB drive faults FSK had to be employed	D 2
TAN SON NHUT	25 Nov 66		New sloping 'V' Rx antenna constructed and operational. Drop in QRM due to relocation	
			away from US antenna servicing equipment.	D 2
***************************************				
**************************				
*******************************		***************************************		
			1 B P Coy—275/65—55m	.

## AUSTLAN MILITARY FORCES

HQ 145 Sig Sqn

Oct 66

114:4:4(52)

## FTS - HELBOURIJE - SAIGON COT - NOVELDER 66

EUR BRITISH W

1.	SAIGOIT SETTO		
	2400 - 1200	F15B	19355
	Alt	F14B	10505
	1200 - 2000	F 7B	13965
	Alt	F 6B	12155
	2000 - 2400	F 6B	14620
	AJ.t	F 7D	13965
20	I ELDOURNE SEND		
	Main Tr		
	2300 - 0900	P 9A	14800
*	0900 = 2300	F 9A	14800
	AIt	F 5A	10865
	Spans Tx		
	2300 - 0900	F12A	18525
	0900 - 2300	F 3A	10310
	Alt	F 6A	12155

B.E. BROADRIBB)

## FTS - THE BOURNE - SAIGON COP

#### DECEMBER 60

SAIGON Sond		
2300 - 1200	F75 B	19355
Alt	F14 D	10505
1200 - 2300	P 7 B	13965
Alt	F 5 B	10075
TELBOURIE Sond		
Iloin Tx		
2300 1200	F13 A	18525
1200 - 2300	F 6 A	12155
Alt	IF 5 A	10065
Spare Tx		
2300 - 1200	F16 A	21700
1200 - 2300	F3A	10310
2300 - 2300 Spene freq on	vail either ch	
	F 9 A	14800
If CW Activated :-	SITMEX	
2300 - 1400	F13 33	10555
Alt	F 6 D	12155
1400 - 2300	F 6 B	12155
Alt	F 3 B	10310

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## MONTHLY TRAFFIC STATISTICS

## AUSTCAN RELAY STATIONS

			THAT DI	THE POST OF THE PARTY OF THE PA		
STATION AUSTRALIA				(B) Month	Movember 1966	
(C) Scheduled Hrs of Operation Continue				(D) Daily Average Operator Strength		
Daily Avera of Mess (By Cir	ages	ber	Peak N Messa (By Cir	ages	Daily Average Re-runs From Service Position	
(E) Circuit	(F) In	(G) Out	(H) In	(J) Out	(K)	
					Daily Average Re-runs Requested	
					(L)	
					Daily Average Number Messages Refiled	
					(M)	
					TARE Stations Daily Average Number Rejects	
					(N)	
					MANUAL Stations Daily Average Number Multi-Routes	
					(0)	•
					Average Number Supervisory Staff	
					(P)	
Total		370	B. V. F. S.			
		REST	- 1 RICTED		Original (Reverse Blank)	

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ComStats 3

## MONTHLY TRAFFIC STATISTICS

## AUSTCAN TRIBUTARY STATIONS

STATION BO AND SARROW	(B) Month 1966
(C) Scheduled	(D)Average Daily
Hrs of Operation	Operator Strength

## Outgoing Traffic (Daily Average)

(E)	(F)	Z	Y	0	P	R	М
Number of Messages Lodged	Precedence			585	2727	6437	

## Terminating Traffic (Daily Average)

(G)	(H)	Z	Y	0	P	R	M
Number of Messages Received 144.66	Precedence			8002	44	90284	

## Peak Traffic

Outgoi	ng Traffic	Terminat	ting Traffic
(J)	(K) Number of Messages 145	(L)	(M) Number
Date 2233		Date 250	of Messages 256

## Re-Runs

Number Requested From Tributary	Number Requested By Tributary
(H)	(0)
	2

2 - 2

2 - 2 RESTRICTED (Reverse Blank).

#### SECRET

#### AUSTRALIAN MILITARY FORCES

#### VIETNAM

Headquarters
Australian Force VIETNAM

R193 - 1 - 11

13 Dec 66

D Sigs (2)

#### COMMUNICATIONS REPORT - NOV 66

#### Point to Point Circuits

1. <u>Circuit Data Summaries</u> - Annexes A to E.

#### 2. Rear Link

- a. Insulation for, and installation of air conditioning at transmitter building was commenced. One air conditioning unit installed and operational 10 Nov. High ambient temperatures caused many ISB drive faults throughout the month. Temperatures were high due to insulation of building before the air conditioner was fully operating. A further air conditioning unit is to be installed as soon as it becomes available.
- b. A new "sloping V" antenna was erected at the receiver site and became operational 25 Nov. The relocation was necessary because a satellite station was built within the previous "sloping V". The new antenna resulted in improved reception because of its relocation separate from US antennae servicing equipment which had previously been causing QRM.
- c. Alternate, D10 keying lines, were completed from transmitter to receiver site 29 Nov. This provides an alternative line or PRC-25/line route for keying.
- d. Extensive line repair work carried out throughout the month due to damage caused by US construction work.

#### 3. Radio Relay

- a. Faulty internal frequency calibration of a TRC-24 station caused QRM to a US Satellite Tracking Station at TAN SON NHUT. This fault was pointed out by a US Electro-magnetic capability team (RFIT). Notes on this teams capability are at Annex F.
- b. In support of Op HAYMAN; see Annex M, a radio relay det was formed and deployed. It was only possible to deploy this det by removing all spare equipments from existing stations. Details of the installation are at Annex G,

#### RAAF Communications

4. NO significant changes. Radio Officer's report for months Sep/Oct and submission on comms requirements for RAAF contingent VUNG TAU are at Annexes H and I respectively.

#### Area Communications

- 5. Traffic volume graphs are attached as Annexes J and K.
- 6. See OC 103 Sig Sqn's DO at Annex L.

/Tactical Comms

#### Tactical Communications

- 7. See Annex L.
- 8. A copy of HQAFV R193-1-21 of 2 Dec, a report on SAS communications in SVN, is at Annex M.

#### Signal Projects

9. Comcen 1 ATF - Building 70% complete.

#### Miscellaneous

- 10. Equipment
  - a. A copy of the report on KW-7/TT-76 keying faults is at Annex N.
  - b. Fault rates remain high on AN/PRC-47, R5223 and Bucknell generator.
- 11. 547 Sig Tp Two 50' x 30' Standard Tropical huts have been erected to accommodate Operations and Tg Terminal/Offices.
- 12. Inf Bn Comms Notes are at Annex O.

John July 213 for (J. H. BIRD) Maj SO SIGS HQ AFV

#### ANNEXES

- A Monthly Circuit Data Summary SAIGON/MELBOURNE.
- B Monthly Circuit Data Summary SAIGON/VUNG TAU.
- C Monthly Circuit Data Summary SAIGON/NUI DAT.
- D Monthly Circuit Data Summary 1 ALSG VUNG TAU/RAAF VUNG TAU.
- E Monthly Circuit Data Summary VUNG TAU/NUI DAT.
- F Report on US Electro-magnetic capability team.
- G Details RR installation Op HAYMAN.
- H RAAF Radio Offrs report Sep/Oct.
- I Submission Comms requirement RAAF contingent VUNG TAU.
- J Traffic volume graph HQ AFV COMCEN.
- K Traffic volume graph 1 ALSG COMCEN.
- L 00 103 Sig Sqn's DO.
- M Report SAS Comms SVN.
- N Report on KW-7/TT-76 keying faults.
- 0 Notes on Inf Bn Comms.

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#### LICHTHIAY CURCUIT DATA SUITIARY

1.	Circuit	
	SAIGON - WATSONIA	
2.	Period	
	1-30 Nov 66	
3.	Schodule	
	Continuous	
40	Dotail of Circuit	
	Classified; Duplox, RTT, HF S	SB
5.	Percentace Schedule Available to	o traffic
7	In 82% - 19.7 hrs daily	
Go	Total Resonates III and OUT	
	9912	
7.	Traffic Breakout by	
	a. Precedence	Flash IIil .
		Immediate 1314 - 13.3%
		Priority 3758 - 37.9%
		Routine 4840 - 48.8%
	b. Classification	Top Socret )
		Secret )
		Confidential) HOT aval
		Restricted )
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8.	Liscollaneous Cormonts	

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#### LICHTHLY CIRCUIT DATA SUTHIARY

10	Circuit		
	SAIGON - VUNG TAU		
20	Period		
	1 - 30 Nov 66		
3.	Schedule		
	Continuous		
40	Detail of Circuit		
	Duplom; TTY, Classified, US/AUS	T boarer circuit	
5.	Percentaço Schedule Available t	o Troffie	
	87% - 20.9 hrs daily		
6.	Total Messages IV and OUT		
	4223		
7.	Traffic Breakout By		
	a. Precedence	Flach	MAI
		Inrediate	220 - 5.2%
		Priority	1594 - 37.7%
	40	Routine	2409 - 57,1%
	b. Classification	Top Secret	)
		Secret	)
		Confidential	) NOT aval
		Restricted	)
		Unclassified	)
_			

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Miscellaneous Commendo

8,

#### HESTR ICTED

#### CONTELLY CINCUIT DATA SULLARY

70	Circuit :			
	SAIGON - BARIA			
2.	Period			
	1 - 30 Nov 66			
3.	Schodule			
	Continuous			
40	Detail of Circuit			
	Simplex; TTY, Classified, US/AUST becarer circuit			
5.	Percentege Schedule Available to Traffic			
	89.1% - 21.4 hrs daily			
6.	Total Rescores III and OUT			
	2900			
7.	Troffic Breakout By			
	a. Procedence	Flash	Nil	
		Immodiate	200 - 7.8%	
		Priority	605 - 23.5%	
		Routine	1775 - 68,7%	
	b. Classification	Top Secret	)	
		Secret	)	
4		Confidential	) NOT aval	
		Restricted	)	
		Unclassified	)	
8,	Miscollaneous Commonto			

RESTRICTED

#### RESTRICTED

ATMEX °D° TO HQ AFV R193:1:11 DATED /3 DEC 66

#### LICHTELLY CIRCUIT DATA JUITIARY

70	Circuit				
	1 ALSG - RAAF VUNG TAU				
2.	Period				
	1 = 30 Nov 66				
3.	Schedule				
	Continuous				
40	Dotail of Circuit				
	Simplex Tg over land line				
5.	Percentage Schedule Available to Traffic				
	94%				
6,	Total Messages IN and OUT				
	2191				
7.	Traffic Brookup By				
	c. Procedonce:	Flosh	1711		
		Immodiato	77		
		Priority	1360		
		Routine	754		
	b. Classification:	Top Secret	)		
		Secret	)		
		Confidential	) NOP aval		
		Restricted	)		
100 M		Unclassified	))		
8,	Lliscollancous Commends				

#### BESTAR TOTAL



## LEXIBLE CHOMES DATA SECURIT

1.	Circuit				
	1 ALGO - 1 ADD				
2.	Rentel				
	1 - 30 Hor 66				
3.	Schodula		I SHE TO THE		
		10700			
4.					
40	Dotail of Circuit				
	Simplex To over AUST/US	podzona			
5.	Porcentago Schodulo Avai	Porcentago Schodulo Available to Traffie			
	92.048%		IN APV B193-1-1		
6.	Total Messages III and OU	Total Messages III and OUT			
	1006				
7.	Troffic Droskout Ly				
	C. Procodence:	Flash	mai.		
		Translate	131		
		Priority Routine	458		
		TONATIO	367		
	b. Classifications	Top Secrot	)		
		Secret	)		
		Confidential	) NOT eval		
		Rootrioted	)		
		Unclassified	)		
8.	Miscelloneous Comments				
			ALTER SEP TO		

RESTRICTION

#### USMACV ELECTROMAGNETIC CAPABILITY TEAM

#### Introduction

1. MACV has recently acquired the use of an "Electromagnetic Capability Team" and equipment for use within SVN. The team is tasked by the J-6 (Communications-Electronics) branch of MACV primarily with the detection of RF interference. The services of the team are available to AFV.

#### Facilities Available

- 2. a. Ground RF direction finding 14 KCS to 10 GCS.
  - b. Environmental studies and noise level surveys 14 KCS to 10 GCS.
  - c. Field Intensity Measurements 14 KCS 10 GCS.
  - d. Study of electromagnetic radiation hazards to:
    - (1) Personnel.
    - (2) Electro-explosive devices.
    - (3) POL.
  - e. Photographic recording:
    - (1) Scope DC 15 MCS.
    - (2) Analyzer 10 MCS to 10 GCS.
  - f. Graph recording (2 channel).
  - g. Spectrum analysis 10 MCS to 10 GCS.
  - h. Frequency standardization DC to 3 GCS.

#### Equipment Used

- 3. The complete installation is mounted on a modified 1 Ton Dodge "Power Wagon" which is air transportable by C-130 (Hercules) aircraft. Major equipment items include:
  - a. 2 x 5KW petrol generators (mounted on roof).
  - b. Field strength meter.
  - c. R391 communications receiver.
  - d. Hewlett-Packard Frequency counter and analyzer.
  - e. Oscilloscope.
  - f. Log periodic and loop antennae.
  - g. HF tranceiver for communication with MACV J-6.
  - h. Air conditioner.

#### Employment

4. The team is generally employed on detection of interfering stations and frequency calibration. It is interesting to note that over 80% of the interference problems investigated concern AN/TRC-24 interference and in almost every case the cause of the interference has been traced to faulty internal calibration of AN/TRC-24 equipments. Other problem areas are stated to be VHF FM and UHF AM tranceivers.

#### Comment

5. In AFV experience the major problem areas are HF and VHF FM ground - air - ground communications.

SECRET

#### RR INSTALLATION - OP HAYMAN

#### Task

1. Provide for voice/tg channels in sp of Op HAYMAN on LONG SON Island:

Fwd TF TOC - Rear TF TOC 1 voice

" " " " - G2 HQ AFV 1 voice

Fwd TF HQ Swbd - Rear TF HQ Swbd 2 voice

" " " " - 1 ALSG Swbd 1 voice

Fwd TF Sigcen - Rear TF Sigcen 1 telegraph

#### Equipment

2. a. Fwd TF HQ (LONG SON Island):

```
2 x AN/TRC-24 (1 spare) ) In 3/4 ton veh - set up in tent
1 x Group Modem ) 16' x 16' at site - worked direct
2 x TA-5006/U ) to MRC-69 at NUI DAT.
2 x 6.25 KVA ONAN Gens (1 spare) - in ½ ton tlr.
2 x AN/PRC-25 ) carried loose - set up as emergency DX
1 x AN/TCC-14 ) 1+1 working direct to 1 ALSG - 1 horizontal
and 1 vertical dipole wire aerial
```

b. Rear TF HQ (NUI DAT):

1 x MRC-69 (converted to repeater terminal for Op)

c. 1 ALSG (VUNG TAU)

```
2 x AN/PRC-25 ) emergency DX 1+1 to Fwd TF HQ. 1 x AN/TCC-14 )
```

d. General RR eqpt obtained by removing all on-station spares from the four normal detachments which had to remain operational during this period.

#### Personnel

3. 3 x TE with fwd det.

#### Results

4. Both the AN/TRC-24 circuit and the AN/PRC-25 DX 1+1 emergency circuit worked well and were operational within 2 hours of landing on the island.

#### Comment on Op

- 5. a. The demand for voice channels is significant and similar demands may be expected for future ops of this type. It Strengthens a general impression that comms for ops in this theatre will primarily be based on RR and VHF FM. The facilities provided by HF radio circuits are likely to be considered quite inadequate by users.
  - b. The removal of all on-station spares from RR dets providing the in-theatre system involved an unacceptable risk. There is need for at least one more MRC-69 (R) in theatre. As a result of AN/TRC-24 courses run within 145 Sig Sqn, sufficient operators could be produced to man it during TF operations.

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#### AUSTRALIAN MILITARY FORCES

#### VIETNAM

R193/2/1

Headquarters Australian Force VIETNAM

8 Dec 66

D Sigs (2)

#### KW-7/TT-76A KEYING FAULT

Reference: A. KAM-143B/TSEC Repair and Maintenance Instructions for TSEC/KW-7.

B. MWO 11-5815-205-30/1 Modification Work Order for Installation of KW-7 in AN/MGC-17.

#### Introduction

1. Intermittent corrupting of local and distant copy, increasing in incidence under high ambient temperature conditions, has been experienced when TT-76A and KW-7 equipment is used as specified in Reference A. Improvement in the quality of copy has been obtained by employing measures detailed in Reference B. Further investigation is necessary.

#### Operation as per KAM-143B/TSEC (Reference A)

- 2. Until recently, equipment has always been connected as specified in the reference which includes bypassing of Filters Radio Interference 120V 60MA FL1 and FL2 in the TT-76A equipment as noted in Chart 3-7 pp 85-86. In this configuration, and when operating at 50 bauds, the following applied:
  - a. Uncorrupted encrypted output from the KW-7 could only be obtained when the TD send contacts on the TT-76A were set for 20-30% marking bias; this adjustment was critical and varied with different combinations of particular TT-76 and KW-7 machines.
  - b. With this adjustment, and at normal temperatures (70-80°F) occasional intermittent corrupting still occurred, but not to an extent that equipments could not be used; the TT-76 bias setting required regular re-adjustment.
  - c. Recently it has been found that if the ambient temperature increased, the incidence of corruption of the KW-7 output increased, until at > 90°F it is completely garbled. After being allowed to cool, both TT-76A and KW-7 equipments will operate satisfactorily, until approximately 30 minutes after being returned to a high temperature area.

#### Operation as per MWO 11-5815-205-30/1 (Reference B)

3. This US Modification Work Order for Installation of KW-7 in AN/MGC-17 has been sighted but a copy is NOT held. It specified the following for operation of TT-76A with KW-7:

/a. Filters

CONFIDENTIAL

- 2 -

- a. Filters FL1 and FL2 in the TT-76A are NOT to be bypassed vide Chart 3-7, pp 85-86 of Reference A.
- b. A 27K resistor is to be placed in series with the TD send contacts of the TT-76A vide para 10 d (3)(c) of Reference A. (This para cannot be located in any copies of reference A sighted; it is possible that it is contained in an amendment NOT yet received.)
- 4. Limited tests were carried out with the 27K resistor inserted vide para 3:

#### a. At 50 Bauds

- (1) With the filters out of circuit the send contacts of the TT-76 can be set for zero bias ± 10% and a significantly improved KW-7 output results; the bias setting is not so critical and does not have to be re-adjusted so frequently.
- (2) It has yet to be established that the modification is effective with the filters in circuit.
- (3) Tests at high ambient temperatures have not been attempted, but there is reason to believe that, even with the resistor in, the KW-7 output is affected by temperature variations.

#### b. At 75 Bauds

- (1) With the filters out of circuit, insertion of the resistor produced worse results bias adjustment becam very critical.
- (2) Tests have not been conducted at this speed with the full modification (both filters and resistor in circuit).

#### Discussion

- 5. The significance of the above should be gauged against:
  - a. The marked improvement in operation at 50 bauds and normal temperatures that results from using the 27K resistor.
  - b. The necessity to have TT-76 machines without the resistor in circuit for use on unclassified circuits (STRATCOM, SCO engineering, local SIGCEN).
  - c. The inability to guarantee air conditioning and therefore stable temperatures in this theatre.
  - d. The desireability of adopting 75 bauds on the Melbourne circuit and eventually on in-theatre circuits (when a page printer capable of 75 baud operation is available). (Note the system complexity and the diversity of equipment configurations that would exist if 75 bauds were adopted at present.)

/6. It is

#### CONFIDENTIAL

- 3 -

6. It is obvious that the operation of the TT-76 with the KW-7 should be promptly and thoroughly investigated, however normal committments prevent this being done in theatre. No information, additional to that above, is available from US sources in theatre.

#### Recommendation

- 7. It is recommended that D Sigs initiate investigations to establish the best method of TT-76/KW-7 operation bearing in mind:
  - a. The high ambient temperatures that may apply.
  - b. The desireability of 75 baud operation.
  - c. The desireability of radiation suppression (use of send line filters).
  - d. The need for maximum uniformity in equipment configurations.

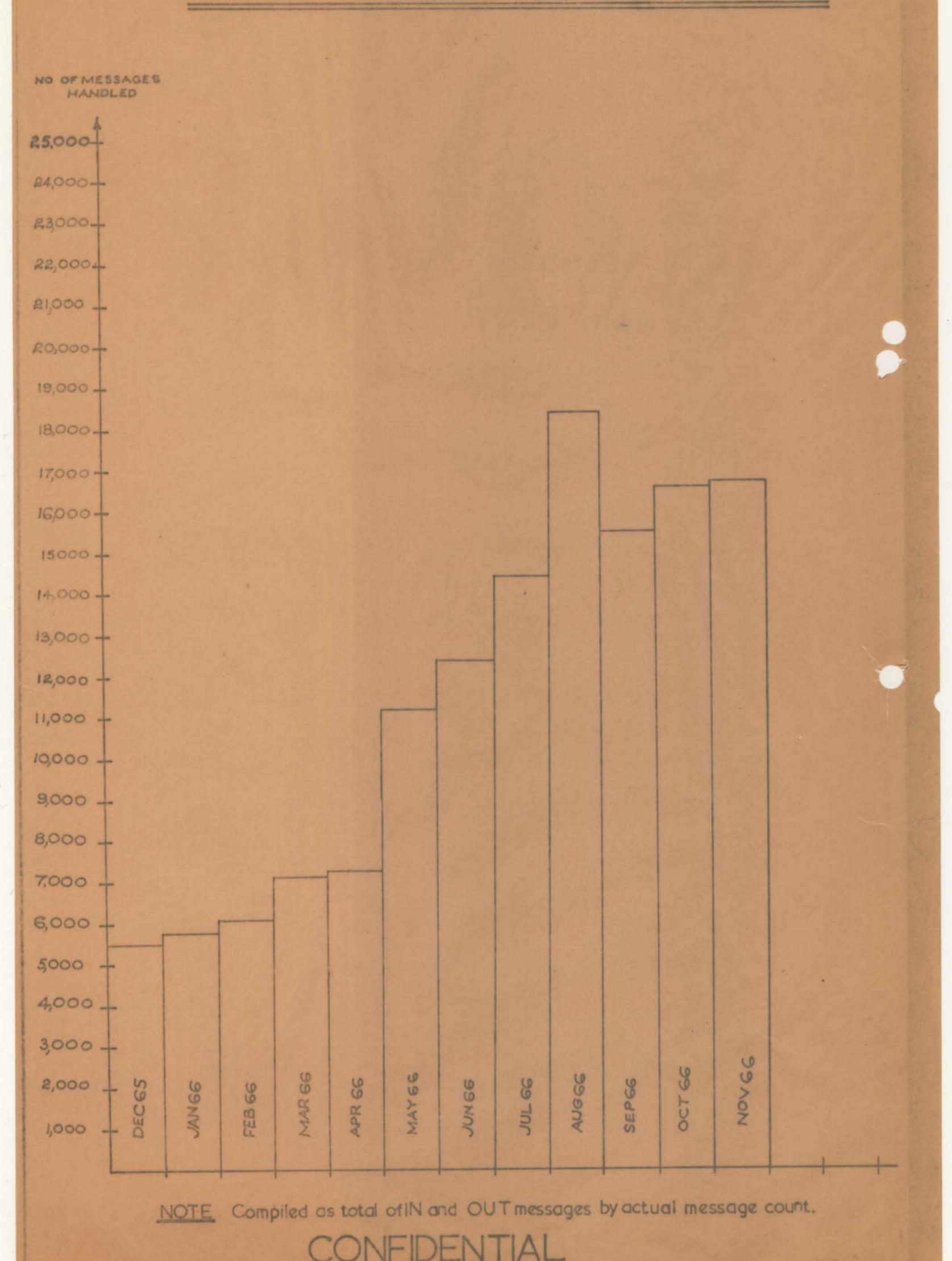
(J. H. BIRD) Maj SO Sigs HQ AFV

Copy to: 145 Sig Sqn (2) 103 Sig Sqn 6 Sig Regt

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Annex J' to HQ AFV R193-1-11 of 13 Dec 66

## CONFIDENTIAL TRAFFIC VOLUME HQ AFV COMCEN



AUSTRALIAN WAR MEMORIAL

## CONFIDENTIAL

## TRAFFIC VOLUMES MINOR RELAY STATIONS VUNG TAU & LALSG SIGCEN

