

UNCLASSIFIED

HISTORY OF THE  
6994TH SECURITY SQUADRON  
AND ITS DETACHMENTS

July – December  
1967



The EC-47 History Site

14014413  
101-5



ON FILM

HISTORY  
OF THE  
6994th SECURITY SQUADRON  
1 July 1967 - 31 December 1967  
RCS: AU-D5 (USS-1)

000074  
19 OCT 1970

103



PROJECT COPIES HARVEST  
DO NOT DESTROY

15 April 1968

0408613-  
0408625  
0412031, 0412032  
+08612



Tan Son Nhut Air Base, Vietnam

Copy 1 of 10 Copies



4  
4  
02 713

[REDACTED]

HISTORY OF THE 6994th SECURITY SQUADRON

1 July 1967 - 31 December 1967

RCS: AU-D5 (USS-1)

This document contains information affecting the national defense of the United States within the meaning of the Espionage Laws (Title 18, USC, Sections 793 and 794) the transmission or revelation of which, in any manner, to an unauthorized person, is prohibited by law.

Prepared by:

MSgt TONY Z. ODOM  
Operational Historian

Sgt LARRY E. HAND  
Information Specialist

TSgt ROY C. WHITE  
Illustrator

Approved:

*Wyman M. Bridges*  
WYMAN M. BRIDGES, Lt Col, USAF  
Commander

[REDACTED]

[REDACTED]

[REDACTED]

"The best of prophets of  
the future is the past."

Byron

  
FOREWORD

This history covers the operational activities of the 6994th Security Squadron during the reporting period of 1 July - 31 December 1967. The histories of the detachments are presented as appendices; however, in some instances the material contained in the basic document is all inclusive. This was necessary to provide the reader with a complete account of the subject/activity.

This history has been presented in three chapters in accordance with the "Revised Format for USS-1 History," published by USAFSS. Appendix I, Sentinel Sara and Compass Dart Operational Summary, was added to present the unit's effectiveness in accomplishing its unique mission. Also included in the appendices is a brief history of the activities of the Airborne Radio Direction Finding Coordination Center (ACC).

This history was prepared primarily from files, interviews and project folders available at the unit. Many of the messages referenced as 6994th Security Squadron messages are quoting other correspondence to higher headquarters. Many of the activities reported were coordinated with local agencies (i.e., MACV, 7th Air Force, 509th Radio Research Group, etc.) in person by 6994th Security Squadron staff personnel and, consequently, may not be fully documented. This could not be avoided.

The research and writing was accomplished by Sgt Odom. The historian was mainly concerned with editing and style.

All suggestions and comments concerning this history should be directed to the Office of Information.

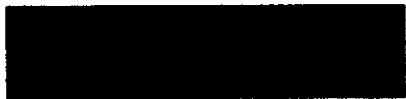




TABLE OF CONTENTS

	<u>Page</u>
Foreword	iv
Index of Illustrations	vii
Chronology	viii
<b>I MISSION AND ORGANIZATION</b>	
Mission	1
Organization	1
Organizational Changes	2
<b>II TASKING AND COLLECTION</b>	
Tasking	7
Collection	7
Collection Facilities	7
KY-8 and "Z" System Wiring	15
KY-8 System Installed	15
Aircraft Arrivals	16
Aircraft Require IRAN	17
"Y" Console Installed	17
Temporary "Z" System Installed	18
KY-8/FM-622 Interference	19
KY-8 Equipment Problems	20
Airborne RFP Proposed	21
Collection Policies	21
Technical Support	21
"Q" System Readied	22
Aircraft Standardization/Evaluation Revised	24
Ground/Air Tip-off Procedures	24
Special Collection Projects	25
Bomb Damage Assessment	25
"Operation SAM" - Ground/Air Tip-off	26
Cambodian R/T Intercept	27
Dye Marker/Muscle Shoals	27
Barrier Device Hearability Tested	28
DMZ Low Level Comm Hearability Test	29





III PROCESSING AND REPORTING

Processing	30
Reporting	30
EW DCMR Revised	30

FOOTNOTES	32
-----------	----

GLOSSARY OF TERMS	35
-------------------	----

SUPPORTING DOCUMENTS

APPENDICES

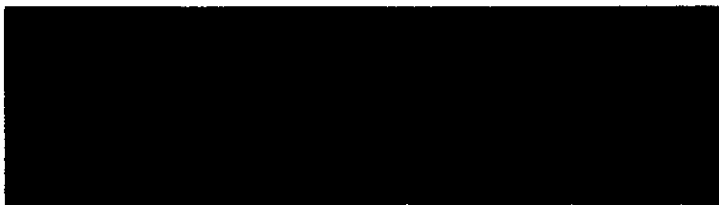
Sentinel Sara and Compass Dart Operational Summary

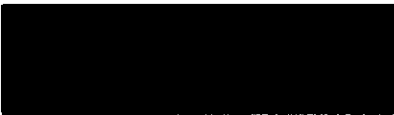
History, Detachment 1, 6994th Security Squadron

History, Detachment 2, 6994th Security Squadron


History, ARDF Coordination Center

DISTRIBUTION



  
INDEX OF ILLUSTRATIONS

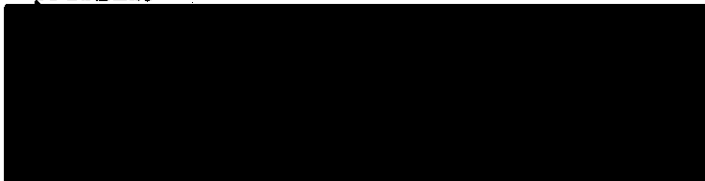
<u>Chart</u>	<u>Title</u>	<u>Page</u>
One	Geographical Locations, 6994th Security Squadron Activities	3
Two	Organizational Chart	6
Three	Compass Dart EC-47, "Q" and "Z" Configuration	8
Four	"Z" System Position Capability	9
Five	"Q" System Position Capability	10
Six	Compass Dart EC-47	11
Seven	Compass Dart EC-47, Basic System Position Capability	12
Eight	Sentinel Sara RC-47	13
Nine	Sentinel Sara Position Capability	14

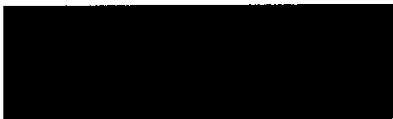




  
CHRONOLOGY

<u>Date</u>	<u>Event</u>
July	Seventh Air Force considered construction of facilities at Hue/Phu Bai AB to support the operation of 12 Compass Dart aircraft.
July	Three Compass Dart "Q" aircraft, 43-16123, 43-15603, and 42-10513, arrived in country.
August	USAFSS issued proposed annex to OPS Plan 11-66 outlining the concept of operations for the "Q" System.
8 August	"Z" System temporarily installed in two Compass Dart "Q" system aircraft to supplement Sentinel Sara DMZ operations.
19 August	Sentinel Sara tasked with bomb damage assessment mission.
September	Proposed in-country test of "Q" system "bit" mode forestalled.
September	6994th Security Squadron Standardization/Evaluation procedures revised.
September	Installation of RFP in Compass Dart aircraft proposed.
September	Installation of KY-8 equipment in Sentinel Sara aircraft completed.
September	Installation of "Y" consoles in all Compass Dart aircraft except 43-45112 completed.
October	Ground/air tipoff program received renewed emphasis.
October	Three "Q" systems installed.
October	Sentinel Sara aircraft 43-49680 departed for IRAN.
November	Compass Dart commenced providing support to Muscle Shoals.
November	MACV requested a statement of requirements from 7th AF to support relocation of 15 ARDF aircraft from Nha Trang AB to Hue/Phu Bai AB.
December	US Army resources tasked with Cambodian Tactical Air problem.

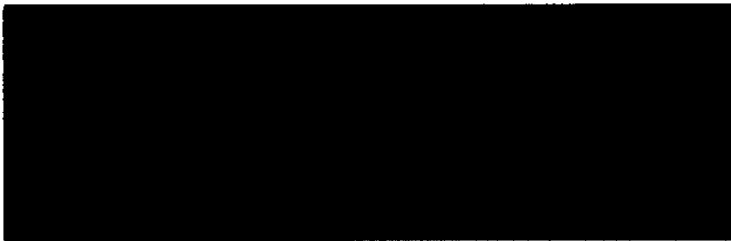




December First Compass Dart aircraft to receive KY-8 follow-on wiring modification departs for Itasuke AB, Japan.

December Forty-ninth aircraft to be assigned to Compass Dart arrives in-country.

EC47.com






Chapter I

MISSION AND ORGANIZATION

Mission


 The mission of the 6994th Security Squadron was to conduct Compass Dart ARDF operations to provide direct support to MACV for the employment of tactical forces against enemy forces<sup>1</sup>. In fulfilling this mission, the organization conducted ARDF flights over South Vietnam, Laos, and the adjacent coastal waters of South Vietnam and North Vietnam, north to approximately 20 nautical miles above the DMZ. The organization accomplished its mission through the resources of projects Compass Dart and Sentinel Sara\*. Through these facilities they provided intelligence support to combat operations of the Vietnam conflict by:

(1) Close tactical support of offensive operations through establishing the location of enemy forces and passing the information to DSU's collocated with combat elements.

(2) Support of SIGINT activities through ARDF of enemy transmitters.

(3) Augmentation of SIGINT collection facilities through utilization of the ARDF acquisition equipment (including "Q" and "Z" system) and the Sentinel Sara airborne collection platforms.

Organisation

 The 6994th Security Squadron was located at Tan Son Nhut AB, Vietnam. Its subordinate units were Detachment 1, Nha Trang AB, Vietnam

\*Project Drill Press was redesignated Sentinel Sara during October.



[REDACTED]

and Detachment 2, Pleiku AB, Vietnam. The unit also maintained an operating location at Hue/Phu Bai AB, Vietnam. The organization was subordinate to the 6922nd Security Wing, Clark AB, Philippines.

[REDACTED] The organization was operationally subordinate to headquarters, 7th Air Force, Tan Son Nhut AB. However, due to its mission of close tactical support to ground operations and its inter-service involvement, operational control was generally accepted as being exercised by MACV-J2.

[REDACTED] The organization provided administrative and logistical support to the USAFSS Liaison Officer (SSLO) and the USAFSS personnel assigned to Operating Location 4, 6970th Support Group. Tasked with separate missions, these activities functioned independently of the organization. The USAFSS manning of the ARDF Coordination Center was provided from the organization's resources.

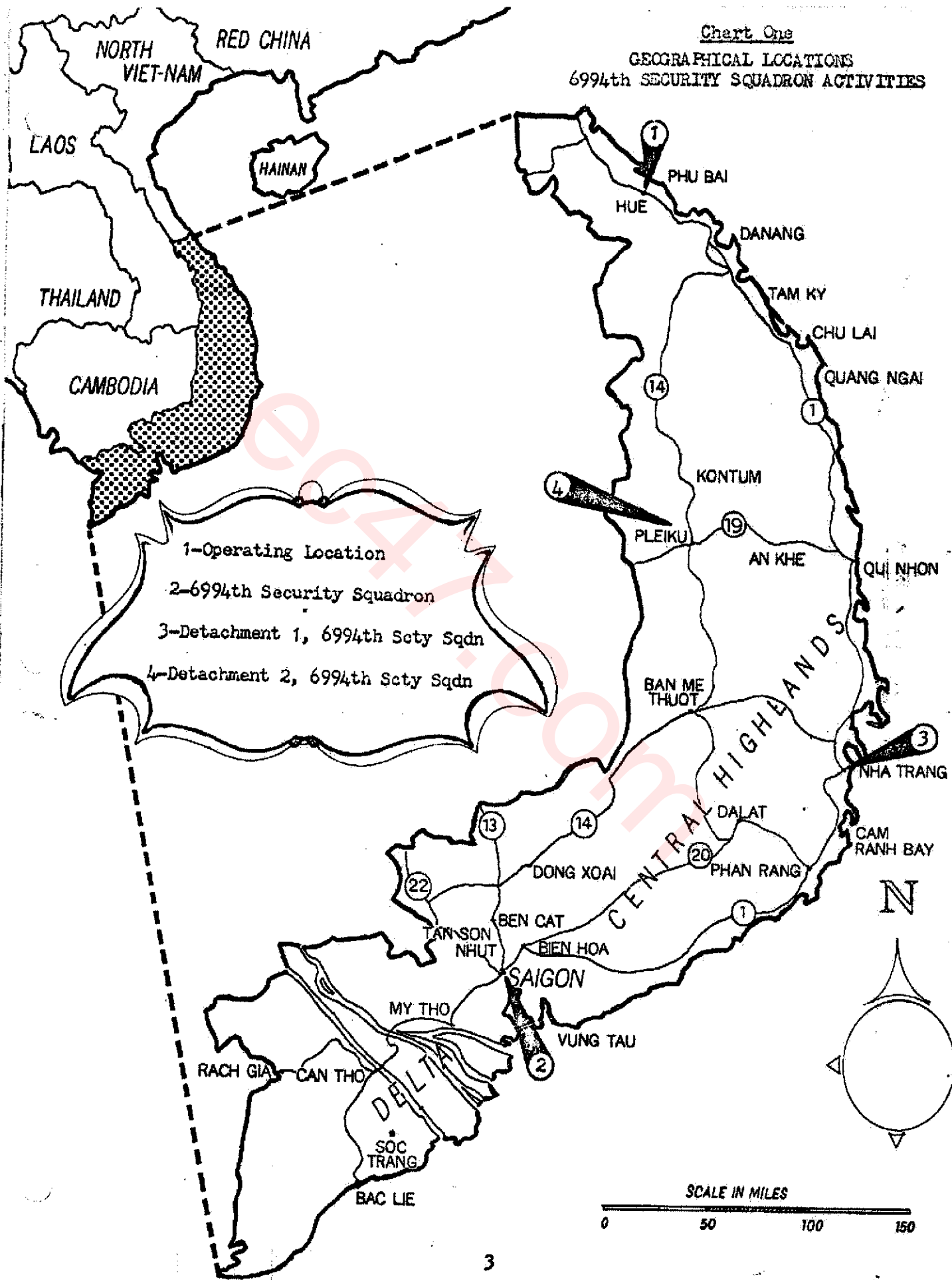
[REDACTED] The operating location maintained by the organization at Hue/Phu Bai AB was comprised of the entire contingent of Sentinel Sara personnel and equipment, supplemented in most instances by some resources of Compass Dart. Operational and maintenance personnel from the 6994th Security Squadron were assigned to the activity, TDY. Linguistic support was provided by TDY personnel from the 6988th Security Squadron, Japan.

#### Organizational Changes

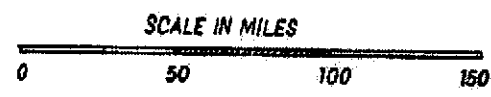
[REDACTED] The unit experienced no organizational changes. However, discussion continued relative to the relocation of at least a portion or its resources to a location that would improve its ability to meet

[REDACTED]

Chart One  
 GEOGRAPHICAL LOCATIONS  
 6994th SECURITY SQUADRON ACTIVITIES



- 1-Operating Location
- 2-6994th Security Squadron
- 3-Detachment 1, 6994th Scty Sqdn
- 4-Detachment 2, 6994th Scty Sqdn



[REDACTED]

mission requirements, present and programmed.

4

[REDACTED] During June it appeared that actions by MACV to reduce the number of military personnel in the Nha Trang area, as a means of curbing inflation, would result in the relocation of Detachment 1, 6994th Security Squadron. The decision was made to relocate the unit, if in fact it became necessary, to a location that would align the resources more closely with the mission commitments. Since considerable discussion was evolving around ARDF requirements in Laos and the squadron had extensive mission requirements in the DMZ area, consideration was being given to operating locations or unit relocations to northern South Vietnam and/or Thailand. Two requirements for ARDF support in Laos were under study: One, a MACV requirement for increased coverage of the Tiger Hound and Steel Tiger areas; another, a MACTHAI and CAS\* requirement for ARDF support in Thailand and central Laos. Discussion relative to relocating the entire detachment was dropped, at least temporarily, due to the non-availability of suitable facilities and consideration was switched to relocating some resources nearer the DMZ. This move would also partially satisfy the Laotian requirement.<sup>2</sup>

[REDACTED] During July, 7th Air Force gave serious consideration to constructing facilities at Hue/Phu Bai to support an operation of 12

\*The MACTHAI/CAS requirement for ARDF in central Laos and Thailand was temporarily satisfied from US Army resources during May. However, a valid requirement for USAF ARDF was considered to remain in existence. (6994th Security Squadron RGS: AU-D5 (USS-1) dated 15 Dec 67).

[REDACTED]

[REDACTED]

Compass Dart aircraft.<sup>3</sup> This proposal was shelved in favor of the immediate placement of six Compass Dart aircraft at Da Nang. This plan also failed to materialize, due largely to the vulnerability of Da Nang to VC rocket attacks.<sup>4</sup>

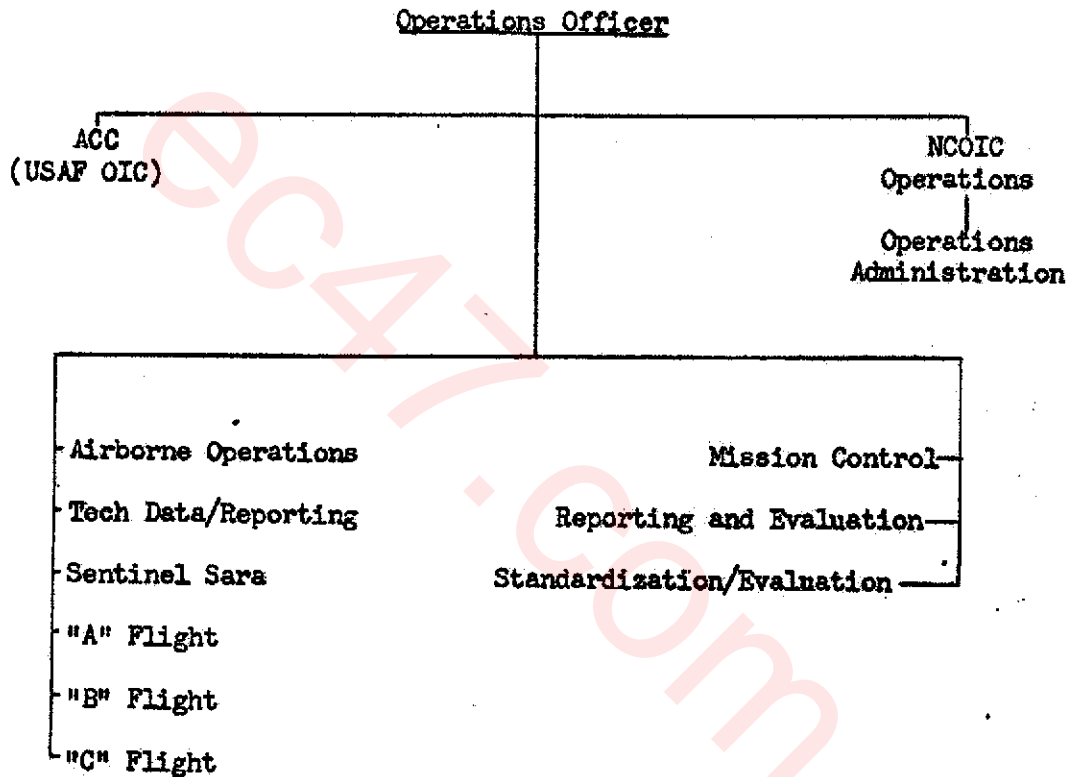
[REDACTED] During November SSO MACV requested a statement of requirements from 7th Air Force to support their intent to relocate at least 15 ARDF aircraft from Nha Trang AF to Hue/Phu Bai AB. This proposal was intended to improve the ARDF support to III MAF and II FFV. Like similar plans previously considered by 7th Air Force and USAFSS, the proposal was subsequently dropped, at least temporarily, due to a lack of adequate support facilities at Hue/Phu Bai AB and the cost of developing these facilities.<sup>5</sup>

[REDACTED]

6994TH SECURITY SQUADRON

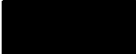
Operations Division

Organizational Chart







  
Chapter IITASKING AND COLLECTIONTasking

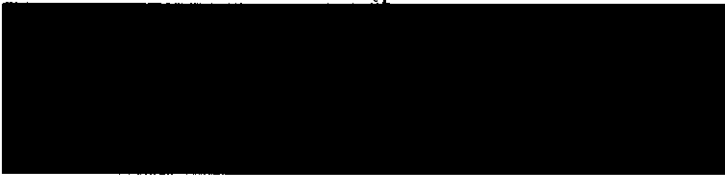
 The unit's Compass Dart resources were tasked with ARDF and associated collection of Viet Cong and PAVN/NVA transmitters. Sentinel Sara aircraft were tasked with collection of PAVN/NVA communications in the DMZ area.

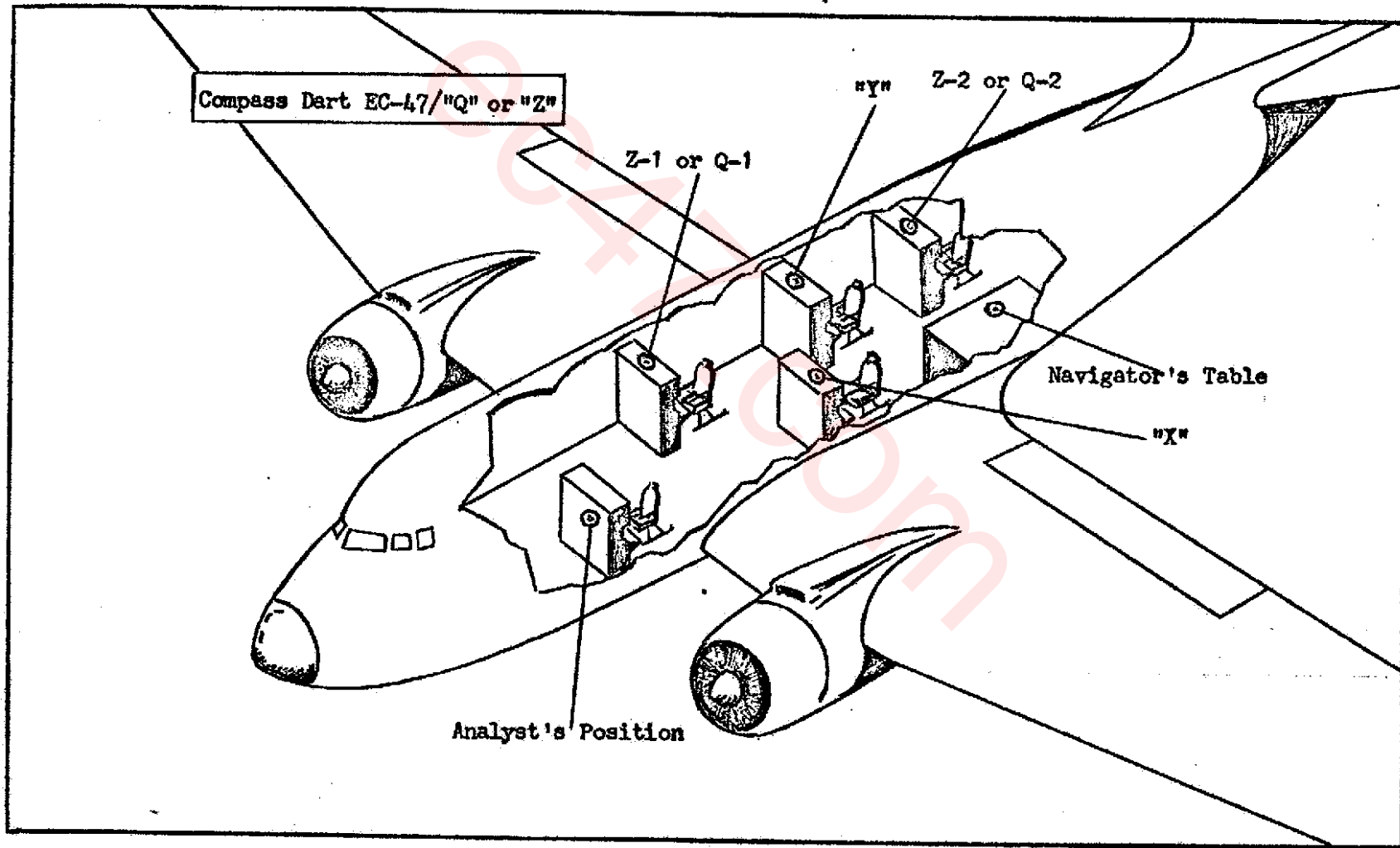
Collection

 The unit's collection capability consisted of airborne acquisition, monitor, record, ARDF and active ECM of HF radio signals in the 2-16 MHz frequency spectrum, and acquisition, monitor and record of HF and VHF radio signals in the .5-260 MHz frequency spectrum.

Collection Facilities

 The unit's collection facilities were 46 aircraft on 30 June, increasing to 51 aircraft by 31 December. Forty-nine of the aircraft were Compass Dart EC-47's and two were Sentinel Sara RC-47's. Ten of the Compass Dart aircraft were "Z" configured (Charts 3 and 4); five were "Q" configured (Charts 3 and 5); 33 were configured with the ALR-34 and an acquisition position (Charts 6 and 7), and one was equipped with only the ALR-34. Of the 33 ALR-34 and acquisition equipped aircraft, 14 had received the installation of the wiring components (Group "A") that would facilitate the installation of the "Z" system. Two of these 14 aircraft would receive the "Z" system in the immediate future.





8

Chart Three

Compass Dart ARDF Aircraft Position Capability

"Z" System

Position 1 ("X") - ALR-34 (ARDF) 2-16 MHZ

Position 2 ("Y") - HF/HF Receive .5-30 MHZ

Position 3 (Z-1) - HF/HF Receive .5-30 MHZ  
or (HF/VHF Receive .5-260 MHZ)

Position 4 (Z-2) - HF/HF Receive .5-30 MHZ

Compass Dart ARDF Aircraft Position Capability

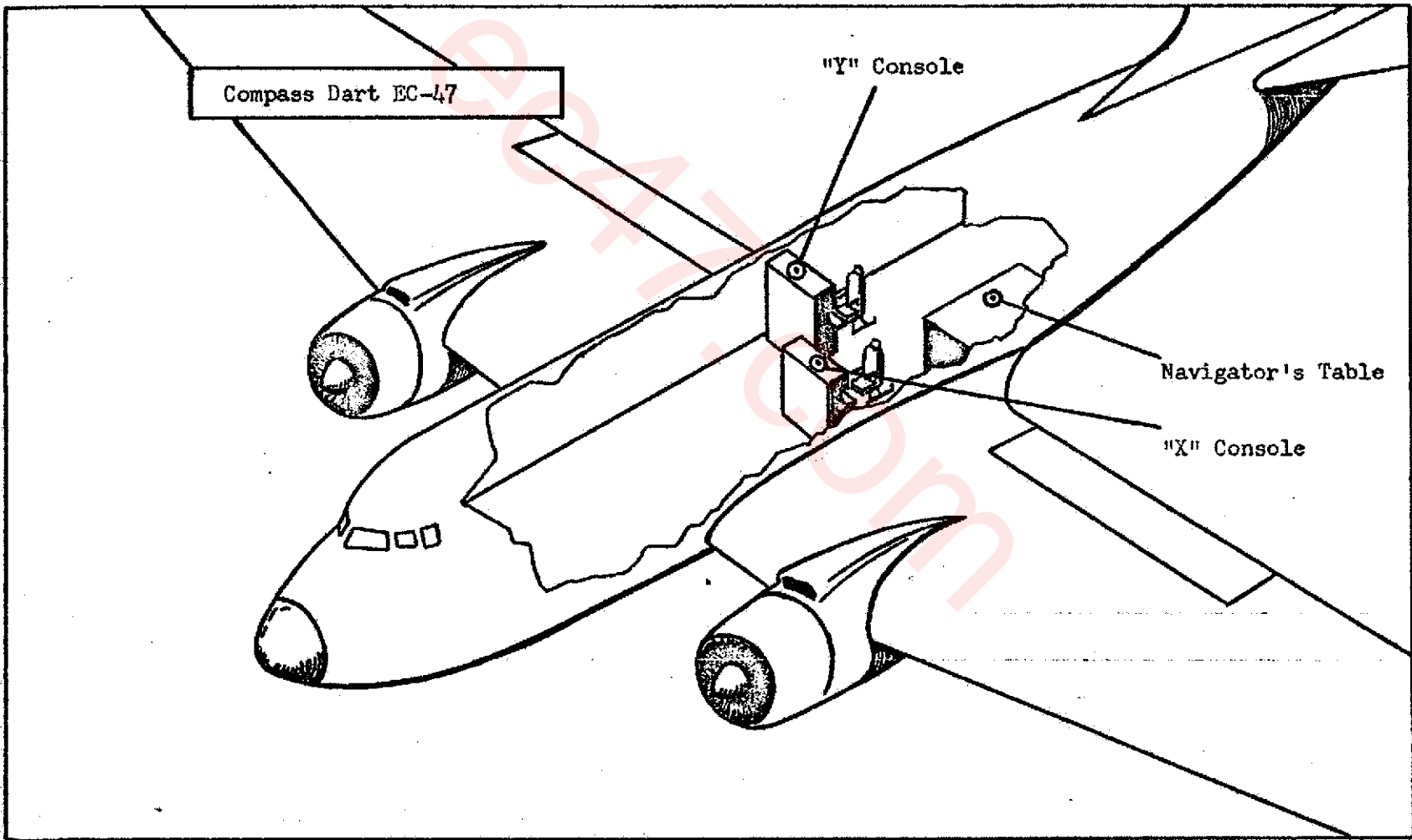
"Q" System

Position 1 ("I") - ALR-34 (ARDF) 2-16 MHZ

Position 2 ("Y") - HF/HF Receive .5-30 MHZ

Position 3 (Q-1) - HF/HF/HF Receive-COMJAM 2-16 MHZ  
HF Receive 2-16 MHZ (not installed)

Position 4 (Q-2) - HF/HF/HF Receive-COMJAM 2-16 MHZ  
HF Receive 2-16 MHZ (not installed)



11

Chart Six



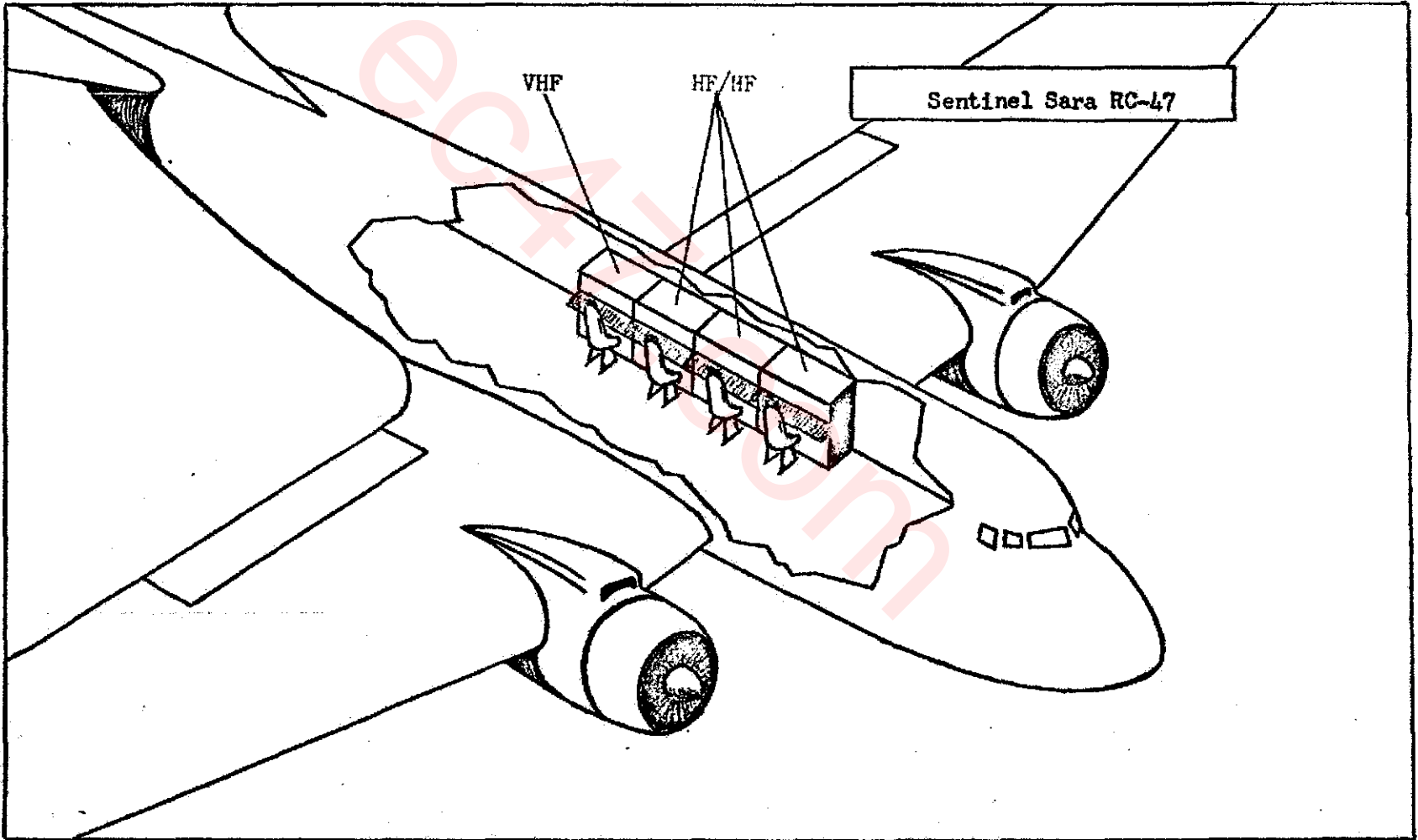
Compass Dart ARDF Aircraft Position Capability

Basic Configuration

Position 1 ("X") - ALR-34 (ARDF) 2-16 MHZ

Position 2 ("Y") - HF/HF Receive .5-30 MHZ

EC47.com



13



Chart 13411

Sentinel Sara Position Capability

Position 1 - HF/HF Receive .5-30 MHZ

Position 2 - HF Receive .5-30 MHZ

Position 3 - HF/HF Receive .5-30 MHZ

Position 4 - VHF Receive 20-260 MHZ

EC47.com



[REDACTED]

[REDACTED] The two Sentinel Sara aircraft were equipped with four SIGINT collection positions each (Charts 8 and 9).

#### KY-8 and "Z" System Wiring

[REDACTED] The 24 Compass Dart aircraft scheduled for the installation of the "Z" system wiring (Group "A") and the KY-8 wiring components<sup>1</sup> completed the modification (Mod 2000/270).

[REDACTED] Immediately following the completion of Mod 2000/270 those aircraft that had not undergone this modification were scheduled for a follow-on modification<sup>2</sup> that consisted of the installation of the wiring components for the KY-8 system (former Mod 270). The initial aircraft scheduled for the modification at Itazuke AB, Japan departed on 3 December. The modification required approximately 14 days, and all aircraft scheduled were to be completed by late February 1968. Five aircraft had completed the modification by 31 December.

[REDACTED] Twelve of the aircraft, four at each location, that had received Mod 2000 were programmed to have the "Z" system installed. By 31 December installation had been completed in ten aircraft. The components had been installed in the remaining two aircraft. However, due to the non-availability of power dividers, final installation<sup>3</sup> could not be accomplished.

#### KY-8 System Installed

[REDACTED] By 31 December 34 of the Compass Dart aircraft and the two Sentinel Sara aircraft were equipped with the KY-8 secure voice communications system. The Sentinel Sara aircraft were first to receive

[REDACTED]

[REDACTED]

this modification. The installation of the KY-8 equipment in the Sentinel Sara aircraft was accomplished locally by the 460th FMS. Tempest testing was accomplished by a TDY team from AFCD. Aircraft 43-16254 was scheduled to enter the modification on 25 July<sup>4</sup>. However, due to mission commitments it was delayed until arrangements could be made to preclude a loss of mission<sup>5</sup>. The modification of 43-16254 was commenced on 16 August<sup>6</sup> and completed with the aircraft being declared operational on 27 August. Work was commenced on 43-49680 on 27 August and completed on 13 September<sup>7</sup>. Although some minor discrepancies were discovered in the installation, they were soon repaired and the system functioned properly. The anticipated use of the KY-8 system for passing perishable intelligence air/ground was not as effective as desired due to excessive interference on the collection positions created by the FM transmitter (See FM Interference, below). KY-8 components were installed in the Compass Dart aircraft, commencing in September, as the aircraft returned from Mod 2000/270 and the follow-on mod. The "Q" system aircraft arrived from CONUS equipped for immediate installation of the KY-8 components. Compass Dart aircraft also experienced problems with the FM transmitter interfering with the ALR-34 and acquisition equipment (See FM Interference, below).

#### Aircraft Arrivals

[REDACTED] The five additional aircraft arriving in country were the Compass Dart "Q" system aircraft. The aircraft arrived fully wired for the systems, which were shipped later. Arrival dates of the aircraft

[REDACTED]

and dates of installation of the "Q" systems were:

<u>Aircraft</u>	<u>Date Arrived</u>	<u>System Installed</u>
43-16123	21 July	10 Oct
43-15603	29 July	10 Oct
42-10513	28 July	16 Oct
42-10984	7 Oct	10 Oct
43-16055	24 Dec	27 Dec

All "Q" systems were installed minus the "G" equipment, which had not been received.

#### Aircraft Requires IRAN

The scheduling of Compass Dart and Sentinel Sara aircraft for IRAN began with Sentinel Sara aircraft 43-49680 undergoing the (overdue) action during October and November<sup>8</sup>. Compass Dart aircraft 43-15112 underwent the action during November and December. IRAN is based on the number of flying hours logged to the airframe, therefore, the aircraft with the longest time in the inventory were the first to require the action. (Note: All aircraft had undergone IRAN upon being assigned to the Compass Dart program). Additional aircraft were scheduled for the activity, which requires approximately 45 days, during 1968.

#### "Y" Consoles Installed

During September the installation of the acquisition position ("Y") was completed in all remaining Compass Dart aircraft that were wired to accept the position. Fifteen consoles were received and

[REDACTED]

installed from 27 August through 15 September<sup>9</sup>. One remaining console was retained for future installation in aircraft 43-45112. This was the initial Compass Dart aircraft to arrive in South Vietnam, and was the only aircraft that did not have wiring for the "Y" console installed in CONUS. Arrangements were made for the fabrication of a kit comprising the wiring components for this modification and its subsequent installation during the installation of the KY-8 wiring components at Itazuke AB, Japan.<sup>10</sup> The modification was delayed until early 1968 while the aircraft underwent IRAN.

#### Temporary "Z" Systems Installed

[REDACTED] During August the Sentinel Sara aircraft were scheduled to have KY-8 communications equipment installed.<sup>11</sup> Also, one aircraft, 43-49680, was scheduled to undergo IRAN at Taiwan. The aircraft could not, however, be released from their high priority mission commitments although the installation of the KY-8 was expected to greatly enhance mission effectiveness. The proposal was instituted and accepted to replace the Sentinel Sara aircraft with a Compass Dart "Z" configured aircraft, which would be available in the near future, while the Sentinel Sara aircraft were down. No firm date of completion of the installation of the "Z" system wiring in a Compass Dart aircraft could be established. Therefore, permission was secured from PACAF to delay the IRAN schedule for 43-49680 for 90 days and the local schedule for the KY-8 modification was delayed until arrangements could be made.<sup>12</sup>

The 6994th Security Squadron investigated the possibility of temporarily

[REDACTED]

[REDACTED]

installing "Z" components in two "Q" system aircraft presently on station and awaiting the arrival of the "Q" system. The idea proved feasible and a request was submitted to Sanders Associates for immediate air shipment of four "Z" consoles<sup>13</sup>. The "G" equipment necessary for the installation was secured from the "spares" at the squadron and detachments<sup>14</sup>. The installation of the "Z" positions in aircraft 43-15123 was completed on 8 August and the aircraft subsequently deployed to Phu Bai. By 11 August the installation of "Z" positions had been completed in aircraft 43-15603<sup>15</sup>. The use of Compass Dart "Z" aircraft to augment the Sentinel Sara operations provided such significant results that it was continued<sup>16</sup> although both Sentinel Sara aircraft became operational after 43-49680 returned from IRAN (18 Oct - 6 Dec). During the interim period, prior to the availability of additional "Z" components, several transfers of the two "Z" systems were accomplished between "Q" system aircraft and other group "A" wired Compass Dart aircraft. This was necessary to preclude a loss of mission coverage while extended maintenance was being performed on the airframes. As additional "Z" systems became available, the components were permanently installed in the aircraft as programmed.

#### KY-8/FM-622 Interference

[REDACTED] The KY-8 secure voice communications system was integrated into the Sentinel Sara (August) and Compass Dart ARDF (September) air/ground, ground/air network. This system was expected to greatly enhance the ARDF operations by providing a medium for the ARDF operators and

[REDACTED]

[REDACTED]

ground site personnel to discuss target identification, etc. Also, it eliminated the need for Hestia Pads, except as back-up for the KY-8. Unfortunately, these benefits were realized on a small scale only. The FM-622 transceiver, when keyed, affected the reception of the ALR-34 and the acquisition position to the extent that targets could not be worked while the transmitter was in use<sup>17</sup>. It was noted that by placing the FM-622 transmitter on "Lo" output (1 watt), the interference became negligible. However, in most cases the output of the transmitter was not sufficient to allow communications with the ground station. The problem was cited to USAFSS and remained unresolved.

#### KY-8 Equipment Problems

[REDACTED] Several problems were encountered during the initial utilization of the KY-8 that hindered its effectiveness. In several instances a thermal problem was encountered that resulted in the equipment "locking up"<sup>18</sup>. The problem was investigated and could not be attributed to the equipment or method of installation. Voltage surge was suspected in some of the cases cited. Although the problem was not corrected, it was minimized, when encountered, by shutting the equipment down for a short period to allow it to cool<sup>19</sup>. Also, operators were instructed to insure that a cool air vent located in the vicinity of the KY-8 remained in the open position. Numerous malfunctions encountered in failure of the equipment to operate were found to be created by the improper seating of the KYK-12 (manual key) in the KY-8<sup>20</sup>. This problem was reduced through improved operator check-out procedures and will be eliminated

[REDACTED]

[REDACTED]

with the forthcoming replacement of the KYK-12 (manual key) with the KYK-3 (automatic key). At the closure of this report the system was giving satisfactory performance, with the exception of the FM-622 interference.<sup>21</sup> Of interest was the fact that the ARC-136 (UHF) transmitter had minimal effect on the ALR-34 system.<sup>22</sup>

#### Airborne Radio Finger Printing Proposed

[REDACTED] During the earlier stages of the Compass Dart program USAFSS had aired some discussion relative to airborne RFP. This discussion subsequently disappeared from correspondence at this echelon, its disposition unknown. During September 1967, Captain Dickey, Operations Officer, Detachment 1, 6994th Security Squadron proposed that the feasibility of installing RFP equipment in Compass Dart aircraft be investigated.<sup>23</sup> In submitting this proposal, Captain Dickey thoroughly investigated the US Army's research and development efforts in airborne RFP. The information provided by Captain Dickey was forwarded, as received, for study at higher echelons.

#### Collection Policies

##### Technical Support

[REDACTED] During the early stages of its operation the unit realized a requirement for COMINT technical documents relative to the target entity to support its ARDP mission. Documents were needed to increase the unit's ability to identify mission targets. Considerable correspondence was exchanged on the subject, at that time, with negative results. The need became more prevalent and pressing with the advent

[REDACTED]

[REDACTED]

of the "Z" configured aircraft during September<sup>24</sup>. Consequently, the issue was reopened during late September with renewed emphasis on the requirement. Attention was called to the US Army's higher rate of identification of targets fixed, which was attributed largely to their having unlimited access to technical support documents. NSA refused to supply the requested documents due to the fact that USAF ARDF resources are categorized as Electronic Warfare and do not fall within their realm of support. In effect, the 6994th Security Squadron was considered a consumer and was not authorized to procure COMINT technical materials through normal COMINT channels<sup>25</sup>. In citing their unusual position to the detachments, who were incessant in their demands for technical support documents, the squadron stated:

"Do not completely understand motivation. Using the concept in paragraph B-2, above is interpreted here as meaning we won't get documents. Do not believe that NSA releases ITN's and CTR's to consumers. However, we will continue our efforts to validate our right to these documents until turned down and told to desist. In the meantime, continue your short range, stop-gap methods of wheedle, cajole, and beg to obtain as much data as you can to aid in identification."

#### "Q" System Readied

[REDACTED] During August USAFSS issued a proposed annex to OPS Plan 11-66 outlining a concept of operations for the "Q" system aircraft. This concept, in essence, integrated the "Q" system into the normal ARDF program for control and tasking<sup>26</sup>. Shortly thereafter USAFSS advised the 6994th Security Squadron that the first "Q" system had been accepted and would be shipped to the theater immediately<sup>27</sup>. USAFSS advised

[REDACTED]



[REDACTED]

that an operational check of the equipment was required and queried what action had been taken by 7th Air Force to coordinate utilization of the system and develop an estimate of utilization for logistical purposes. The 6994th Security Squadron, in coordinating the requirement for the estimate of utilization, found that 7th Air Force personnel possessed very limited knowledge of the "Q" system or its capabilities.

A briefing was prepared and subsequently presented to the staff. The 6922nd Security Wing was advised that since there was no immediate plan for employment of the "Q" system in the active mode that USAFSS should be advised to arrange for logistical support on a standby basis. By September, USAFSS had promulgated plans for an operational test of the "Q" system in the active mode utilizing the "bit" transmission. Test would be conducted against North Vietnamese air warning tracking stations located in the southern portion of North Vietnam. The 6924th Security Squadron would cooperate with the unit in accomplishing the test.

AFSSO USAF stated of the test plans:

"Your recommendations concerning use of the bit mode in theater is excellent. Planning should be initiated ASAP. We will inform CS and propose that a theater evaluation be made to MACV."

USAFSS then decided that the proposed test was premature and should be delayed while further testing of the system was conducted by the manufacturer and USAFSS in CONUS. During November it was learned that MACV-J6 had granted authorization for the US Army to test Ceflien Lion aircraft in the active mode. Test was to be conducted locally against a friendly transmitter. In view of this development, the 6994th was

[REDACTED]

[REDACTED]

unhesitant in suggesting that similar testing of the Compass Dart "Q" system be proposed to MACV. This testing would be conducted against the squadron KMM-2 transmitter. This plan was also abandoned. These actions did not alter the fact that the "Q" system was considered operationally ready and prepared to react to any requirement for active ECM. The "Q" system aircraft were utilized in the same manner as the "Z" system aircraft and were found to be ideally suited for acquisition support due to the compatibility of the "Q" receivers to the ALR-34.<sup>33</sup>

#### Aircrew Standardization/Evaluation Revised

[REDACTED] During September action was initiated to completely revise the squadron's standardization/evaluation system. The objective was to incorporate procedures from the three units to produce a single, all-inclusive system with definite procedures for measuring its effectiveness. TDY visits were conducted to the detachments for viewing operational practices and gathering data. Directives were then promulgated for all facets of airborne ARDF operations. The resultant program was as outlined by the Operations Officer when citing the planned revision.<sup>34</sup>

"The ultimate goal will be to do away with three different Stan/Eval programs and consolidate all Stan/Eval at the 6994th SetySq to be operated in accordance with existing regulations, manuals, OOI's etc. Stan/Eval will then function by having SEFE personnel visit each detachment monthly on a continuing and rotational basis to coordinate new and different procedures and to flight check all Radio Operators as the need arises. (Students at the two detachments would be certified as Radio Operators by detachment training personnel but Stan/Eval checked by SEFE's from the 6994th)."

#### Ground/Air Tip-off Procedures

[REDACTED] During October the Commanding Officer, 303rd RRBN informed [REDACTED]

[REDACTED]

the 6994th Security Squadron of a discussion with intelligence personnel of the 1st Infantry Division during which great concern was voiced over the extremely low hear/fix rate by ARDF aircraft of targets tipped-off by ground stations. Lt Col Benedict, G2, 1st Inf Div stated:<sup>35</sup>

"Since these ground tip-offs reflect the current combat needs of the division, they are of immediate value and the results are always closely followed by General Hay."

The unit investigated the procedures for handling ground/air tip-offs and concluded that the instances in which tip-offs were not being received by the radio operator when the aircraft was, in fact, within range of the tip-off station, could most likely be attributed to the FM communications equipment being utilized by the Navigator to obtain flight clearance information.<sup>36</sup> Procedures were reiterated, but little improvement in the fix ratio for tip-offs was noted (See SAM, Collection Projects, for additional information on the tip-off program).

#### Special Collection Projects

##### Bomb Damage Assessment

[REDACTED] On 19 August General Westmoreland tasked Sentinel Sara with a special collection mission intended to gain an insight into the success of B-52 strikes in the DMZ area. Sentinel Sara aircraft were tasked with being on target during the time B-52 strikes were being executed from 21 August through 4 September. Since it was anticipated that most reflections would be on VHF voice, the unit requested a highly qualified linguist (by name) from the 6988th Security Squadron to assist in fulfilling the requirement.<sup>37</sup> Considerable effort was expended by

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Sentinel Sara personnel in the execution of this mission. Twenty-nine messages were intercepted that contained reflections of the B-52 activity. Such information as number of aircraft in the strike force, damage reports on facilities and casualty reports were contained in the message texts.

"Operation SAM" - Ground/Air Tip-off

[REDACTED] The unit continued to participate in the ground/air tip-off program (Operation SAM) with the 175th Radio Research Company, 146th and 156th Aviation Companies. Basically, the concept of the project was to tip-off the ARDF aircraft when selected priority 1A targets were intercepted by ground operators at the 175th Radio Research Company. Initially, a special Hestia Pad series was used to encrypt the target data for the tip-offs. However, the advent of the KY-8 equipment eliminated the use of the pads except for backup. The tip-off position at the 175th RRC was colocated with the ground intercept positions. Fixes obtained by the ARDF aircraft on tip-offs were passed by the aircraft to the DSU's and reported in the ARDF recovery report, which the 175th RRC receives. The use of the KY-8 system reduced the time required to pass the tip-offs sufficiently to allow the 175th to commence tip-off of all priority targets intercepted on their positions. Approximately 25% of the targets tipped-off were fixed, accounting for a significant portion of the total targets fixed by ARDF. Short duration transmissions and transmitter locations beyond the range of the aircraft at the time of the tip-off accounted for the majority of the targets not fixed.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Cambodian Radio Telephone Intercept

[REDACTED] Suspected overflights of South Vietnam by Cambodian jet aircraft during December generated a requirement for an airborne platform to mount an all out collection effort to intercept Cambodian VHF tactical communications pertinent to this flight activity<sup>39</sup>. The US Army's Ceffien Lion aircraft, operating in two MACV areas adjacent to the Cambodian border were tasked with the mission, mainly due to their availability<sup>40</sup>. Since the collection of TACAIR communications was clearly an Air Force problem, the unit launched an attempt to secure its tasking for USAF resources (Compass Dart and Sentinel Sara). The USAF resources were equipped to satisfy the requirement, which called for immediate tip-off to NRV when the activity was noted, through its<sup>41</sup> UHF/KY-8 air/ground communications to Tan Son Nhut and direct ops comm circuit to NRV. Although a workable plan to satisfy the requirement without a loss in present tasking was formulated, MACV-J2 refused the use of Sentinel Sara or Compass Dart aircraft for the project (Simone)<sup>42</sup> to preclude degradation of other high priority mission commitments. By closure of this report the Unit was planning to conduct informal<sup>43</sup> hearability tests against the Cambodian communications on a non-interfering basis as soon as arrangements could be completed for the loan of a suitable linguist.

Dye Marker/Muscle Shoals

[REDACTED] During November NSAPACREP, Vietnam (C) informed the unit of a forthcoming requirement for airborne intercept facilities

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

to participate in the Dye Marker/Muscle Shoals program. The requirement was for airborne intercept resources to operate in the Muscle Shoals area<sup>44</sup> in order to assess, through SIGINT, reactions and possible countermeasures of the enemy to the anti-infiltration barrier devices. Since the requirement was for VHF intercept, the unit issued an immediate request for four G-175J receivers<sup>45</sup> for installation in the "Z" aircraft that would be tasked with the mission. Two days later, however, seven G-175J receivers were unexpectedly received. Four of the receivers were shipped to Det 2, and three were retained at the 6994th Security Squadron for use in "Z" aircraft operating from Hue/Phu Bai. The unit also requested additional linguistic support to meet the requirement.<sup>46</sup> Although formal tasking was not levied until later in December, the unit commenced supporting the project during early December. The support was provided through substituting a Compass Dart "Z" aircraft with VHF capability for the regular scheduled missions in MACV area one.<sup>47</sup> Traffic was dropped off at Hue/Phu Bai for transcribing and reporting upon mission completion. The results through December were negative reflections of any awareness by the enemy of the barrier devices.<sup>48</sup> However, the program and the unit's involvement in its activities continued.

#### Barrier Device Hearability Tested

[REDACTED] During December an incident during which a sound sensing barrier device discovered by the VC transmitted their ensuing activities and conversations prompted General Westmoreland to request that the feasibility of dropping the devices into enemy base camps for<sup>49</sup>

[REDACTED]

[REDACTED]

[REDACTED]

the purpose of monitoring activities within the camps be investigated. A device was secured and a test executed by the 6994th Security Squadron utilizing both a Compass Dart "Z" and a Sentinel Sara aircraft. It was concluded that the system was not suited for such an endeavor. The device's transmissions could not be intercepted by the aircraft while airborne, and could be monitored at a distance of only 200 feet by the aircraft on the ground.

DMZ Low Level Communications Hearability Test

[REDACTED] During September USM-808 conducted a hearability test of low level communications in the DMZ area during which the capabilities of the airborne platform (Sentinel Sara) were compared with the capability of the ground intercept site. The test confirmed that the airborne platform's capability to intercept low level communications could not be duplicated by the ground intercept site. The Commanding Officer, <sup>50</sup> 8th Radio Research Field Station stated of the test:


"During the period 13 thru 22 Sep 67, this station conducted a low level DMZ hearability test. Recognizing the professional capability of your squadron's personnel and equipment attached to the 8th, their assistance was solicited, and most generously contributed, in resolving the many problems encountered in both the planning stage and actual test period. Air to ground tip-off, so vital to a hearability test of this nature, was provided thru the use of KY-8 equipment on a non-interfering basis to their primary mission. The results were far greater than had been expected."

[REDACTED]

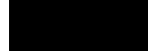
[REDACTED]

[REDACTED]

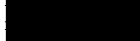
  
Chapter IIIPROCESSING AND REPORTINGProcessing

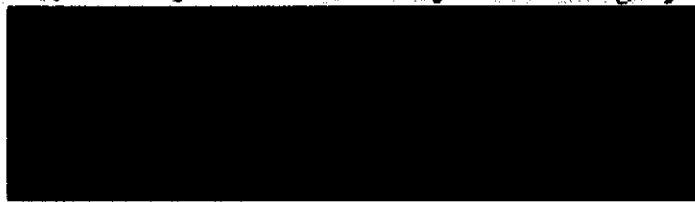
 The unit's processing mission consisted of cursory analysis of the traffic and operator logs for identification purposes and extraction of messages of possible significance for electrical forwarding to US Army SIGINT processing units. This effort was on a very limited basis due to the non-availability of pertinent technical directives and documents. Forms and records were maintained, as necessary, to accomplish reporting requirements and resource managerial duties.

Reporting

 The unit's reporting mission consisted of (a) air/ground reporting of ARDF fix data; (b) Position Status Reporting; (d) Master Program change actions; (e) ARDF Recovery Reporting; (f) USAF Special SENSOR Reporting; (g) Sentinel Sara Weekly Operational Summary Reporting, and (h) Electronic Warfare Daily Operational Management Report HILLITE Reporting.

EW DMR Revised

 A conference was conducted at the 6922nd Security Wing from 8 through 11 September which resulted in a proposed complete revision of the EW DMR. The proposed format was submitted to the PACSCTYRGN on 28 September and forwarded to USAFSS on 4 October. Subsequently approved by USAFSS with only minor changes, the revised





[REDACTED]

format was implemented on 4 November<sup>2</sup>. The revised EW DMR was more compatible to the EW mission than the original format which was a hasty revision of the existing Air COMINT DMR devised to meet EW reporting requirements.

[REDACTED]

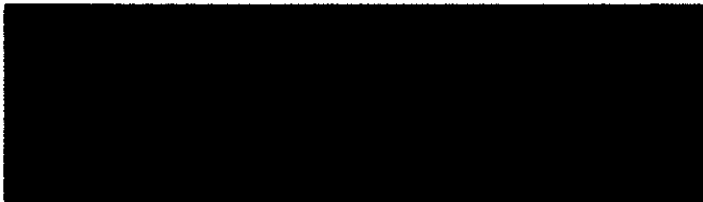


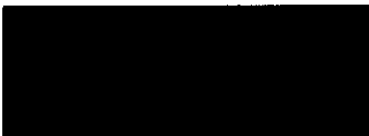
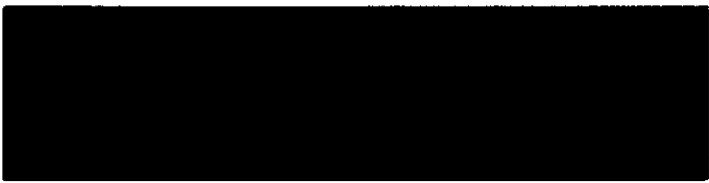
NOTES


Chapter I

1. USAFSS Operations Plan, Project Project Phyllis Ann (U), Serial No 11-66, Dtd 24 June 1966.
2. History of the 6994th Security Squadron, 1 Jan - 30 June 1967, RCS: AU-D5 (USS-1), Dtd 15 Dec 67.
3. Msg, 6994th Scty Sqdn CDR 16188, Dtd 16 Jul 67. Doc 1.
4. Msg, 6994th Scty Sqdn CDR 24294, Dtd 24 Jul 67. Doc 2.
5. Msg, 6994th Scty Sqdn OPS 100145Z Nov 67. Doc 3.

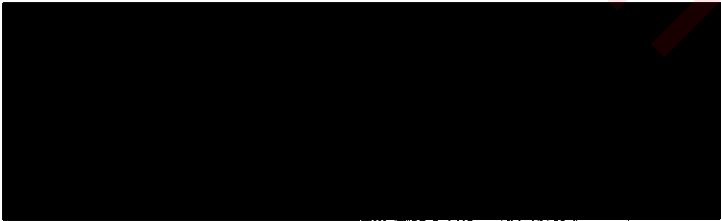
Chapter II

1. Msg, 6994th Scty Sqdn MAT 11159, Dtd 10 Aug 67. Doc 4.
  2. Msg, PACSCTIRGN 111940Z Nov 67. Doc 5.
  3. Interview by Msgrt Odom with Capt James Baker, Material Officer.
  4. Msg, 6994th Scty Sqdn MAT 24292, Dtd 23 Jul 67.
  5. Msg, 6994th Scty Sqdn MAT 01023, Dtd 1 Aug 67.
  6. Msg, 6994th Scty Sqdn MAT 26348, Dtd 26 Aug 67.
  7. 6994th Scty Sqdn PSR Nr 68, Dtd 13 Sep 67.
  8. Msg, 6994th Scty Sqdn MAT-M 250802Z Nov 67. Doc 6 and Doc 7.
  9. Msg, 6994th Scty Sqdn MAT 25324, Dtd 24 Aug 67.
  10. Interview by MSgt Odom with Capt James Baker, Material Officer.
  11. Msg, 6994th Scty Sqdn CDR 01003, Dtd 1 Aug 67.
  12. Interview by MSgt Odom with Capt Harold V. Barnett, Assistant Operations Officer.
  13. Msg, 6994th Scty Sqdn MAT 01004, Dtd 1 Aug 67.
  14. Msg, 6994th Scty Sqdn MAT 01011, Dtd 1 Aug 67.
- 

- 
15. Msg, 6994th Scty Sqdn MAT 18251, Dtd 18 Aug 67.
  16. Msg, 6994th Scty Sqdn OPS 22323, Dtd 22 Aug 67.
  17. Msg, 6994th Scty Sqdn MAT-M 15184, Dtd 14 Sep 67. Doc 8.
  18. Msg, 6994th Scty Sqdn MAT 22242, Dtd 21 Oct 67.
  19. Interview by MSgt Odom with 1st Lt Charles C. Aplin, Communications Officer.
  20. Ibid.
  21. Msg, 6994th Scty Sqdn COM 30348, Dtd 30 Oct 67.
  22. Interview by MSgt Odom with Capt Edward E. Smith, Material Officer.
  23. Msg, 6994th Scty Sqdn OPS 120845Z Dec 67. Doc 9.
  24. Msg, 6994th Scty Sqdn OPS 25350, Dtd 24 Sep 67. Doc 10.
  25. Msg, 6994th Scty Sqdn OPS 17259, Dtd 17 Oct 67. Doc 11.
  26. Msg, USAFSS TAD 48648, Dtg 160443Z Aug 67.
  27. Msg, USAFSS TAD 48668, Dtg 221934Z Aug 67.
  28. Msg, 6994th Scty Sqdn OPS 02017, Dtg 020045Z Sep 67.
  29. Msg, USAFSS TDC 48248, Dtg 222226Z Sep 67.
  30. Msg, AFSSO USAF 46016, Dtd 21 Sep 67.
  31. Interview by MSgt Odom with CMS Robert Mandell, NGOIC Operations.
  32. Msg, 6922nd Scty Wg OPS 130917Z Nov 67.
  33. Msg, 6994th Scty Sqdn OPS 27420, Dtd 26 Oct 67.
  34. Ltr, 6994th Scty Sqdn, Dtd 19 Sep 67.
  35. Msg, 303rd HRBN IAPV 303-00 728002-S, Dtg 070500Z Oct 67. Doc 12.
  36. Ltr, 6994th Scty Sqdn, Dtd 17 Oct 67.
  37. Msg, 6994th Scty Sqdn OPS 19286, Dtd 19 Aug 67.
- 

- 
38. Interview by MSgt Odom with 1st Lt Richard C. Husemann, OIC Airborne Collection.
  39. Msg, 6994th Scty Sqdn OPS 112355Z Dec 67. Doc 13.
  40. Msg, 6994th Scty Sqdn OPS 210623 Dec 67.
  41. Ibid.
  42. Msg, 6994th Scty Sqdn OPS 220815Z Dec 67.
  43. Msg, 6994th Scty Sqdn OPS 270837Z Dec 67.
  44. Msg, 6994th Scty Sqdn OPS 110520Z Nov 67. Doc 14.
  45. Msg, 6994th Scty Sqdn MAT-S 110531Z Nov 67.
  46. Msg, 6994th Scty Sqdn OPS 230023Z Nov 67.
  47. Msg, 6994th Scty Sqdn OPS 010515Z Nov 67.
  48. Msg, USM 808 IAPVJS3 7360 051, Dtg 261236Z Dec 67. Doc 15.
  49. Msg, 6994th Scty Sqdn OPS 270837Z Dec 67.
  50. Msg, GO 8th RRFS IAPVJS3/COL 7277 002, Dtg 040010Z Oct 67.

Chapter III

1. Msg, 6922nd Scty Wg OPS 04850, Dtg 280933Z Sep 67.
  2. Msg, 6994th Scty Sqdn OPS 041018Z Nov 67.
- 



GLOSSARY

A

AB Air Base

ACC Airborne Radio Direction Finding Coordination Center

AF Air Field

AFSSO Air Force Special Security Officer

ALR-34 Airborne Radio Direction Finding System (Compass Dart)

ARDF Airborne Radio Direction Finding

ASAP As Soon As Possible

B

BC Body Count

BDA Bomb Damage Assessment

C

CAS Controlled American Source

C&D Continuity and Development

CINCPACAF Commander-in-Chief, Pacific Air Forces

COMINT Communications Intelligence

CONUS Continental United States

CSAF Chief-of-Staff, U.S. Air Force

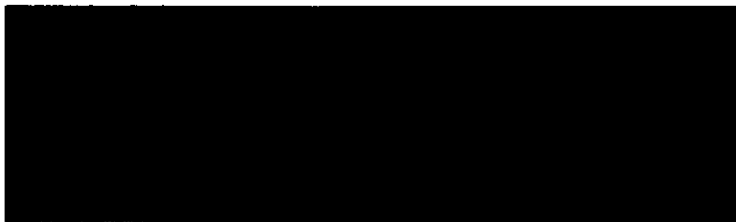
CTS Close Tactical Support

D

DMZ Demilitarized Zone

DOISPECREP Department of Defense Special Representative (unclassified name for NSA Representative, Vietnam (C))

DSU Direct Support Unit



  
E

ECM Electronic Counter Measures

EW Electronic Warfare

F

PFV (II) II Field Force, Vietnam

FM Frequency Modulation (Used in reference to FM-622 transceiver)

H

HF High Frequency

I

IRAN Inspect and Repair as Needed

J

JCS Joint Chiefs-of-Staff

K

KIA Killed in Action

KWM-2 HF Transceiver (nomenclature)

KY-8 Radio Telephone Encryption System (nomenclature)

KYK-3 KY-8 Automatic Keyer (nomenclature)

KYK-12 KY-8 Manual Keyer (nomenclature)

L

LOP Line of Position

M

MACTHAI U.S. Military Assistance Command, Thailand

MACV U.S. Military Assistance Command, Vietnam  


MAF, III 3rd Marine Amphibious Force

N

NRV (G) National Security Agency, Pacific, Representative,  
Vietnam (Confidential)

NVA North Vietnamese Army (same as PAVN)

P

PACAF Pacific Air Forces

PAVN People's Army, Vietnam (same as NVA)

Q

"Q" HF Search/Comm Jam Position

R

RFP Radio Finger Printing

REB(N) Radio Research Battalion

RRC Radio Research Company

RRD Radio Research Detachment

RRFS Radio Research Field Station

RRG Radio Research Group

S

SSLO USAFSS Liaison Officer

SVN South Vietnam

U

USARPAC U.S. Army, Pacific

UMD Unit Manning Document

USASA U.S. Army Security Agency

V

VC Viet Cong



X

"X" ALR-34 Console

Y

"Y" Search/Acquisition Position

Z

"Z" Phase III Compass Dart Position or Aircraft



© 2011 ECF.com



ec47.com

SUPPORTING DOCUMENTS

0408613

No.

PRIORITY

6994SCTESQ TAN SON NHUT AB VIETNAM


"USAFSS PRIVACY"

6922SCTYWG CLARK AB PHIL

CHANNELS/USAFSS PRIVACY/CDR 16188 Jul 67

For Lt Col Lilley from Lt Col Bridges.

- Ref: A. PSR Msg OPSQ 18464 Jul
- B. 6922 OPS 03423, 9 Jul 67
- C. 6922 OPS 03441, 16 Jul 67.

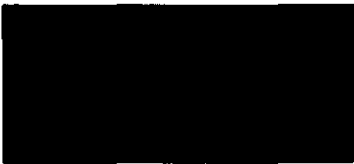
Subj:  Compass Dart/Drill Press OPLOC At Da Nang. Since my arrival here I have made special effort to establish a rapport with 7AF DO Staff who are interested in and to a considerable degree control the Project Compass Dart. One of my objectives has been to ultimately relocate resources (aircraft) closer to the activity in the DMZ. That my efforts were partially successful was indicated last week when serious consideration was given to the construction of adequate facilities to support 12 CD aircraft at Hue-Phu Bai. Even though this proposal was shelved for the time being the exercise was not a complete loss since the action Officer is now preparing a paper to go to the Programmers which will establish a requirement for ramp space and support facilities for a package of

16  
Jul 67  
1 2

LT COL BRIDGES

4644

WYMAN A. BRIDGES, LT COL USAF  
COMMAN





PRIORITY

6994SCTYSQ TAN SON NHUT AB VIETNAM

6922SCTYWG CIA HK AB PHIL



CHANNELS/USAFSS PRIVACY/CDR 24396 Jul 67

For Lt Col Lilley from Lt Col Bridges.

Ref my CDR 16188 Jul 67 regarding Compass Dart/Drill Press OPLOC at DaNang. Vulnerability of DaNang to VC attack has caused DO Staff 7AF to back down on their plan to relocate 6 Compass Dart aircraft to DaNang. The action officer has indicated that he plans to brief EG Bolt, DO 7AF, on this subject before Gen Coira visit. This subject could very well come up during Gen Coira's meeting with Gen Bolt. Have you briefed Gen Coira on this? If so what did you tell him? If not, what do you want me to tell him?

PROJECT COMPASS HARVEST DO NOT DESTROY  0408614 No. _____
---

24

Jul

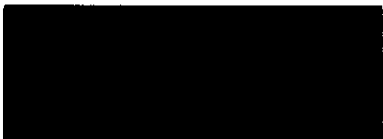
67

1

1

LT COL BRIDGES

4644



WYMAN M. BRIDGES, LT COL, USAF  
COMMANDER



PROJECT COORDINATOR HARVEST

COMMUNICATIONS

Doc. 3



0408625

ROUTINE

No.

69943CTYSC

1001457 MAR 67  
SUBJECT:

69223CTYWG

REQUEST TO COLLOCATE  
AIRCRAFT WITH SUPPORTING  
RADIO RESEARCH UNIT



OPS NOV 67.

1. FOLLOWING MESSAGE FROM SSO MACV TO AFSSO 7AF, INFO CG THIRD MAF IS QUOTED FOR YOUR INFORMATION. QUOTE. "1. WE ARE REVIEWING WAYS AND MEANS TO IMPROVE THE ARDF SUPPORT TO CG, III MAF. EXPERIENCE IN OTHER CTZ HAS DEMONSTRATED THAT WHEN THE AIRCRAFT ARE COLLOCATED WITH THEIR SUPPORTING RADIO RESEARCH UNIT, ARDF RESULTS SHOW MARKED IMPROVEMENT. 2. PHYSICAL SEPARATION OF THE AIR FORCE ARDF AIRCRAFT FROM THE INTERCEPT FACILITY AT PHU BAI (SUPPORT TO III MAF BEING PROVIDED BY AF ARDF DET AT PLEIKU) REDUCES TIME THE AIRCRAFT REMAINS IN THE TARGET AREAS AND PRECLUDES CLOSE COORDINATION BETWEEN GROUND INTERCEPT, ANALYSTS, AND ARDF CREWS. SINCE SUPPORT TO III MAF IS PROVIDED FROM PLEIKU, ARDF SUPPORT FOR II PFV MUST BE FLOWN FROM NHA TRANG. HENCE, THESE AIRCRAFT ARE ALSO PHYSICALLY SEPARATED FROM THE RADIO RESEARCH UNIT WHICH SUPPLIES THEIR TARGETING DATA (330TH RR CO AT PLEIKU). 3. IN ORDER TO RESOLVE THIS PROBLEM WE ARE EXAMINING THE FEASIBILITY OF MOVING AS MANY AS FIFTEEN AIR FORCE ARDF AIRCRAFT FROM NHA TRANG TO PHU BAI. THIS WOULD PLACE THEM WITH

9  
NOV 67  
1 2

LT COL EVANS

3706



KELVIN E. EVANS, Lt Colonel, USAF  
Operations Officer

ROUTINE

LT COL EVANS

LT COL EVANS

3706

THE SUPPORTING RADIO RESEARCH UNIT, AND INCREASE THE TIME OVER TARGET. THE AIRCRAFT AT PLEIKU COULD THEN BE FLOWN AGAINST II FFV TARGETS, AND BENEFIT FROM THEIR CURRENT COLLOCATION WITH SUPPORTING RADIO RESEARCH UNIT. WE RECOGNIZE THE CROWDED CONDITIONS AT HUE/PHU BAI AIRFIELD, AND ARE CONSIDERING ALTERNATIVES, SUCH AS DA NANG. HOWEVER, WE WOULD LIKE TO PLACE AS MANY AS POSSIBLE AT HUE/PHU BAI. 4. REQUEST YOU DEVELOP A STATEMENT OF REQUIREMENTS FOR SUPPORTING THE FIFTEEN ARDP AIRCRAFT AT HUE/PHU BAI WHICH YOU CONSIDER FEASIBLE FOR THIS PURPOSE. THESE REQUIREMENTS, AND YOUR COMMENTS SHOULD BE FORWARDED BY 15 NOVEMBER". UNQUOTE.

2. THIS UNIT HAS BEEN TASKED TO PROVIDE INPUT FOR 7AF REPLY. IT APPEARS THAT 7AF WILL REPLY WITH A LARGE DOLLAR COST BECAUSE OF THE EXTENSIVE BUILD UP IN SUPPORT FACILITIES REQUIRED (E.G., RAMPS, REVETMENTS, A&E MAINTENANCE, WAREHOUSING, SUPPLY, BILLETING, MESSING, POWER). WILL FORWARD 7AF REPLY WHEN AVAILABLE.

JOINT MESSAGEFORM

Doc. 4

SECURITY CLASSIFICATION  
UNCLASSIFIED E F T O

SUBJECT:  
TENTATIVE DELIVERY  
SCHEDULE

TYPE MSG	BOOK	MULTI	SINGLE
		2	
PRECEDENCE			
ACTION PRIORITY			
INFO			

DTG

FROM: 6994SCTYSQ TAN SON NHUT AFID VIETNAM

TO: DET 1, 6994SCTYSQ NAH TRANG AB VIETNAM  
DET 2, 6994SCTYSQ PLEIKU AB VIETNAM

SPECIAL INSTRUCTIONS

OPS COMM

UNCLASSIFIED E F T O//MAT 11159 AUG 67.

THE FOLLOWING MSG FROM 348CMT SPT GP IS QUOTED FOR UR INFO:

QUOTE: UNCLAS E F T O BDM 70048 AUG 67. FOR DME, DCO, DCM, WRNCPA-1, LDL, LGO, DM, DMM, SCPTC, DM. SUBJ: C-47 MOD.

TENTATIVE DELIVERY SCHEDULE NEGOTIATED AS FOLLOWS:

INPUT SEQ	INPUT	OUTPUT
3RD ACFT	ALREADY IN	17 AUG
4TH	11 AUG	23
5	17	29
6	23	5 SEPT
7	29	11
8	5 SEPT	16
9	11	22
10	16	28
11	22	4 OCT
12	28	10

1ST  
 CLASS  
 LIBRARY  
 0408616  
 No.

DATE	TIME
10	
MONTH	YEAR
Aug	67
PAGE NO.	NO. OF PAGES
1	7

D  
R  
A  
F  
T  
E  
F

TYPED NAME AND TITLE  
SSgt Doolittle/wod

PHONE  
3164

SIGNATURE

TYPED (or stamped) NAME AND TITLE  
EDWARD E. SMITH, Capt., USAF  
Material Officer

SECURITY CLASSIFICATION  
UNCLASSIFIED E F T O

REGRADING INSTRUCTIONS

ABBREVIATED JOINT MESSAGEFORM  
and/or CONTINUATION SHEET

SECURITY CLASSIFICATION  
Doc. 4 (cont'd)  
UNCLASSIFIED E F T O

PRECEDENCE	RELEASED BY	DRAFTED BY	PHONE
ACTION PRIORITY	CAPT SMITH	SSGT DOOLITTLE/wod	3164
INFO			

13	4 OCT	16
14	10	21
15	16	27
16	21	2 NOV
17	27	8 NOV
18	2 NOV	15
19	8	21
20	15	28
21	21	4 DEC
22	28	9
23	4 DEC	14

ABOVE SCHEDULE IS BASED ON 10 WORKING DAYS FLOW TIME; 2 IN WORK;  
SUBSEQUENT INPUT/OUTPUT OR ONE FOR ONE. FIRM INPUT/OUTPUT WILL  
BE CONFIRMED BY 5 DAYS AND 3 DAYS NOTIFICATIONS, REQUEST 4TH  
ACFT BE INPUT ON 11 AUG. REPLACEMENT ACFT (2ND) READY FOR  
PICK-UP. UNQUOTE.

CONTROL NO.	TOR/TOD	PAGE NO.	NO. OF PAGES	MESSAGE IDENTIFICATION	INITIALS
		2	2		
REGRADEING INSTRUCTIONS				SECURITY CLASSIFICATION UNCLASSIFIED E F T O	



~~25 / 1944~~  
11/20/47

NNNNZCZCRDA267AM3222

RR YMRDQR

DE YHLAKZ 6 3151947

R 1119422

FM PACSCTYRGN

TO 6994SS

DET 1 6994SS

DET 2 6994SS

PROJECT CORONA HARVEST
LOWA DEPTOY
0408617
No. _____

022 SS (MAT)

ZEM

R 091730Z NOV 67

FM WRAMA RO 3 NS AFB GA

TO HHHHHA/PACSCTYRGN LOG-M WHEELER AFB HAWAII

BTAVAP/APRFE SCPTC TACHIKAWA AB JAPAN

RUMSBJ/7AF DMME TAN SON AB RVN

RYAPAG/543 COMTSPT GP ITAZUKE AFB JAPAN

RHFT EJA/USAFSS LDL

RWNTADA/OCANA OCPWCS TYNER AFB OLA

RUKHABA/CI NCPACAF DMN

RJAVAZ/9AF DMN FUCHU AB JAPAN

BT



WRNC

Doc. 5(cont'd)

FOR 348 CM3TSPTGP/CAFT O'NEIL. SUBJECT FOLLOW-ON MODIFICATION

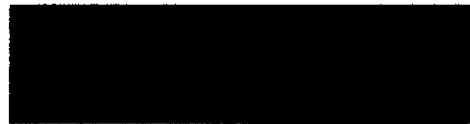
FOR 21 EC-47 ACFT AT ITAZUKE AB JAPAN. THIS MESSAGE IN TWO PARTS. PART ONE. FOR AL. CONTRACTUAL COVERAGE HAS BEEN OBTAINED TO ACCOMPLISH MOD 1849 - 1875 T.O. 1C-47-541 AND 1873 T.O. 1C-47(E)-522 ON ADDITIONAL 21 EC-47 ACFT AT ITAZUKE AB JAP. (MY (C) WRNC-33076 14 SEP 67). INSTALLATION SCHEDULE AS FOLLOWS: INPUT TWO ACFT AT ONE TIME WITH ESTIMATED

FIVE DAY TAT. REQUEST FIRST TWO ACFT BE INPUT NOT LATER THAN 15 NOV 67. PROGRAM CANNOT BE FURTHER ACCELERATED DUE TO AVAILABILITY OF GROUP "7" COMPONENTS FOR FM522 INSTALLATION AS STATED ON REF MSG. PART TWO. FOR CINCPACAF. KITS ARE

AVAILABLE FOR INSTALLATION OF MOD 1873 IN ORIGINAL 22 ACFT JUST COMPLETING MOD ON PROJECT 195. REQUEST YOUR RECOMMENDATION FOR LOCATION TO ACCOMPLISH MOD 1873 ON THESE ACFT. ESTIMATED MANOURS FOR INSTALLATION OF MOD 1873 (INSTALLATION OF AN/WRN-25 RADAR REACOMEC-47 ACFT) APPROXIMATELY 153 HOURS. ADVISE WRAMA (WRNCFA) YOUR RECOMMENDATION.

GP-4

259



*MAT*

**JOINT MESSAGEFORM**

SECURITY CLASSIFICATION  
 [REDACTED]

TYPE MSG [ ] SINGLE [ ]  
 X

PRECEDENCE  
 ACTION PRIORITY

INFO

RESERVED FOR COMMO INFORMATION CENTER

Doc. 6

PROJECT CORONA HARVEST  
 CONFIDENTIAL

DTG 250802 Nov 67

No. 0408618

FROM: 6994SCTYSQ TAN SON NHUT AFDL VIETNAM

TO: PACSCTYRGN/LOG-MP/WHEELER AFB HAWAII

INFO: 6922SCTYWG/MAT/CLARK AB PHIL

[REDACTED]

REF UR LOG-MP, 220317Z NOV 67. SUBJ: ACFT IRAN SCHEDULE.

THE FOLLOWING LISTED ACFT ARE SCHEDULED FOR IRAN IN TAIWAN.

ACFT NR	IN	OUT
43-49680	15 OCT 67	19 NOV 67
43-15112	14 NOV 67	19 DEC 67
44-76524	14 JAN 68	18 FEB 68
43-48767	31 JAN 68	7 MAR 68
43-49126	18 FEB 68	25 MAR 68
45-10046	1 MAR 68	4 APR 68
43-48947	25 MAR 68	29 APR 68
42-93735	6 MAY 68	11 JUN 68

GP-1

SPECIAL INSTRUCTION

DATE	TIME
25	
MONTH	YEAR
Nov	67
PAGE NO.	NO. OF PAGES
1	

DRAFT

TYPED NAME AND TITLE: CMSgt Hunt/wod

PHONE: 3164

SIGNATURE: [REDACTED]

TYPED (or stamped) NAME AND TITLE: WALTER E. HUNT, CMSGT., USAF

Asst Chief of Maint

REGARDING INSTRUCTIONS: GP-1

SECURITY CLASSIFICATION: [REDACTED]

JOINT MESSAGEFORM

RESERVED FOR COMBAT INFORMATION CENTER

Doc. 7

SECURITY CLASSIFICATION

TYPE MSG

BOOK

MULTI

SINGLE

PRECEDENCE

ACTION

PRIORITY

INFO

DTG

30 2245 NOV 67

FROM: 6994SCTYSQ TAN SON NHUT AFLD VIETNAM

TO: PACSCTYRGN/MAT/WHEELER AFB HAWAII

SPECIAL INSTRUCTIONS

REFERENCE YOUR LOG-MPA 290303Z NOV 67. SUBJ: COMPASS DART IRAN.  
 AIRCRAFT NUMBERS 933, 665 AND 016 WERE EXCLUDED FROM OUR LIST DUE  
 TO AN OVERSIGHT ON OUR PART. THE EXCLUDED AIRCRAFT ARE ASSIGNED TO  
 THE DETS. WE NEGLECTED TO INCLUDE THESE AIRCRAFT NUMBERS ALONG  
 WITH AIRCRAFT ASSIGNED THIS STATION. YOUR START DATED FOR THESE  
 AIRCRAFT ARE CORRECT ACCORDING TO OUR RECORDS. GP-1

PROJECT COMBAT INVEST  
 0408619  
 No. \_\_\_\_\_

DATE	TIME
30	
MONTH	YEAR
NOV	67
PAGE NO.	NO. OF PAGES
	1

TYPED NAME AND TITLE

PHONE

3164

Capt Baker/jlf

SIGNATURE

James C. Baker

TYPED (or stamped) NAME AND TITLE

JAMES C. BAKER, Capt, USAF  
Material Officer

SECURITY CLASS

REGARDING INSTRUCTIONS

DD FORM 173  
NOV 62

REPLACES EDITION OF 1 MAY 58 WHICH MAY BE USED.

GPO: 1968-761-922

JOINT MESSAGEFORM		REPRODUCTION FOR USE AT LOCATION CENTER	
SECURITY [REDACTED]		Doc. 8	
TYPE MSG	BOOK	MULTI	SINGLE
PRECEDENCE			
ACTION PRIORITY		No.	
INFO		DTG	

0408600

FROM: 6994SCTYSQ TAN SON NHUT AFBD VIETNAM

TO: USAFSS SAN ANTONIO TEX

INFO: PACSCTYRGN WHEELER AFB HAWAII

6922 SCTYWG CLARK AB PHIL

NASHUA NEW HAMPSHIRE (SANDERS ASSOC)

[REDACTED] 15184 \_\_\_\_\_ SEPT 67

SUBJ: FM-622 INTERFERENCE WITH AN/ALR-34.

FOR: LDL/TSD, LOG-M, MAT.

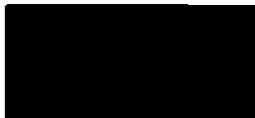
1. THIS UNIT IS EXPERIENCING INTERFERENCE PROBLEMS WITH FM 622 RADIO SET AND THE AN/ALR-34. FREQUENCY RANGE OF FM-622 IS 30MHZ TO 74.5MHZ. PROBLEM HAS EXISTED FOR SOME TIME BUT HAS NOT AFFECTED MISSION EFFICIENCY BECAUSE OF LOW UTILIZATION OF THE FM 622 RADIO SET. WITH THE INSTALLATION OF KY-8 SECURE VOICE, THE RADIO IS USED MORE OFTEN. FM-622 TRANSMISSION APPEARS TO SATURATE THE ALR-34 ANTENNA PRE-AMPS CAUSING THE 422 O'SCOPE TO BE BLANKED. FOR SOME MODE REASON, EFFECT IS MORE NOTICABLE WHEN IN KY-8 CYPHER.

2. REQUEST A STUDY BE MADE AT SANDERS ASSOC. TO FIND A SOLUTION TO THIS PROBLEM. GP-4

SPECIAL INSTRUCTIONS

DATE	TIME
14	
MONTH	YEAR
SEPT	1967
PAGE NO.	NO. OF PAGES
1	1

D R A F T E R	TYPED NAME AND TITLE	PHONE	SIGNATURE
	Capt Smith/jlf	3164	
	SECURITY CLASSIFICATION	TYPED (or stamped) NAME AND TITLE	
	[REDACTED]	EDWARD E. SMITH, Capt, USAF Material Officer	
		REGRADING INSTRUCTIONS	



**PROJECT CORONA HARVEST**  
**DO NOT DESTROY**  
*12/08453 Dec 67*  
**0408622**  
 No. \_\_\_\_\_

ROUTINE

6994SCTYSQ

6922SCTYWG



OPS DEC 67.

EQUIPMENT  
INSTALLED IN  
COMPASS  
DART

SUBJECT: INSTALLATION OF RFP IN COMPASS DART SYSTEM.

1. QUOTED BELOW IS THE LATEST ON LEFTBANK/RFP AS RECEIVED FROM  
 DET 1. PERSONNEL AT DET 1 ARE STRONGLY URGING THAT AN RFP CAPABILITY  
 BE ADDED TO COMPASS DART. THIS HEADQUARTERS LOOKS UPON RFP WITH THE  
 CURRENT STATE OF THE ART WITH RESERVATION. HOWEVER, THESE INPUTS  
 FROM DET 1 ON CURRENT ARMY EFFORTS MAY BE OF VALUE TO USAFSS  
 ENGINEERS IN DEVELOPING AN RFP CAPABILITY FOR COMPASS DART.

2. HERewith CITED MSG. QUOTE. "1. FOLLOWING IS ADDITIONAL,  
 ALTHOUGH STILL INCOMPLETE, INFO TO SUPPORT ON THE PROPOSAL TO USE  
 RADIO FINGERPRINTING (RFP) EQUIPMENT ON COMPASS DART ACFT. THE  
 INFORMATION WAS OBTAINED FROM PERSONNEL WHO HAVE WORKED WITH AND  
 FLOWN THE LEFTBANK HELICOPTERS IN SUPPORT OF THE 1ST AIR CAV DIV.

2. THE EQUIPMENT IN THE HELICOPTERS, NICKNAMED SHORT SKIRT, IS  
 LIGHT IN WEIGHT (75 LBS) AND SIMPLE TO OPERATE. THE EQUIPMENT  
 PRODUCES THE PICTURE ON TWO PLY PAPER BY BURNING THE PICTURE

12  
 DEC 67  
 1

CAPT BARNETT

3706

HAROLD V. BARNETT, Captain, USAF  
 Ass't Operations Officer



ROUTINE

CAPT BARNETT

CAPT BARNETT

3706

UTILIZING ULTRAVIOLET LIGHT. THE OPERATION IS NOT HAMPERED BY FILM, ITS DEVELOPING, AND THE WAITING TIME THESE WOULD REQUIRE. 3. SINCE THE ENEMY IS USING TRANSMITTER WITH TUBES OBTAINED FROM NUMEROUS COUNTRIES --US, CZECH, RED CHINA, USSR, ETC--EACH TRANSMITTER HAS VERY UNIQUE CHARACTERISTICS. THE OPERATOR IS CAPABLE OF MEMORIZING THE CHARACTERISTICS OF HIS PARTICULAR TARGETS PRIOR TO HIS MISSION AND IDENTIFYING SAME IN FLIGHT. SINCE THE LEFT BANK PROGRAM IS DESIGNED FOR LOW LEVEL DIRECT SUPPORT, THIS CONCEPT OF OPERATION IS FEASIBLE. THE MAIN PROBLEMS EXPERIENCED WITH THE LEFT BANK PROGRAM SEEM TO BE THE VIBRATIONS OF THE HELICOPTER AND THE FRAILTY OF THE SHORT SKIRT EQUIPMENT ITSELF. 4. APPLICATION TO COMPASS DART: THE OPERATOR COULD MEMORIZE THE TARGET CHARACTERISTICS OF A LIMITED NUMBER OF HIS TARGETS, BUT THE VOLUME OF OUR TAKE WOULD DEMAND EMPHASIS ON POST MISSION EXPLOITATION OF THE RFP. A. DET 1 HAS NOTED THAT IT IDENTIFIES APPROX 35-40 PERCENT OF ITS TARGETS. OF THOSE IDENTIFIED APPROX 50 PERCENT ARE IDENTIFIED AS PRIORITY TARGETS. THEREFORE, WITH ADDITIONAL IDENTIFICATIONS IT IS REASONABLE TO ASSUME THAT THE NUMBER OF PRIORITY TARGETS FIXED WOULD ALSO INCREASE. THESE TARGETS ARE BEING FIXED NOW, BUT TO FULLY EXPLOIT THE ARDF TAKE, THE FIXES SHOULD BE IDENTIFIED. B. WE HAVE SUGGESTED MORE EXTENSIVE IMPLEMENTATION AND EXPLOITATION OF THE WIDEBAND COLLECTION TO IMPROVE THE ARDF PROGRAM. BELIEVE THAT UTILIZATION OF RFP, IF PACKAGED IN A

ROUTINE

CAPT BARNETT

CAPT BARNETT

3706

FEASIBLE SYSTEM WOULD ALSO IMPROVE ARTF PERFORMANCE. UNQUOTE.

3. REQUEST YOUR HEADQUARTERS DETERMINE THE FEASIBILITY OF PLACING REP ON COMPASS DART.

CDR/R1

Doc. 10

PROJECT CORONA HARVEST  
DO NOT DESTROY  
0408622  
No. \_\_\_\_\_

ROUTINE

6994TH SCTY SQ

6922ND SCTYWG

OPS 25350, SEPT 67.

SUBJ: TECHNICAL DOCUMENTS.

1. AFTER CONSIDERABLE THOUGHT AND REVIEW OF USAFSS OPLAN 11-66, AND AFTER SOME EXPERIENCE WITH Z CONFIGURED AIRCRAFT, IT IS APPARENT THAT WE ARE NOT ALLOWED TO RECEIVE SOME OF THE BASIC AIDS NEEDED TO COMPLY WITH THE PLAN AND TO PERFORM TO THE BEST OF OUR ABILITY. SPECIFICALLY THE OPLAN (ANNEX A) REQUIRES US TO ASSIST IN AIRBORNE IDENTIFICATION. HOWEVER, THE ONLY TECHNICAL AIDS WE HAVE BEEN ALLOWED TO HAVE IS THE NSA RADIO ARBITRARY DESIGNATOR LIST PREPARED BY NSA: AND, OF COURSE, WITHOUT THIS DOCUMENT WE COULD NOT EVEN PROVIDE SEVENTH AIR FORCE WITH THE DATA THEY REQUIRE.

2. A REVIEW OF YOUR MESSAGE OPR-M 01953 SEPT 66, AND THE <sup>ENSURING</sup> ~~ENSURING~~ EXCHANGE WILL POINT OUT OUR DILEMMA. WE NEED <sup>SUCH</sup> ~~SURE~~ THINGS AS CALLSIGNS RUNS AND THE IDENT AIDS MADE BY B-64 AT NSA. HOWEVER, OUR REAL PROBLEM IS THAT WE CANNOT GET OUR REQUIREMENTS VALIDATED. WE HAVE NO THOUGHT OF DUPLICATING THE DEVELOPMENTAL EFFORTS OF

24 Z  
SEPT 67  
1 2

4697

CAPT BARNETT

HAROLD V. BARNETT, Captain, USAF  
Assistant Operations Officer



ROUTINE

CAPT BARNETT

CAPT ALMQUIST

4697

HIGHER LEVEL PROCESSORS. REQUEST A RENEWED ATTEMPT TO GET OUR  
REQUIREMENTS DECLARED VALID AND TO ALLOW US TO HAVE THE BENEFIT  
OF EXISTING AIDS.



PROJECT CORONA HARVEST  
DO NOT DESTROY

Doc. 11  
Comdr

0412034  
No. \_\_\_\_\_

X

ROUTINE

6994SCTYSQ TAN SON NHUT AB VIETNAM

OPSCOM

DET 1, 6994SCTYSQ

DET 2, 6994SCTYSQ



OPS

17259

OCT 67.

FOR DICKEY AND PORTER FROM BARNETT. SUBJECT: REQUEST FOR TECH DOCS.

1. FOLLOWING MSGS FROM 6922 SW ARE QUOTED FOR YOUR INFORMATION AND REVEALS THE STATE OF PROGRESS ON OUR EFFORTS. A. OPS 05008, OCT 67, ADDRESSED TO 6994TH ONLY: QUOTE "1. REQUEST YOU WORK WITH 7AF TO ESTABLISH SPECIFIC INTELLIGENCE COLLECTION REQUIREMENTS... FOR TECHNICAL DOCUMENTS TO FACILITATE GROUND IDENTIFICATION SUPPORT TO AIRBORNE MISSIONS. PROVISIONS FOR THE ACTION ARE IN USAF INTEL 201-2 AND DIA INSTRUCTION 58-3.... UNQUOTE. B. OPS 05011 OCT 67, ADDRESSED TO PSR, INFO TO 6994TH. QUOTE "1. REQUEST 6922SW AND 6994SS BE FURNISHED DISTRIBUTION OF DIA INSTRUCTIONS 58-1, 58-2, AND 58-3 TO FACILITATE REQUISITIONS FOR COMINT TECHNICAL DOCUMENTS THROUGH PROPER CHANNELS.

2. JUSTIFICATION: AS AN ELECTRONIC WARFARE UNIT, THE 6994SS IS PROHIBITED FROM PROCURING COMINT TECHNICAL DOCUMENTS THROUGH NORMAL

17 1540  
OCT 67  
1

CAPT BARNETT

3706

HAROLD V. BARNETT, Captain, USAF  
Ass't Operations Officer



ROUTINE

CAPT BARNETT

CAPT BARNETT

3706

COMINT CHANNELS. THE 6994SS IS A COMINT CONSUMER FOR THIS PURPOSE. THE SQUADRON REQUIRES CERTAIN COMINT TECHNICAL DOCUMENTS TO PERFORM ACCURATE AND RAPID IDENTIFICATION OF TARGET TRANSMITTERS WHILE SUPPORTING THE AIRBORNE MISSION. THE CURRENT COMPASS DART FIXES ARE BEING PASSED AT AN UNACCEPTABLE RATE (OVER 60 PERCENT) OF UNIDENTIFIED TARGETS. THE TIMELINESS FACTOR IN PASSING FIXES AIR TO GROUND DOES NOT ALLOW THE 6994TH TECH SUPPORT ANALYSTS TO QUERY DATA BASES DO NOT HAVE SECURE AIR TO GROUND TO AIR (SIG) COMMUNICATION WITH THE AIRCRAFT. PAST ATTEMPTS TO OBTAIN IDENTIFICATION AIDS FROM THE 509 RBG HAVE BEEN UNSUCCESSFUL DUE TO THEIR LIMITED SUPPLY. FURTHER, THE 6922SW MUST ASSURE PROPER FORMAT AND COMPLETENESS OF INFORMATION IN EXPRESSING THE REQUIREMENT. UNQUOTE.

2. DO NOT COMPLETELY UNDERSTAND MOTIVATION. USING THE CONCEPT IN PARAGRAPH B2 ABOVE IS INTERPRETED HERE AS MEANING WE WON'T GET DOCUMENTS DO NOT BELIEVE THAT NSA RELEASES ITN'S AND CTR'S TO CONSUMERS. HOWEVER, WE WILL CONTINUE OUR EFFORTS TO VALIDATE OUR RIGHT TO THESE DOCUMENTS UNTIL TURNED DOWN AND TOLD TO DESIST. IN THE MEANTIME, CONTINUE YOUR SHORT RANGE, STOP-GAP METHODS OF WHEELDE, CAJOLE, AND BEG TO OBTAIN AS MUCH DATA AS YOU CAN TO AID IN IDENTIFICATIONS.

35. Msg, 303rd RRBN IAPV 303-00 728002-S, Dtg 070500Z Oct 67. Doc 12.

Ground/Air Tip-off Procedures

██████████ During October the Commanding Officer, 303rd RRBN informed the 6994th Security Squadron of a discussion with intelligence personnel of the 1st Infantry Division during which great concern was voiced over the extremely low hear/fix rate by ARDF aircraft of targets tipped-off by ground stations. Lt Col Benedict, G2, 1st Inf Div stated:

"Since these ground tip-offs reflect the current combat needs of the division, they are of immediate value and the results are always closely followed by General Hay."

Document #12 is obviously the full text message from the 303d Radio Research Battalion (ASA) regarding the 1st Infantry Division's concerns outlined in the narrative. Apparently it was not declassified because of its ASA origin.

DOCUMENT # 12 REDACTED

©CC477.com

SECRET SAVIN



137  
EOR  
RF

11/23 557 DEC 67

ROUTINE

6994TH SCTY SQ

6922ND SCTY WG

PROJECT CORONA HARVEST  
DO NOT DESTROY  
  
0408623  
No. 66



OPS

SUBJ: CAMBODIAN OVERFLIGHT OF SVN.

1. FOLLOWING FORWARDED FOR YOUR INFO: QUOTE: fm; NSAPICREF

VIETNAM TO: INFO: HQ NSA PAC: DIRNSA:

CUSASAPAC: USM-704; USM-627; ZEM. F46C/8820

SUBJ: OVERFLIGHTS OF SOUTH VIETNAM BY SUSPECT CAMBODIAN AIRCRAFT

- A. MY 071540Z, F46C/8798 (NOTAL)
- B. SSO MACV 071043Z, MAC 11846 INTEL (NOTAL)
- C. MX 071140Z, F46V/8787.

1. AS A RESULT OF RECENT OVERFLIGHTS OF SOUTH VIETNAM BY SUSPECT CAMBODIAN JET AIRCRAFT, A REQUIREMENT HAS BEEN GENERATED TO MOUNT AN ALL OUT COLLECTION EFFORT TO INTERCEPT CAMBODIAN AIR FORCE TACTICAL VHF VOICE COMMS PERTINENT TO THIS FLIGHT ACTIVITY.

2. PRESENT INTERCEPT RESOURCES SVN TARGETTED AGAINST CAMBODIAN AIR

COMMS ARE THE TECH RESEARCH SHIP ON STATION IN MARKET TIME AREA 9

AND CEFLIEN LION AIRBORNE PLATFORM (REF BRAVO) OPERATING IN MACV

AREA ARDF AREA 23 AND 24.

11	2
DEC	6
1	

3706

LT COL EVANS

KELVIN E. EVANS, Lt Col, USAF  
Operations Officer



ROUTINE

LT COL EVANS

LT COL EVANS

3706

3. WAS INFORMED BY DCG 509TH HROP THAT VHF COLLECTION CAPABILITY NOW EXISTS AT USM-627 DF SITE IN [REDACTED] INFO RESULT OF RECENT VISIT TO USM-627 BY S3 OFFICER OF THE 509TH. IN AN EFFORT TO ENHANCE COLLECTION AGAINST VHF CAMBODIAN TACTICAL AIR COMMS REQUEST YOU INVESTIGATE THE POSSIBILITY OF TASKING THAT POSITION TO SEARCH FOR VOICE COMMS EMANATING FROM PHNOM PENH CONTROL TOWER AND CCI CONTROL. ONLY LIMITED TECHNICAL DATA AVAIL (PARA 1A REF ALFA APPLIES). IN THE EVENT TASKING IS EXPECTED REQUEST THAT ALL REFLECTIONS OF SUSPECTED CAMBODIAN FIGHTER AIRCRAFT ACTIVITY WHICH MEET THE ESTABLISHED CRITERION (PARA 2 REF ALFA APPLIES) BE TIPPED OFF TO NRV (C) AT FLASH PRECEDENCE FLAGGED "PROJECT SIMONE." REPORT TO INCLUDE HEADINGS, ALTITUDE AND SPEED OF AIRCRAFT IF GIVEN BY CONTROLLER OR PILOT. ALL OTHER SUSPECT CAMBODIAN AIR ACTIVITY TO BE FORWARDED TO USM-627 FOR PROCESSING. PLEASE ADVISE NRV (C) OF PERTINENT INFO AS A RESULT OF PROCESSING WHICH WOULD IMPROVE PRESENT TECH DATA USE.

4. REQ ADVISE. UNQUOTE.

2. YOU MAY BE INTERESTED TO KNOW THAT THERE <sup>MAY BE</sup> ~~ARE~~ A FEW VIETNAMESE LINGUISTS ASSIGNED TO THE 6988 (PROBABLY SUBSEQUENTLY ASSIGNED TO 6990) WHO WERE CAMBODIAN LINGUISTS WHO GRADUATED FROM THE BERLITZ CONDUCTED 203XI MD COURSE ABOUT ONE YEAR AGO. HQ USAFSS (PAD) SHOULD STILL HAVE THEM IDENTIFIED IF NEEDED. KLE

3. THIS SEEMS TO BE A TACAIR PROBLEM BEING GIVEN TO OTHER THAN USAF UNITS BECAUSE OF LACK OF CAPABILITY IN COUNTRY.

DOCUMENTS #14 and 15 REDACTED

44. Msg, 6994th Scty Sqdn OPS 110520Z Nov 67. Doc 14.

to participate in the Dye Marker/Muscle Shoals program. The requirement was for airborne intercept resources to operate in the Muscle Shoals area in order to assess, through SIGINT, reactions and possible countermeasures of the enemy to the anti-infiltration barrier devices. Since the require-

Document #14 obviously pertains to SIGINT support of the Dye Marker/Muscle Shoals (later Igo White) electronic sensor anti-infiltration program, the details of which have been declassified for many years. It is not clear why the document should remain classified.

48. Msg, USM 808 IAPVJS3 7360 051, Dtg 261236Z Dec 67. Doc 15.

aircraft operating from Hue/Phu Bai. The unit also requested additional linguistic support to meet the requirement. Although formal tasking was not levied until later in December, the unit commenced supporting the project during early December. The support was provided through substituting a Compass Dart "2" aircraft with VHF capability for the regular scheduled missions in MACV area one. Traffic was dropped off at Hue/Phu Bai for transcribing and reporting upon mission completion. The results through December were negative reflections of any awareness by the enemy of the barrier devices. However, the program and the unit's involvement in its activities continued.

Document #15 continues to detail SIGINT support of the anti-infiltration "barrier." Apparently it remains classified because of its origin (USM 808, the 8th RR Field Station at Phu Bai.)



DOCUMENTS #14 and 15 REDACTED

©CC477.com

DOCUMENTS #14 and 15 REDACTED

©CC477.com

©CC477.com

DOC47.com

ec47.com

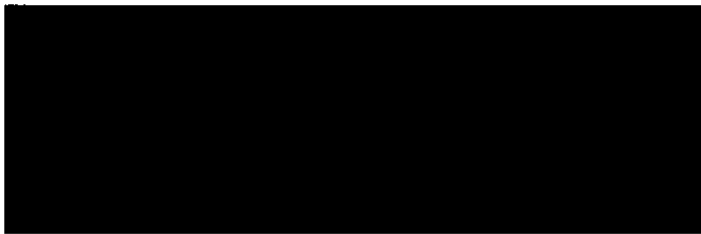
APPENDIX A

SENTINEL SARA AND COMPASS DART OPERATIONAL SUMMARY



FOREWORD

This appendix was instituted to provide the reader with a statistical account of Compass Dart and Sentinel Sara operational activities during the period 1 July 1967 through 31 December 1967. It also presents a resume of some of the applications of SIGINT and ARDF data, collected by the unit, in the planning and execution of many of the offensive operations executed during that period.



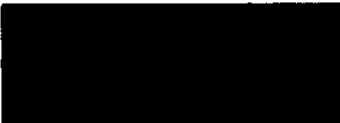
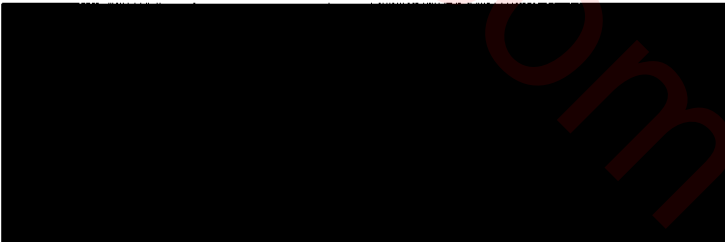


TABLE OF CONTENTS

	<u>Page</u>
1967 ARDF Summary (Chart)	1
Compass Dart Mission Summary, 6994th Scty Sqdn (Chart)	2
Compass Dart Mission Summary, Det 1, 6994th Scty Sqdn (Chart)	3
Compass Dart Mission Summary, Det 2, 6994th Scty Sqdn (Chart)	4
ARDF Summary, 6994th Security Squadron (Chart)	5
ARDF Summary, Det 1, 6994th Security Squadron (Chart)	6
ARDF Summary, Det 2, 6994th Security Squadron (Chart)	7
Sentinel Sara Manual Morse Intercept (Chart)	8
Sentinel Sara Message Intercept (Chart)	9
Period Conversion Chart	10
Close Tactical Support Activities	11



Period Conversion Chart

<u>Period</u>	<u>Inclusive Dates</u>
1	1 Jul - 7 Jul
2	8 Jul - 14 Jul
3	15 Jul - 21 Jul
4	22 Jul - 28 Jul
5	29 Jul - 4 Aug
6	5 Aug - 11 Aug
7	12 Aug - 18 Aug
8	19 Aug - 25 Aug
9	26 Aug - 1 Sep
10	2 Sep - 8 Sep
11	9 Sep - 15 Sep
12	16 Sep - 22 Sep
13	23 Sep - 29 Sep
14	30 Sep - 6 Oct
15	7 Oct - 13 Oct
16	14 Oct - 20 Oct
17	21 Oct - 27 Oct
18	28 Oct - 3 Nov
19	4 Nov - 10 Nov
20	11 Nov - 17 Nov
21	18 Nov - 24 Nov
22	25 Nov - 1 Dec
23	2 Dec - 8 Dec
24	9 Dec - 15 Dec
25	16 Dec - 22 Dec
26	23 Dec - 30 Dec



[REDACTED]

Close Tactical Support Activities

[REDACTED] ARDF results were passed from the aircraft to Direct Support Units collocated with combat elements; Army and Air Force ARDF results fused for reporting; and, the intelligence gleaned from ARDF associated intercept was reported in intelligence reports issued by US Army units. Consequently, it was impossible to isolate the specific contributions of Compass Dart and Sentinel Sara activities. Some consumers did, however, indicate constant awareness to the importance of the support they had received from these activities.

[REDACTED] General Hay, Commanding General, 1st Infantry Division in discussing ARDF support with the division G-2, Lt Col Benedict, was quoted as stating:

"I could not operate without COMINT support; it is the basis for my division's tactical operations".

He expressed complete satisfaction in the ARDF support allocated to his area and in discussing ARDF support in general mentioned his conviction that rocket attacks on Bien Hoa had been prevented more than once based on alerts provided through ARDF fix pattern analysis.

[REDACTED] Lt Gen Cushman, Commanding General, 3rd Marine Amphibious Force in a personal message to the 6994th Security Squadron on 15 December lauded the superb performance of the Compass Dart "Z" aircraft operating in the DMZ area.

[REDACTED] The following brief presents a resume of some of the offensive operations conducted during the period and the contributions of COMINT and ARDF support toward their success.

[REDACTED]

[REDACTED]

[REDACTED] Operation Shelby was a search and destroy operation against a suspected VC main force that was planned and executed solely on ARDF results. During the first six months of 1967, only six fixes were located in the area in which the operation was later conducted. Four fixes were noted during the first week of July and between 22 July and 3 August a burst of activity netted 22 unidentified ARDF fixes. An analysis of the activity indicated a concentration that posed a threat to Tan Son Nhut AF. Based on those indications, the seven day operation was conducted (17-24 Aug). Enemy losses were 31 confirmed and numerous structures, fortifications and munitions destroyed.

[REDACTED] Operation Coronado was a continuous operation that began 1 June 1967. A riverine operation on the Mekong, the operation did not rely on ARDF results for immediate intelligence. However, ARDF and COMINT was utilized extensively in conducting various phases of the operation. The actual area of the operation encompassed several tasking areas. A minimum of two flights daily were executed by the unit to areas that facilitated support of this operation. The initial phase of the operation was planned from COMINT and resulted in 256 confirmed enemy losses. During the second phase of the operation ARDF was utilized to guide the forces to the highly maneuverable enemy forces. Enemy losses inflicted totalled 202 confirmed during that phase. ARDF was not significantly utilized again until phases V and VI when 56 fixes were passed to the supported

[REDACTED]

[REDACTED]

elements. One-hundred-one enemy losses were inflicted on their forces and numerous facilities destroyed during those phases.

[REDACTED] The Monsoon Campaign 67, which consisted of three operations, Diamondhead, Kole Kole and Barking Sands, was conducted in an area immediately north of Saigon from 1 June through 7 December 1967. More than 3,000 rounds of artillery were expended, and 17 tactical air strikes, two B-52 strikes and two patrols executed against the more than 8,000 total ARDF fixes provided from combined ARDF resources. Also, ARDF associated intercept yielded a communications change on a PAVN complex and 56 new communications links.

[REDACTED] From 10 to 16 July daily ARDF missions were conducted by the unit in providing ARDF support for Operation Paddington, a search and destroy operation in a coastal province. Forty-six fixes were passed to the tactical commander during this period, six of which were considered to be highly significant and were reacted upon immediately. Ordnance expended on these locations included 166 rounds of 105MM and 24 rounds of 175MM. Also, two air strikes were executed against the targets with 26-500 pound bombs, 4-750 pound bombs and 2,400 rounds of 20MM. Ninety-two enemy losses were confirmed by BC and numerous facilities including 65 military structures destroyed.

[REDACTED] Operations Riley and Strike II were conducted from 22 August through 27 August against an unknown size force that had been located through COMINT and ARDF. The operation began with a B-52 raid which devastated an area leaving it strewn with body fragments.

[REDACTED]

[REDACTED]

During the operation the 6994th Security Squadron provided daily support and obtained fixes of 30 targets. Thirteen fixes were of interest to the command; two were of immediate tactical importance and were reacted upon by an airlift assault into the area. Heavy contact with the enemy resulted on both occasions. Forty-eight enemy were confirmed killed and an additional 20 estimated killed by the B-52 raid.

[REDACTED] Operation Shenandoah II was conducted during the period 29 September through 19 November. Commencing as a road clearing operation, the activity developed into an offensive against a VC regiment that ARDF detected moving into the area. The 6994th Security Squadron flew 42 missions and acquired 212 fixes in support of the operation. Twenty-six fixes were obtained on the VC regiment against which the forces were primarily targeted. Nine B-52 strikes and hundreds of tactical air strikes were targeted through ARDF results. The maneuvering of tactical forces relied heavily on ARDF. More than 1,330 enemy losses were confirmed.

[REDACTED] A highly successful operation for which the unit conducted daily support missions was Operation Akron III conducted immediately north of Saigon from 21 September through 23 October. One-hundred sixty five (165) fixes were passed to the supported forces, 30 of which were highly significant and received immediate action. An extremely large base camp and numerous munitions and supplies were destroyed during the activity.

[REDACTED] Operation Santa Fe was a coordinated multi-unit attack

[REDACTED]

[REDACTED]

against a VC division headquarters conducted from 3 November through 2 December 67. The unit accomplished 17 missions, acquiring 39 fixes, in support of the activity. The Commander, 11th Armored Cavalry Regiment stated of the ARDF support:

"ARDF continued to be the single most important product provided to the tactical commander".

EC47.com

[REDACTED]

APPENDIX B  
HISTORY OF DETACHMENT 1, 6994th SECURITY SQUADRON

HISTORY OF DETACHMENT 1, 6994th SECURITY SQUADRON

1 July 1967 - 31 December 1967

RCS: AU-D5 (USS-1)

This document contains information affecting the national defense of the United States within the meaning of the Espionage Laws (Title 18, USC, Sections 793 and 794) the transmission or revelation of which, in any manner, to an unauthorized person, is prohibited by law.

Prepared by:

SMS JAMES A. ALI  
NCOIC Operations

MSgt RICHARD P. CHENEY  
NCOIC Operations/Exploitation

TSgt JEREMIAH D. JOYCE  
NCOIC Airborne Exploitation

Sgt JOHN L. KIMMICH  
Mission Analyst

Approved:

WILLIAM P. DICKEY, CAPT, USAF  
Operations Officer

## FOREWORD

This historial study is a record of Detachment 1, 6994th Security Squadron (Operations), covering the period 1 July - 31 December 1967.

All references to date are within this period unless otherwise indicated.

The majority of the information contained herein was taken from files and records maintained at the unit. Additional information was gained from personal interviews with members assigned to the unit.

All suggestions and comments should be directed to the Operations Officer, who was responsible for preparing this report.

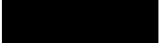




Chapter I

MISSION AND ORGANIZATION

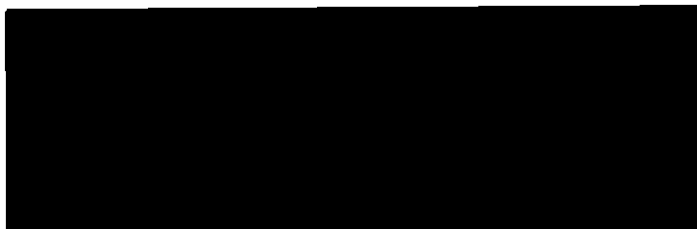
Organization

 Detachment 1, 6994th Security Squadron was located at Nha Trang AF, Republic of Vietnam. The Operations Section continued to be located at Camp McDermott in the 313th Radio Research Battalion compound area. The flying crews continued to operate from Nha Trang AF proper, in conjunction with the 361st Tactical Electronic Warfare Squadron.

(UNCLAS) The detachment maintained and improved a close working relationship with personnel of IFFV and the 313th RRB. This greatly enhanced the operating capabilities of the detachment by providing a ready channel to exchange ideas which had affected or would effect the mission accomplishment of the unit.


Organizational Changes


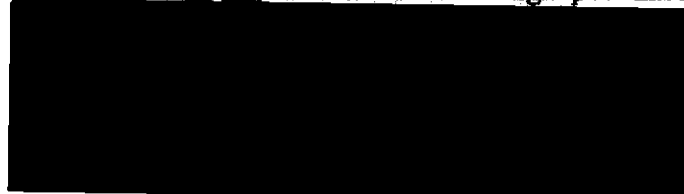
(UNCLAS) During the period 5 July through 30 September 1967, the detachment experienced a serious shortage and turn-over of personnel in AFSC's 292X1 and 202X0. Assistance was requested and received from Detachment 2, 6994th Security Squadron in the form of four (4) combat ready operators in a TDY status to this unit. During the period 25 August to 28 September 1967 the unit reached a low of 29 combat ready operators. The personnel flew a minimum of 100 hours and in some cases medical waivers were obtained to exceed monthly flying hour restrictions.



  
OJT

(UNCLAS) In September the unit introduced a formal OJT program for the 20270 and 29271 skill levels. The formalized program was established to provide uniform progression and training continuity during periods of personnel rotation. The training consisted of classroom instruction and a consolidated study aid for off-duty reference. Prior to the implementation of this program, there was very little technical information available for OJT and that available was outdated. Since the establishment of a formal OJT program, the necessary support documents had been acquired and all available information had been updated. Personnel who were eligible for OJT have been entered into training and one seven level trainee has been tested and upgraded.

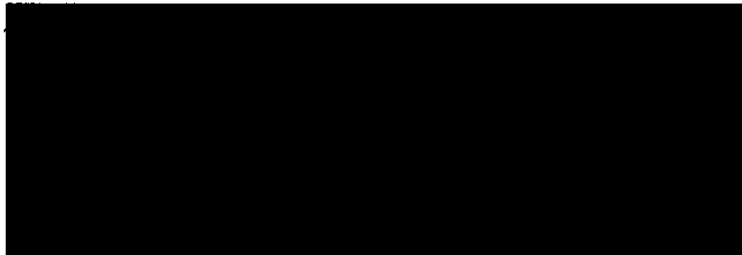
 On 15 December 1967 a major reorganization of the operations section was initiated, (see Chart 1), which improved the mission: (a) the area of awards and decorations, on-the-job training and operations administration were placed directly under the supervision of the NCOIC of Operations; (b) airborne operations, standardization evaluation flight examination (SEFE) and related ground duties were placed under the direct supervision of the NCOIC of Airborne Operations; (c) both NCOIC's were directly responsible to the Operations Officer.

 On 15 December 1967 a "one-flight" concept was implemented. That enabled the unit to assign permanent crews to 



specific areas and thereby extensively train those crews in the operating characteristics of the targets, locations and terrain.

ec47.com








## Chapter II

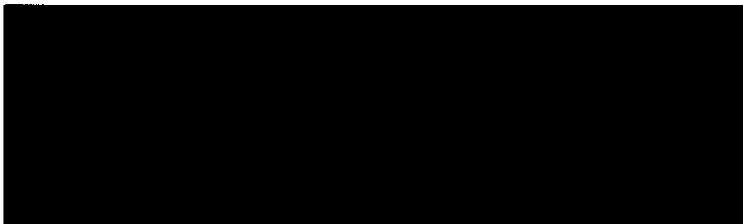
### TASKING AND COLLECTION

#### Tasking

 With the implementation of ARDF Coordination Center (ACC) Working Aid 01-67 on 1 September 1967 and its subsequent changes, a more clear and concise tasking of the unit's resources was experienced. Time delays experienced in the receiving of weekly and specialized taskings were reduced and specific channels for seeking information or clarification of doubtful areas as established.

 During the ACC ARDF conference on 23 October 1967, personnel from Detachment 1, 6994th Security Squadron were instrumental in bringing to the attention of the conferees necessary changes which were subsequently established as follows: (a) that ARDF technical support responsibilities accomplished strictly by USM-604, the CMA, be decentralized and delegated to USM-631 and USM-634 as well. These organizations would issue the necessary technical support to the aviation units on those entities that paralleled their intercept assignment. As a result, USM-604 would not be over-burdened with the complete task and more important, aviation units would receive more accurate and complete support; (b) that air-to-ground communications procedures be established for ARDF aircraft to report "visual" sightings of enemy movement to ground based DSU's.

 In addition to the suggested changes mentioned above, two were submitted and accepted as follows: (a) that the three digit



[REDACTED]

ARDF mission number and the two digit MACV area number be combined into one three digit number. That was approved and since the first digit has represented the aviation unit and the last two digits denoted the MACV area; (b) since the PAVN 3rd Division elements were dispersed along the southern portion of MACV area 13, this area should be realigned and combined in part with area 15 to gain adequate coverage of targets in area 13. As a result, the fixing of priority targets desired by the Commanding General, 1st Cavalry Division (Airmobile) was accomplished more satisfactorily.

#### SIGINT Collection Policies

[REDACTED] To support I Field Force, Vietnam (IFFV) and to educate the U.S. Army on the unit's ARDF capabilities, a special report, the Daily Mission Summary, was created. This report provided an input for the IFFV staff briefing. That report not only accounted for positive mission results such as the number of targets worked, number of targets fixed, it also explained why in some instances that it was impossible to fix a target (poor weather, artillery fire preventing the aircraft's entry into the target area, etc). Also included were problems encountered with U.S. Army DSU's which degraded the overall mission and in some instances prevented the passing of fixes in a timely manner to tactical commanders. Previously, in the eyes of IFFV, all shortcomings of the mission were charged to the U.S. Air Force. Therefore, all negative DSU contacts were included in the Daily Mission Summary.

[REDACTED]

██████████ Although this approach was taken to make known the fact that the unit had experienced difficulties with U.S. Army units, steps were taken simultaneously to better the situation. The unit discovered that the DSU's either did not receive or follow the ACC tasking vis-a-vis the times the aircraft were operating in a particular area. Accepting this fact, during October, the unit diarized the ACC tasking and began issuing an electrical message to each DSU in the II Corps area. This message advised the DSU's of the times the aircraft would be active in certain areas and the RAD's against which they were tasked. That practice decreased DSU problems considerably, since ground operators commenced manning the radios during those periods that the aircraft were scheduled to be active in their area. Ground-to-air tip-offs on priority targets also increased in number as did the unit target fix rate. An indication of the merit of this direct communication to DSU's was that records revealed ground-to-air tip-offs averaged 35 per month prior to September; and, DSU negative contacts reached a high of 59 in September. However, during October, tip-offs started averaging 60 per month and during December only eight negative contacts with the DSU were recorded. Not to be overlooked was the tremendous assistance rendered by the U.S. Army organizations in the II Corps area in exploring and improving the DSU communications problem. In October the 313th RRB accomplished a complete evaluation of their subordinate DSU operations. They directed that DSU's install more effective antennas to improve communications with ARDF aircraft, compelled subordinates to adhere



[REDACTED]

strictly to the procedures established by the ACC and enforced a rigid manning of communications equipment with trained operators during fringed mission times. Moreover, 403rd Special Operations Detachment of the 5th Special Forces Group instructed their subordinate field units to undertake the same measures.

[REDACTED] During the month of July the NVA/VC elements in the II Corps area were still utilizing the signal operating instructions (SOI) that had been first noted in January 1966. Almost total exploitation of that system had been accomplished which enabled complete identification of most targets fixed by mission aircraft. A minor change to that SOI was implemented in August but did not adversely affect identification of targets. Other changes in NVA/VC communications began to appear in September and continued until December. These changes impeded the identification of targets. To illustrate, identification during September reached 50% whereas identification from October through December averaged 34% (full callsigns 69.1%).

[REDACTED] Some entity communications changes took place unknown to them were not on automatic distribution for technical messages issued by U.S. Army COMINT agencies. A lack of identification aids and documents also hindered the units efforts. In September and October analytical personnel of the unit were sent to various Army COMINT units to obtain documents and establish coordination channels with their Army counterparts. That proved fruitful. Not only were pertinent documents procured or placed on order, but personal contacts were established

[REDACTED]

[REDACTED]

that obtained much needed cooperation. As a result of those TDY's, unit analysts progressed to a point that they could predict or locally generate ARDF technical support data for mission crews. With that, the problem previously encountered with the non-receipt of ARDF tech support was alleviated. Crews were assured of having the necessary technical support for planned missions. The unit also informally acquired/developed better identification aids such as a numerical RAD listing containing everything known about a particular RAD (skeds, BST's, colocations, etc); an accurate, up-to-date, complete target fix file of all targets located in their areas of responsibility, and an alphabetical listing of all fixed or semi-fixed callsigns heard.

Special Collection Projects

[REDACTED] Since early July, the unit's ARDF aircraft had sporadically fixed several targets while entering and leaving the Nha Trang area. Those targets were carried as unidentified links and were not cased or assigned RAD's by USM-604 (CMA) from July until October in spite of the numerous fixes and the extensive intercept. On 21 October 1967, the analytical section compiled a summary of all targets in the Nha Trang area. This included all callsigns (repeating), frequencies, fixes, etc., and was sent to USM-604 for their evaluation and action. Ironically, Nha Trang AF was hit by mortars on 22 October 1967, one day after the summary was forwarded. After that, the interest in "Nha Trang Charlies" developed among Army personnel in the area.

[REDACTED]



[REDACTED]

[REDACTED] Since hearability of these targets was best from the unit's location, Det 1, 6994th allowed the 313th RRB to install an intercept position in the operations quonset. However, at that time a critical shortage of Army intercept operators precluded manning of the position by the Army. Det 1, 6994th Operations personnel therefore volunteered their services and manned the position on their off-duty time for the purpose of: (a) tipping off ARDF aircraft entering or leaving Nha Trang each time the local targets became active, (b) collecting sufficient intercept to permit isolation and identification of the targets. The position also served as a "live" training position for our operators.

[REDACTED] In a short time these targets were assigned case notations: VCMB P8118 and VCMB P8121. On 4 December 1967, the 403rd Special Operations Det of the 5th Special Forces assumed the responsibility of manning the intercept position and a DSU for the Nha Trang area was also thereby established.

#### Mission Accomplishments

(UNCLAS) On 9 November 1967, ten aircraft with crews were diverted from landing at Nha Trang to Tan Son Nhut because of a typhoon with winds predicted up to 85 knots. An additional aircraft was dispatched with its normal crew compliment plus two analysts and a maintenance man to assist in reporting and possible communications problems; all together there were 26 personnel sent/ diverted to Saigon.

[REDACTED]

[REDACTED]

(UNCLAS) All recovery reports were dispatched within the required time period. The DOMR was completed and dispatched by Det 1, 6994th personnel at Nha Trang from information received from the remoted personnel at Tan Son Nhut.

[REDACTED] Det 1 received a message on 16 November 1967 from USN-414J, serving the 3rd Marine Division which is quoted here in part:

"As you may know, the 3rd Marine Division has been awarded the Presidential Unit Citation (PUC) for the period 8 March 1965 through 15 September 1967. The list of supporting units is now being finalized. Consider that ARDF support rendered by you has contributed significantly to success of 3rd Marine Division operations and I intend to request that your Dets be included among supporting units, thus entitling you and your men to wear the PUC ribbon."

(UNCLAS) Det 1 received a letter of appreciation, dated 14 December 1967 from the Commander, 403rd Special Operations Detachment of 5th Special Forces, which reads in part:

"I would like to take this opportunity to express my sincere appreciation for the timely and outstanding support rendered by Det 1, 6994th Security Squadron to the 403rd Special Operations Detachment (Airborne), 5th Special Forces Group (Airborne)."

[REDACTED] Realizing the need for an informal news media to get the news to the unit personnel regarding praise, criticism, individual instances of merit, and humor, the "Zip Zapper" was created in October 1967. The publication remained in the secure area of the Operations compound. Through this medium, feedback was generated to expose the tangible contributions made by individuals

[REDACTED]

[REDACTED]

to the conflict in Vietnam. Recognition was given to those who acquired fixes on targets which were later acted upon by ground forces. This also contained all collected material concerning post-action results on fixes obtained by the crews, air strikes, troop insertion, artillery barrages, etc. It was determined that the publication was effective in keeping intercept personnel informed of target characteristics and new procedures. Also, the commander used it to express his policies in a personal column for each issue.

[REDACTED] A mutual TDY program was established to familiarize the DSUs with the capabilities and limitations of the ARDF system and the need for the DSU to know the area of orbit for the aircraft being contacted. This also served to acquaint unit personnel with the limitations and capabilities of the DSU. Since this program has been initiated Det 1 has experienced greater success in obtaining meaningful tip-offs and better cooperation with the DSUs when the relaying of traffic was required.

[REDACTED] During this period, a total of 10,684 hours were flown over target areas by Det 1's Compass Dart aircraft. Collectively, these missions worked 11,238 targets. Of these, 7,873 were fixed and 1,090 were identified as priority targets. A number of missions flown by Det 1 were in direct support of Combat Tactical Support (CTS) operations. CTS operations supported by the unit were:

[REDACTED] OPERATION BENTON - 13 - 28 August 1967: A total of nine missions or 36 air hours were flown in support of this operation.

[REDACTED]

[REDACTED]

The operation was directed against the 21st NVA Regiment, 2nd NVA Division operating in the Central Quang Nam Province. The supported command was the 1st Brigade of the 1st Air Cavalry (Airmobile). The results of the operation were not compiled by the end of the reporting period.

[REDACTED] OPERATION GREELY - 16 June - 11 Oct 1967: A total of 216 missions or 864 air hours were flown in direct support of this operation, which was directed against the 24th PAVN Independent Regiment. The overall results of the operation were: 140 NVA KIA (body count), 427 possibly KIA, and nine captured. The after-action report issued by the 173rd Airborne Brigade stated:

"Airborne Radio Direction Finding support continued to be the single most important COMINT product provided to the Tactical Commander. During Operation GREELY, a total of 135 fixes were of immediate interest to the supported command and passed to the Brigade S-2."

[REDACTED] OPERATION HOOD RIVER - 2-13 Aug 1967: A total of 38 missions or 152 air hours were flown in direct support. This operation was a follow-on operation to MALHEUR I and II, targeted against the 2nd and 3rd NVA Divisions in Quang Ngai Province. As of 13 August, records revealed that approximately 74 VC were killed in action, 5 VC were captured, and a considerable number of weapons and food supplies were captured.

[REDACTED] OPERATION MALHEUR I AND II - 1 May - 2 Aug 1967: A total of 36 missions or 152 air hours were flown in direct support of this operation, which was directed against the 2nd and 3rd Divisions in Quang Ngai Province. Results of this operation were [REDACTED]

[REDACTED]

859 enemy killed in action (body count). Indications of satisfactory ARDF support rendered to field units were received on 7 Nov 1967 from units directly concerned. The 3rd Brigade, 1st Air Cavalry Division, 1st Brigade, 101st Airborne Division, and the 5th Marine Regiment jointly stated that they "were well supported" by both Nha Trang and Pleiku based ARDF aircraft "during heavy fighting while engaged in combat with the 2nd NVA Division."

[REDACTED] OPERATION WALLOWA/WHEELER - 8 Oct - 31 Dec 1967 and continuing: A total of 44 missions or 176 air hours were flown in direct support of this operation, which was directed against the 2nd NVA Division, 1st VC Regiment, 3rd NVA Regiment, 2nd NVA Regiment, and local force battalions and provincial unit controls. Results of this operation were not compiled at the end of the period.

[REDACTED] OPERATION BOLLING - 19 Sep and continuing: A total of 17 missions or 68 air hours were flown in direct support of this operation. As of 31 Dec 1967, operation results revealed that 237 enemy were killed in action, 30 were taken prisoner, and 60 weapons were captured.

[REDACTED] OPERATION BYRD - 25 Aug 1967 and continuing: A total of 10 missions or 40 air hours were flown in direct support of this operation. As of 31 December 1967, operations results revealed that 849 enemy were killed in action, 1,163 taken prisoner, and 308 weapons captured.

[REDACTED]

[REDACTED]

OPERATION FRANCIS MARION - 6 Apr 1967 - 12 October

1967: A total of 221 missions or 884 air hours were flown in direct support of this operation. At the close of the operation 1,203 enemy were killed in action, 122 were taken prisoner, and 363 weapons were captured.

[REDACTED] OPERATION PERSHING - 12 Feb 1967 and continuing:

A total of 212 missions or 848 air hours were flown in direct support of this operation. As of 31 Dec 1967, operations results revealed that 5,639 enemy were killed in action, 2,366 were taken prisoner, and 1,501 weapons were captured.

[REDACTED] OPERATION MACARTHUR - 6 April 1967 and continuing:

A total of 283 missions or 1,132 air hours had been flown in direct support of this operation. As of 31 Dec 1967, operation results revealed that 1,818 enemy were killed in action, 76 were taken prisoner, and 488 weapons were captured.

[REDACTED] Probably the most significant support given by Det 1 to any particular operation was during the Dak To confrontation in Kontum Province in November 1967. The following is an account of Det 1's support and consists of three parts: (1) the events leading up to the Dak To battle; (2) the battle for Dak To; and (3) the allied pursuit of enemy forces after the battle.

[REDACTED] Events preceding the battle of Dak To. The NVA B-3 Front and its forward elements along with the NVA 1st Division and its subordinate regiments, the NVA 66th Regiment, and the NVA 32nd Regiment, constituted the main attacking forces at Dak To, although they were reinforced by the NVA 174th Independent Regiment

[REDACTED]

[REDACTED]

and the NVA 24th Independent Regiment. The NVA B-3 Front and the NVA 1st Division had been operating in an area south of Dak To and had been active against allied installations in Pleiku and Darlac Provinces. The NVA 174th Indpt Regt had been located in Quang Tri and Thua Thien Provinces but was reportedly enroute south to join the NVA 1st Division in order to replace the 88th NVA Regt which had relocated southward to join the VC 5th Light Infantry Division. The NVA 24th Indpt Regt had previously been located along with the NVA 2nd Division in MACV areas 12 and 13 but had moved southwesterly to join in the offensive against Dak To to block allied reinforcements to Dak To from Kontum City. On 14 October, the Hqs of the NVA 24th Indpt Regt was fixed by Det 1 at ZB 141 470 (14-53N 10-55E), approximately 25 kilometers east-northeast of Dak Seang. This was a westerly move and was indicative of an offensive somewhere in Kontum Province. The Hqs of the NVA 32nd Regiment was fixed by Det 1 on 16 October at YA 765 112 (13-40N 107-35E) 18 KMS southeast of its last known location. On this day, communications between the Hqs NVA 32nd Regt and Hqs NVA 1st Division were observed for the first time since 10 October. Meanwhile, Hqs NVA 1st Division had moved 68 KM north-northeast of its last location to YB 605 247 (14-14N 107-25E) where it was fixed by Det 1's mission 404. A military intelligence entity of the NVA 1st Division was fixed by Det 1 at YB 649 063 (14-31N 107-27E) on 16 October. (Whenever the

[REDACTED]

[REDACTED]

VC/NVA activate their military intelligence nets it is usually indicative of an alert posture. Therefore, this fix then indicated that an enemy offensive in the Dak To area was in the offing). On 30 Nov, the NVA B-3 Front Forward Element Two was located by Det 1 at YB 969 183 (15-59N 107-44E), having moved about 80 KM north-northeast from its last know location. This new location was approximately 5 KM south-southwest of Dak To. The Hqs of the NVA 32 Regt was again fixed by Det 1 on 25 October at YB 799 109 (14-34N 107-35E), approximately 24 KM west-southwest of Dak To. This position was about 100 KM north of Det 1's normal area of operation. Two more military intelligence units were fixed by Det 1 during this time. One, the Military Intelligence Section of Hqs 1st Division, was fixed at YB 800-109 (14-35N 107-36E) on 23 October and the other, a military Intelligence Element subordinate to the Military Intelligence Section of Hqs NVA 1st Division, was fixed on 25 October at the same coordinates YB 800 109.

[REDACTED] On 27 October, Det 1 fixed another terminal in the Dak To area. An unidentified element of the NVA B-3 front was fixed at YB 513 138 (14-30N 107-20E), 48 KM west of Dak To. By 27 October, all known subordinates of the NVA 1st Division were concentrated in the tri-border area southwest of Dak To, the 24th NVA indpt Regt was located northeast and the B-3 Front and its subordinates were located to the west and southwest. It should be

[REDACTED]



[REDACTED]

noted that based solely on ARDF/COMINT, the 173rd ABN BDE, 4th INF DIV were airlifted into Dak To in anticipation of the impending attack.

[REDACTED] The Battle of Dak To. Early in November, the Military Intelligence Elements of the NVA 1st Division began more precise reporting of allied activities in the Dak To area. From the 1st to the 5th of November, it became obvious that forces were fully prepared to initiate tactical operations against Dak To. Det 1, flying two missions against the Dak To area on 4 November noted almost a complete standdown of enemy communications, a warning that the enemy offensive was about to commence. On 5 November fighting erupted. From the onset of the hostilities, Det 1 flew two missions daily against the enemy forces surrounding Dak To and continued to do so until the enemy forces began to break away on 17 November. On 4 November, a target identified as the NVA 174th Indpt Regt was noted in communication with the Hqs of the NVA 1st Division. By 11 November, the 174th NVA Indpt Regt had relocated to a position approximately 24 KM west-southwest of Dak To. On 16 November, Det 1 fixed the 174th NVA Indpt Regt at YB 778 128 (14-34N 107-33E). On 6 November a Military Intelligence Element of the NVA 1st Division was fixed by Det 1 at YB 910 148 (14-36N 107-42E), approximately 3 KM from the Hqs of the NVA 32nd Regt and 17 KM southwest of Dak To. Elements of the 173 ABN BDE and the 1st BDE/4th INF DIV were continually deployed on the basis of these and later ARDF fixes.

[REDACTED]

[REDACTED]

On 6 November, the Hqs of the NVA 1st Division was fixed by Det 1 at YB 763 160 (14-37N 107-34E) which is approximately 23 KM west-southwest of Dak To and in the general vicinity of its last fix. On 8 November the Hqs of the NVA 24th Indpt Regt was fixed by Det 1 at ZB 133 298 (14-43N 106-59E) which relocated that unit to within 15 KM northeast of Dak To. As mentioned earlier, all of these fixes were acted upon immediately by the BDE commanders at Dak To and resulted in allied troop insertion, artillery barrage, air strikes, etc. Shortly thereafter, the enemy began to break contact and seek Cambodian sanctuary.

[REDACTED] Allied Pursuit of Enemy Forces After the Battle.

The following is quoted from a message from the commander of the 374th RR which was transmitted to the commander of the 313th RR BN on 12 January 1968:

"The supported CMDS were insatiable in their appetites for ARDF fixes in particular. Having decided that the enemy was withdrawing, they deployed the BNS in the entry routes which ARDF had indicated. Numerous visual RECON and airborne people detector missions were flown in confirmation and refinement of ARDF location, culminating in ARC Lights, A/S, and troop insertions. It is largely due to repeated ARDF emphasis on the 24th PAVN Regt (advancing from the north) that the ARVN elements was placed in its interception position; the SPTD CMDS had become dangerously preoccupied with their contacts to the south."

[REDACTED] The forward elements of the NVA B-3 Front, the Hqs of the NVA 1st Division, the Hqs of the NVA 32nd Regt, and an unidentified artillery Regt, the 174th NVA Indpt Regt, and the 24th NVA Indpt Regt were fixed repeatedly by Det 1 in the following weeks

[REDACTED]

[REDACTED]

and elements of U. S. and ARVN forces were deployed constantly to harrass these positions and also to interdict the escape routes. The ultimate satisfaction was realized by Detachment 1 when a representative from the Army visited Det 1 and said, "The friendly casualties were high at Dak To but would have been ten times higher if it were not for ARDF."

[REDACTED]

**APPENDIX C**

**HISTORY**

**DETACHMENT 2, 6994TH SECURITY SQUADRON**

HISTORY OF DETACHMENT 2, 6994TH SECURITY SQUADRON

1 July 1967 - 31 December 1967

RCS: AU-D5 (USS-1)

This document contains information affecting the national defense of the United States within the meaning of the Espionage Laws (Title 18, USC, Sections 793 and 794) the transmission or revelation of which, in any manner, to an unauthorized person, is prohibited by law.

Prepared by:

SMSgt ARCHIE R. BARLOW JR.  
Unit Historian

Approved:

GARY F. OBECK, CAPT, USAF  
Commander

## FOREWORD

This historical summary concerns the operations of Detachment 2, 6994th Security Squadron and has been written to include unit activities from 1 July - 31 December 1967.

All information was taken from files, PADS, and correspondence maintained within the unit.

All suggestions, comments, and questions should be directed to the Operations Officer, who was responsible for preparing this report.

[REDACTED]

CHAPTER I

MISSION AND ORGANIZATION

MISSION

[REDACTED] Detachment 2, 6994th Security Squadron, was activated at Pleiku AB, Vietnam, on 1 September 1966. The detachment was activated for the purpose of conducting Airborne Radio Direction Finding (ARDF) operations against low-powered enemy ground tactical transmitters in South Vietnam, Laos, and adjacent waters.

ORGANIZATION

[REDACTED] The detachment was directly subordinate to the 6994th Security Squadron located at Tan Son Nhut AB, Vietnam. The detachment provided the rear-end crews for operational missions; Detachment 1, 361st Reconnaissance Squadron, provided the front-end crews.

Organizational Changes

(UNCLAS) No major organizational changes occurred during the reporting period; however, several minor organizational changes should be noted.

[REDACTED] During the September-October turnover in personnel, the "integrated crew" concept disappeared due to an acute manpower shortage which required more attention to the time the crews were to fly rather than which personnel would be flying.

(UNCLAS) On 1 November, the Flight Management Section was formed. This section included a scheduling clerk, an awards and

[REDACTED]

[REDACTED]

decorations (A&D) clerk, and a flight management supervisor/ coordinator. Aside from the A&D task and the maintenance of individual flight records, this section was formed to be responsible for: (1) scheduling of unit crew members; (2) insuring that the weekly/daily flying schedules/tasking of the 362d TEWS and Det 2, 6994th Scty Sq were compatible; (3) insuring full coordination of all tasking/scheduling changes. Originally formed as an interim measure, the section was officially designated on 1 December.

[REDACTED] On 15 November, three operational flights were designated since there was a sufficient number of personnel available at the time.

[REDACTED] On 1 December, the analyst section was adequately manned to define and designate a separate airborne analysis section. In addition to assisting normal ground analysis functions, these A202s were charged with becoming individually proficient in specific target areas of coverage for development.

[REDACTED] On 20 November, the unit sent its first analyst on extended TDY to its data base at USM-808 (8th Radio Relay Field Station, Hue - Phu Bai, RVN). The program was initiated and developed to give Det 2 a liaison capability and to assist USM-808 in supporting its ARDF effort.

[REDACTED]



[REDACTED]

CHAPTER II

TASKING AND COLLECTION

TASKING

[REDACTED] During the period, the average monthly tasking was for 307 missions. These missions were fraged into all of I Corps, portions of the Tiger Hound and Steel Tiger areas in Laos, and over the coastal waters of North Vietnam south of Dang Hoi. While two-thirds of these missions were for continuity and development, 630 missions were flown in direct combat tactical support of 29 different ground operations.

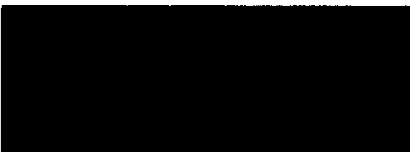
COLLECTION

[REDACTED] From July through December, Det 2 flew 1841 missions and got 9,197 fixes from 12,930 targets worked.

[REDACTED] The almost total turnover from experienced to inexperienced personnel was a significant factor in the fix/mission rate decline from 6.4 in July to 4.2 in October and November. Recovery began in December with a slight increase to 4.4.

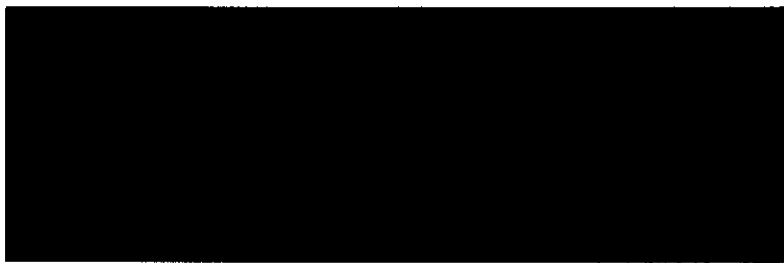
[REDACTED] During this period the unit, while tasked with the ARDF mission, was given and employed the additional capability of collecting selected communications on HF Manual Morse and VHF voice. The additional HF collection capability was gained on 25 and 27 Nov 67 when the Z1 position of the two CDZ aircraft were configured with G 175 receivers. The specific mission of the additional HF Manual Morse capability was to copy full certain selected enemy transmissions and message types. The specific mission of the VHF voice collection capability was to search out

[REDACTED]



enemy reaction to the electronic sensing devices placed along the IMZ (project Muscle Shoals).

ec47.com



APPENDIX D

HISTORY

AIRBORNE RADIO DIRECTION FINDING COORDINATION CENTER

HISTORY  
OF THE  
AIRBORNE RADIO DIRECTION FINDING  
COORDINATION CENTER  
(ACC)

1 July - 31 December 1967

This document contains information affecting the national defense of the United States within the meaning of the Espionage Laws (Title 18, USC, Sections 793 and 794) the transmission or revelation of which, in any manner, to an unauthorized person, is prohibited by law.

Prepared by  
MSgt Tony Z. Odom  
Operational Historian, 6994th Security Squadron  
and  
TSgt Roland J. Kearley  
Historian, ACC

Approved:

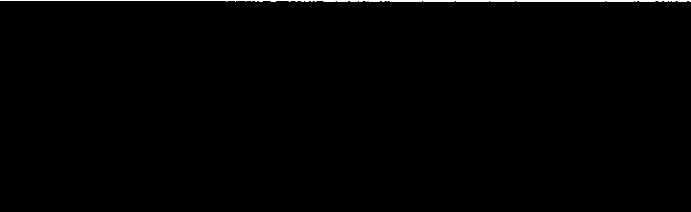
ANTHONY J. SZUREK JR, MAJOR, USAF  
OIC ACC

PROJECT CORONA HARVEST  
DO NOT DESTROY

No. 4434585

  
CHRONOLOGY

<u>Date</u>	<u>Event</u>
July 67	ACC ARDF Directive 01-67 issued in draft.
August 67	Air/Ground reporting requirements for ARDF fixes of MACV Priority 2 and 3 targets revised.
August 67	Operational testing of KY-8 communications system commenced.
August 67	Hestia Pad requirements reduced from 300 to 75 editions monthly.
1 Sept 67	ARDF Directive 01-67 published.
16 Sep 67	TADPS installed at ACC.
19 Sep 67	ARDF Recovery Reports revised.
23 Oct 67	ARDF conference conducted at the ACC.
27 Oct 67	ACC relocated to Whitebirch.
2 Nov 67	TADPS entered developmental stage.





## CHAPTER I

### MISSION AND ORGANIZATION

#### MISSION

█ The mission at the ARDF Coordination Center (ACC) is to maintain close liaison between the 509th RRG and the 6994th Scty Sq in the planning and employment of ARDF resources in support of COMUSMACV approved tasking. The essential ACC objective is to provide optimum ARDF coverage from available sorties.

#### ORGANIZATION

█ The ACC is composed of USAF personnel from the 6994th Security Squadron and U. S. Army personnel from the 509th Radio Research Group. The Army personnel authorizations (51) more than tripled the Air Force (15). The actual personnel assigned from the two services were 35 and 13, respectively. The Command responsibilities are shared jointly by an Army OIC and an Air Force OIC (Chart 1).

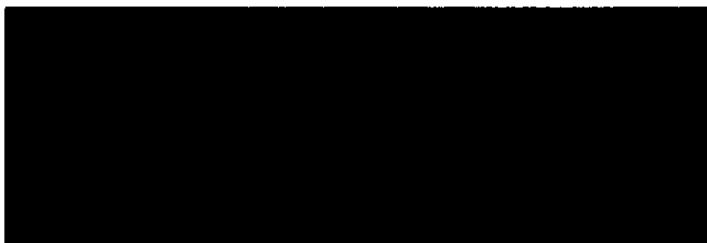
█ Prior to 27 Oct, the ACC was collocated with the 509th RRG at Tan Son Nhut AB, Vietnam. On 27 October, it was relocated to Whitebitch Station, within the Vietnamese Joint General Staff Compound adjacent to Tan Son Nhut AB. The ACC remained collocated with the 509th RRG which had moved to Whitebitch on 13 October. The movement of the ACC was delayed due to problems encountered in relocating the communications circuits.

#### INTERNAL ORGANIZATIONAL CHANGES

█ Two major internal organizational changes occurred.



A Special Projects section was formulated to manage the ARDF Communications Systems/Facilities and to handle those tasks that did not fall within the more specialized areas. Also, a section was developed to accomplish the tasks associated with the Computer System that was introduced into the ARDF program.



[REDACTED]

CHAPTER II

TASKING

[REDACTED] The ACC played an active role in ARDF tasking through receiving the ARDF requirements levied by MACV-J2 and developing it into specific tasking for the Aviation Units. They accomplished the allocation of sorties and the establishment of the on-target times to fulfill the MACV requirements. Their most significant role, and primary mission, was the coordination with all activities and agencies in the establishing of procedures for tech support, communications and tasking to support ARDF operations (Chart 2). All items falling within these areas will be treated as tasking.

[REDACTED] During mid-July, the ACC published an advanced draft of ARDF Directive 01-67. This comprehensive document encompassed all aspects of the ARDF program and standardized procedures for each function. The publication of a draft copy was to insure applicability and accuracy of its contents by allowing agencies affected to peruse its contents prior to formal implementation. On 1 Sep, the document (ACC Wording Aid 01-67) was published and distributed. Changes were issued electrically and followed by hard copy publications.

[REDACTED] During August, the ACC and representatives of the 6994th Security Squadron formulated procedures for accomplishing an operational test of the KY-8 system. The ACC provided the 6994th Scty Sq with a list of Direct Support units possessing the equipment, updated as needed. Also, the ACC, as a result of this meeting added KY-8

[REDACTED]



[REDACTED]

Communications Procedures to the draft of Working Aid 01-67. Although the KY-8 testing was rather informal, the results did establish that the system was practical and would be reliable once the initial difficulties were eliminated. In view of this anticipated application of the KY-8/28, Hestia Pad production was reduced to 75 editions monthly vice 300 editions, effective 31 August.

[REDACTED] On 23 October, the ACC conducted a conference comprised of delegates from all major units involved in ARDF operations. Several problem areas were resolved and some refinements made in existing procedures. Two different formats for the issuance of tech data to support ARDF operations were established; one for I and II CTZ and another for III and IV CTZ. Daily electrical update was instituted for III and IV CTZ support. It was also determined to be advantageous, in some cases, to decentralize tech support responsibility from GMA's to DSU's. The GMA's were requested to advise the ACC on specific tech support responsibilities that were assigned to DUS's. This delineation eliminated the need for designating units tasked with tech support in the tasking message. A daily changing trinome system was also adopted for inclusion in the tech data. This trinome would be used for ground/air, air/air tip-offs on priority 1A and 1 targets.

[REDACTED] During October, the NCOIC of the Mission Control Section established procedures for informal periodic visits with MACV-J2. Designed to eliminate irregularities in the MACV tasking, [REDACTED]

[REDACTED]

these visits were highly successful. Some problems resolved were: inconsistencies in Priority designations for one RAD appearing in two or more areas; excessive tasking by True Unit Designators of units that do not have RADs assigned; and, unrealistic tasking of RADs in improbably areas.

[REDACTED] During November, tasking for both Army and Air Force ARDF units at Saigon was consolidated and issued in one message. This procedure was extended to Nha Trang and later to Pleiku. Considerable savings in communications time and man power resulted from this action.

[REDACTED] During October, DIRNSA requested that the ACC add USM-7 in Thailand to the ARDF tasking distribution. The ACC complied by providing only the information for those areas within the unit's realm of responsibility (MACV areas 1, 2, 3, 4, 6 and 8). USM-7 planned to utilize this data in conjunction with the ARDF recovery reports in the fusion of ARDF results into their own SIGINT source.

[REDACTED]

[REDACTED]

CHAPTER III

PROCESSING AND REPORTING

PROCESSING

TADPS

[REDACTED] On 16 September a computer system was installed at the ACC. Produced by Litton Industries, the system consisted of a Litton 304 computer, a Litton Datalog MC8800 high speed printer and a standard AN/UGC-13 teletype. The system was designated Tactical Automatic Data Processing System and was designed to receive data input from ARDF, MRDF and ground intercept sources. The system objectives were to (a) aid in ARDF target identification and (b) compute emitter locations. It would provide a rapid response to analyst interrogation. The system possessed an on-line input/output capability and could provide direct support to the three data bases and the Army and Air Force Aviation Units. Indirect support could be provided to any unit with CRITICOM facilities and to the DSU's through the CMA's. The system underwent a "shake-down" from 16 September through 2 November 1967 when it became operational as a development project, providing limited support to ARDF activities. The TADPS is undergoing evaluation to determine the extent it is meeting original goals, and to establish requirements for "second generation" development.

REPORTING

[REDACTED] The ACC was tasked with developing and instituting  
[REDACTED]

[REDACTED]

reporting vehicles and procedures to the consumers' requirements for ARDF data. The vehicles that were previously established to accomplish this requirement were the A/G Fix Report, the ARDF Recovery Report and the ARDF Final Fix Report. Several significant revisions were made in the preparation and distribution procedures of these reports.

[REDACTED] During August, MACV-J2 approved a recommendation by the ACC to eliminate the requirement for A/G reporting of ARDF fixes on Priority 2 and 3 targets that did not reflect a significant relocation from their last known location. The result was a 10-15 per cent decrease in the volume of traffic on the already crowded A/G frequencies.

[REDACTED] During August, MACV-J2 issued a letter authorizing the disclosure of additional, sanitized, ARDF results to FW MAF. The intelligence reports were subsequently expanded to include the radius of the ARDF fix and the echelon of the target fixed.

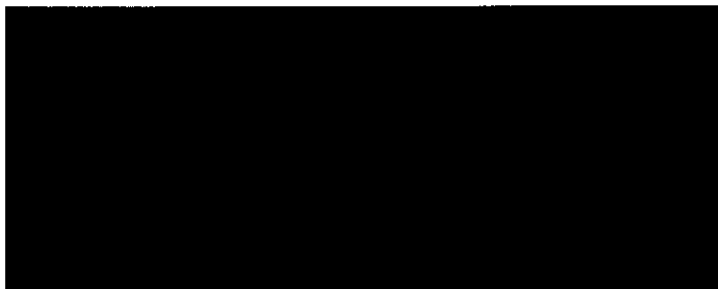
[REDACTED] During September, a major change in the type information and its method of entry in the ARDF recovery report was instituted. Necessitated to provide the information required for input to the TADPS computer, this change increased the workload necessary to prepare the reports. It invoked some reluctance from the navigators to provide the position of the aircraft on LOP's that did not result in a fix. On 29 September, representatives of the ACC and the TADPS section attended a meeting of the 460th TRW Tactics Panel. This delegation explained the necessity of the

[REDACTED]



information and its potential value to the TADPS. Limited cooperation of the 460th TRW was secured.

ec47.com



ARDF COORDINATION CENTER (ACC)

6994TH SCTY SQ

ARMY & AIR FORCE  
OIC's

NC-OIC

509TH RR GP

SPECIAL PROJECTS

1. Special Studies
2. H. A. Pate
3. Monthly SOI
4. KY-3 & Freq Usage
5. IAW Locations
6. ARDF Statistics
7. ACC Working Aids
8. ARDF Activity Report
9. ACC Conferences
10. Action Reports

MISSION CONTROL

1. Station Availability to J2 MACV
2. Weekly Working
3. Tasking Calendar
4. Special Requests
5. MACV Area Map
6. Tasking Related Studies
7. TRATA File

REPORTING

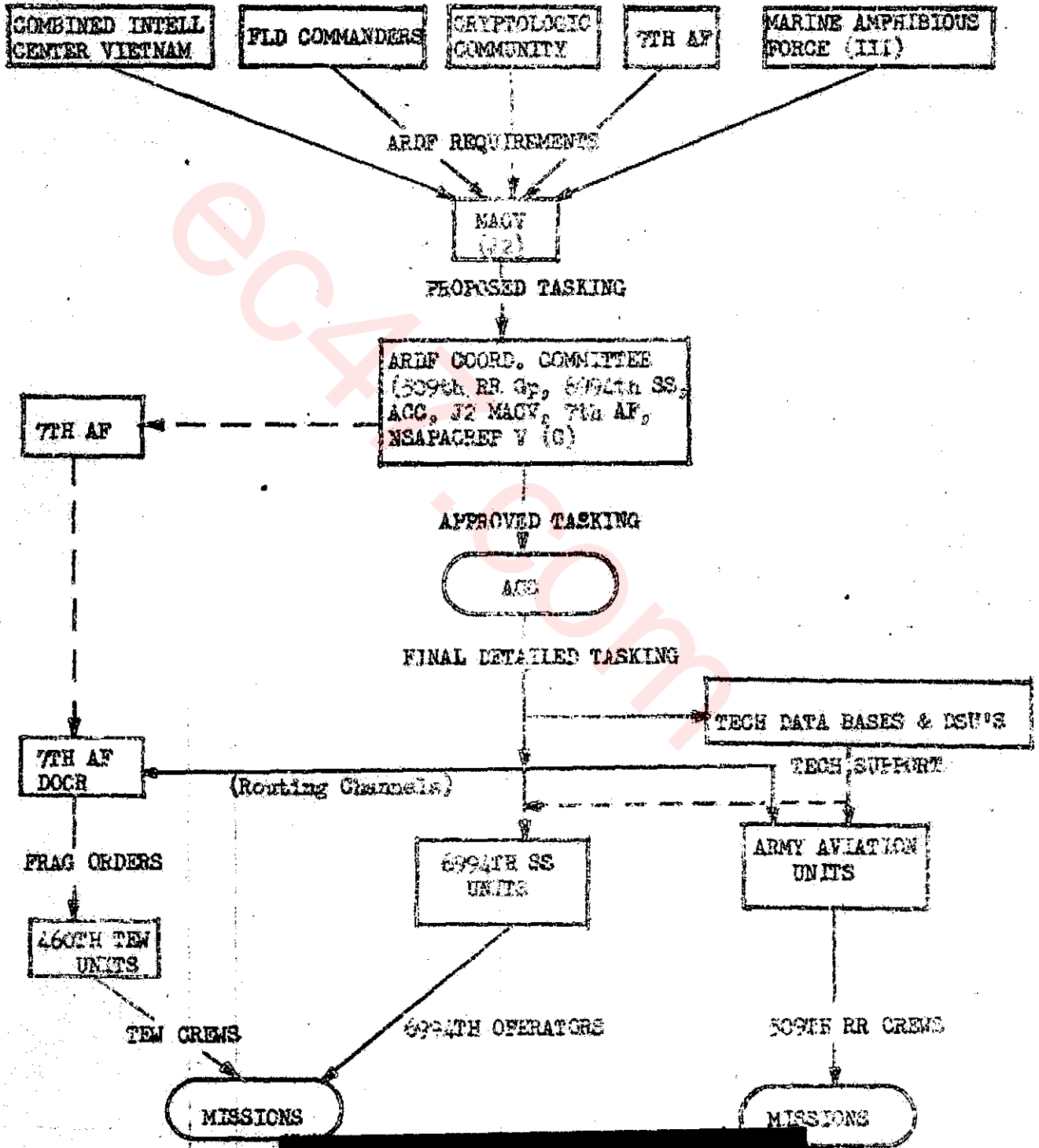
1. Log ARDF Messvory Reports
2. Daily Fix Report
3. Daily Status Report
4. Daily JGS (VH) Fix Report
5. Fix Report for J2 MACV
6. OPSCOM Circuit & KY-3

ARMY-OPSCOM

AUTOMATED SPT

1. Process ARDF Recovery Reports
2. Process Ident Ground Intercept
3. Process MROF Data
4. Process Analyst Queries
5. Correlate ARDF U/I's with ground intercept
6. Compute MROF Fix Location
7. Output MROF Report for DIRNSA

EXTERNAL RELATIONSHIPS AS REPRESENTED BY TASKING CYCLE:



DISTRIBUTION

	<u>Copies</u>
USAFSS . . . . .	2
Pac Scty Rgn . . . . .	1
6922 Scty Wg . . . . .	1
Det 1, 6994 Scty Sq . . . . .	1
Det 2, 6994 Scty Sq . . . . .	1
Retained at 6994 Scty Sq . . . . .	4



[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]