[redacted]

[redacted]

BWR E

USAFSS(Ho)

2C45

THE HISTORY OF

DETACHMENT 2, 6994th SECURITY SQUADRON

1 JANUARY 1972 - 30 JUNE 1972

RCS: USS-D3

[redacted]

1 JULY 1972

[redacted]

Detachment 2, 6994th Security Squadron, APO San Francisco 96337

[redacted]

USAFSS FORM 1 JUN 57 86

[redacted]

THE HISTORY OF

DETACHMENT TWO, 6994th SECURITY SQUADRON

1 JANUARY 1972 - 30 JUNE 1972

Prepared by

Master Sergeant Carl A. Miller

[redacted]

Approved By:

William J. Shea, Captain, USAF
Commander

[redacted]

FOREWORD

This operational history of Detachment 2, 6994th Security Squadron is a narrative depicting the significant detachment accomplishments during the historical period 1 January 1972 thru 30 June 1972.

This history was prepared by Master Sergeant Carl A. Miller. However, credit must also be given Staff Sergeants Jerome E. Johnson and Dennis W. Reinhardt who volunteered to do much of the typing required and often worked many long hours of their own free time. All comments and suggestions are welcomed and should be directed to the Operations Officer, Detachment 2, 6994th Security Squadron, APO San Francisco 96337.

USS-D3

ROSTER OF KEY PERSONNEL

1 January 1972	Position	30 June 1972
Maj E. J. Ledet	Commander	Capt W. J. Shea
Capt K. J. Wegner	Operations Officer	Capt K. J. Wegner
Capt P. Loos	Materiel Officer	Capt O. Costello
TSgt R. L. Murdock	First Sergeant	TSgt N. T. Lee
SMSgt W. E. McCollough	NCOIC Operations	SMSgt W. E. McCollough
MSgt D. T. Burns	Communications	MSgt D. T. Burns
MSgt C. L. Turner	Mission Management	MSgt C. A. Miller
MSgt J. E. Gleen	Exploitation	MSgt G. E. Payne
MSgt B. Lockett	Flight Operations	MSgt R. E. Jasper
TSgt J. J. Nolan	Administration	SSgt S. Willis
Sgt C. L. Robinson	Personnel	TSgt R. O. Long
MSgt A. M. Brewer	Maintenance	MSgt A. M. Brewer
MSgt E. Jones	Security	TSgt E. Tutt
SMSgt C. K. Meeks	Supply	SMSgt C. K. Meeks
MSgt K. N. Owens	Plans	SSgt R. J. Pitre
TSgt W. E. Christian	SEFE	SSgt J. B. Luther

[redacted]

USS-D3

TABLE OF CONTENTS

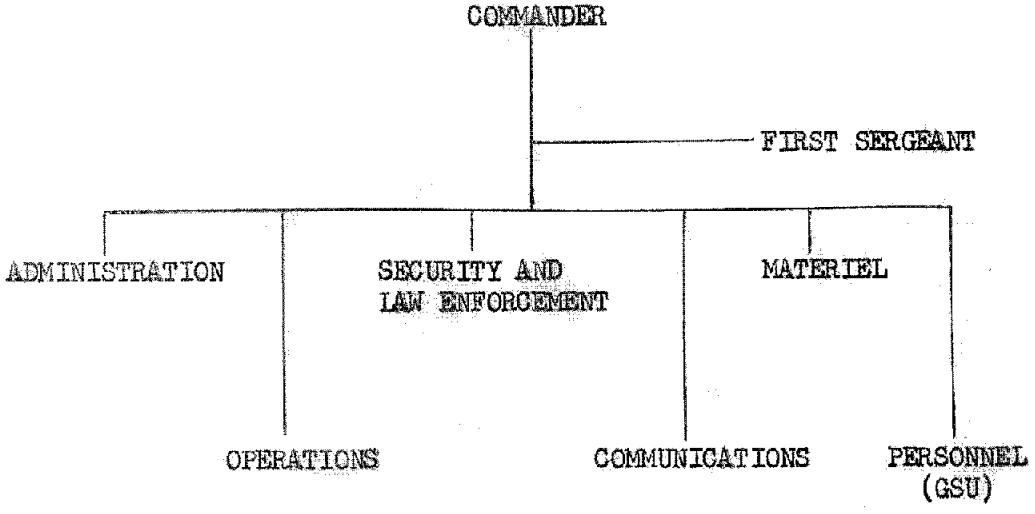
[redacted]

[redacted]

[redacted]

[redacted]

ORGANIZATIONAL CHART



[redacted]

LIST OF ILLUSTRATIONS

[redacted]

[redacted]

USS-D3

CHRONOLOGY

3 January 1972	"Rocket Attack" DaNang Airfield received six 122MM rockets. Three EC-47 aircraft damaged.
17 January 1972	Detachment 2 tasked to provide communications manning assistance for Monkey Mountain.
21 January 1972	Pacific Security Region Standardization/ Evaluation Team visited Detachment 2.
9 February 1972	"Rocket Attack" twenty eight 122MM rockets impacted on DaNang Airfield. No damage to Detachment 2 facilities.
17 February 1972	"Special Mission" Detachment 2 was tasked with special mission in the Tri-Border area, specifically targeted against NVA tank activity.
19 February 1972	First successful mission against NVA tank activity. DF Fixes located NVA tanks in Southeastern Laos.
26 February 1972	DIRNSA authorized Detachment 2 to issue TACREPs on all NVA tank activity.
2 March 1972	First TACREP issued by Detachment 2 on NVA tank activity.
18 March 1972	Final reflection of NVA tank movement.
13 April 1972	Detachment 2 started providing manning assistance to Detachment 3, NKP Thailand.

[redacted]

[redacted]

USS-D3

13 April 1972	"Rocket Attack" twenty four 122MM rockets impacted on DaNang Airbase, 2 EC-47s destroyed, Tail Nr's 51131, 01102, 2 EC-47 Aircraft slightly damaged, Tail Nr's 77254 and 76668.
14 April 1972	"Rocket Attack" all rockets fell short of DaNang Airbase.
15 April 1972	"Rocket Attack" twenty 122MM rockets impacted on DaNang Airbase, no damage to USAFSS facilities.
17 April 1972	Detachment 2 Analysts visited the Collection Management Authority (CMA) at Phu-Bai, RVN.
23 April 1972	"Rocket Attack" nineteen 122MM rockets impacted on DaNang Airbase, no damage to Detachment 2 facilities.
6 May 1972	"Rocket Attack" sixteen 122MM rockets impacted on DaNang Airbase, no damage to Detachment 2 facilities.
13 May 1972	"Rocket Attack" eighteen 122MM rockets impacted on DaNang Airbase, no damage to Detachment 2 facilities.
26 May 1972	Detachment 2 was visited by the 6994 Security Squadron Standardization/Evaluation Team.
9 June 1972	"Rocket Attack" six 122MM rockets impacted on DaNang Airbase, no damage to Detachment 2 facilities.

[redacted]

[redacted]

[redacted]

USS-D3

9 June 1972	Implemented new procedures for ARDF recovery report in compliance with change to TECHINS 3038.
10 June 1972	Tasked with communications support of 328th Radio Research Field Station.
13 June 1972	"Rocket Attack" six 122MM rockets impacted on DaNang Airbase, no damage to Detachment 2 facilities.
15 June 1972	"Rocket Attack"two 122MM rockets impacted on DaNang Airbase, no damage to Detachment 2 facilities.
16 June 1972	"Rocket Attack" four 122MM rockets impacted on DaNang Airbase, no damage to Detachment 2 facilities.
16 June 1972	Captain Shea assumed command of Detachment 2.
21 June 1972	"Rocket Attack" six 122MM rockets impacted on DaNang Airbase, no damage to Detachment 2 facilities.

[redacted]

[redacted]

[redacted]

USS-D3

CHAPTER 1

MISSION AND ORGANIZATION

MISSION

[redacted] Detachment 2, 6994 Security Squadron was an element of the United States Air Force Security Service (USAFSS) stationed at DaNang Airfield, Republic of VietNam (RVN). The unit conducted Airborne Radio Direction Finding (ARDF) and Airborne Communications Intelligence (ACI) collection in support of the intelligence requirement of commanders responsible for tactical operations in Southeast Asia (SEA), and provided cryptologic operations with supplementary data to enhance the value and depth of their technical and analytical development.[1] This support was rendered by locating and maintaining surveillance of enemy radio transmitters and providing ACI on those targets which could not be adequately covered by ground-based intercept.[2] Special targets of interest were selected by the tactical commanders and tasked through the ARDF Coordination Center (ACC). ACC subsequently tasked the Detachment, and technical support was provided by the three Collection Management Authorities (CMA).[3] The Seventh Radio Research Field Station, Udorn, Thailand was responsible for part of SEA Area ten and eleven. The Eighth Radio Research Field Station, Phu Bai, RVN was responsible for part of SEA Area ten and SEA Areas eight and nine. The 330th

[redacted]

[redacted]

Radio Research Company, Nha Trang, RVN was responsible for SEA Area seven and the other part of SEA Area ten.[4]

ORGANIZATION

(U) Detachment 2, 6994 Security Squadron was subordinate to the Commander, 6994 Security Squadron, Tan Son Nhut Airfield, RVN.[5] The Detachment had an integral support element consisting of administration, personnel, material supply and airborne equipment maintenance, communications, and security and law enforcement. The personnel requirements in support of the mission were provided by a Geographically Separated Unit (GSU) and the personnel records were maintained at the 6902 Support Squadron, Wheeler Air Force Base, Hawaii.

OPERATIONS:

(U) The Operations Branch, located in the southwest corner of DaNang Airfield, was the keystone for mission accomplishment and performed the vital functions of directing, coordinating and controlling resources to accomplish the mission. Close coordination was maintained between the Detachment and the 362d Tactical Electronic Warfare Squadron (TEWS), which operated and maintained the Pacific Air Force (PACAF) EC-47 aircraft based at DaNang.

[redacted]

[redacted]

Operational Relationship:

[redacted] The operational relationship of the detachment with other units in the ARDF program is shown in Appendix VI, chart 3. The ACC was the hub on which the ARDF program revolved. It performed the coordinating function between the intelligence community, the customer and the supporting agencies. The customer stated the intelligence he desired, the intelligence community provided technical support necessary to gather the information and the supporting agencies provided the necessary equipment and personnel to perform the mission. In this sense Detachment 2 was both a member of the intelligence community and also a supporting agency. It provided technical knowledge and expertise as well as the personnel and equipment to perform the ARDF and collection functions. The 362d TEWS provided the airframes, maintenance, pilots and navigators to support the mission.

[redacted]

[redacted]

USS-D3

CHAPTER II

SIGINT TASKING AND COLLECTION

TASKING

[redacted] The tasking was generated at the weekly meeting of Tactical Commanders and other agencies at the ACC. The appropriate CMA formally tasked the Detachment, VIA Control Messages (CONMSG). The CMA also generated Technical Data Lists (TDL) for those priority targets on which they held sufficient technical data to reasonably predict a schedule. The CMA tasked the airborne collection positions with specific communications entities which could not be effectively assigned to other, ground-based, SIGINT units.

TARGET PRODUCTIVITY

[redacted] ARDF target productivity is depicted on five charts in Appendix VII. The first chart shows the overall productivity[1] while the next four show trends in each of the SEA areas flown. Significant deviations are outlined below with reference to the applicable chart. The results by SEA area for January, February, and March are not available as the records containing this data were destroyed when this unit implemented

[redacted]

destruction of non essential classified documents during the NVA Spring Offensive.

ARDF Target Productivity SEA Area Seven

[redacted] Chart two shows the ARDF productivity in SEA Area seven.[2] Although more targets were worked and fixed during May and June there was a decrease in the percent of targets worked that were fixed, and an increase in the number of cuts obtained. The high cut rate was primarily caused by very short transmission times, adverse weather, and excessive standoff ranges caused by the presence of enemy artillery in the area.

ARDF Target Productivity SEA Area Eight

[redacted] Chart three shows the ARDF productivity in SEA Area eight.[3] Target productivity was very stable during April, May, and June. The number of targets worked and fixed was higher in April due to the sporadic coverage of the absolute area in the southwest portion. The detachment was not tasked with coverage in this absolute area in May and June.

ARDF Target Productivity SEA Area Nine

[redacted] Chart Four shows the ARDF productivity in SEA Area nine.[4] The decrease in target productivity in April and May was a result of missions being flown around a designated point over water, which hampered target working and fixing capability due to the excessive standoff range. Missions were flown over water for

* Each SEA Area is broken down into several absolute areas to allow for more specific tasking

[redacted]

flight crew safety due to the enemy Anti-Aircraft Artillery that was scattered throughout the area. The increase in June resulted from missions reverting to flying an over land orbit point, which allows optimum opportunity for working targets.

ARDF Target Productivity SEA Area Ten

[redacted] Chart five shows the ARDF productivity in SEA Area ten.[5] The significant drop in targets worked was caused by a decrease in the number of missions flown in this area. The primary responsibility for this area has been turned over to Detachment 3, 6994 Security Squadron, Nakhon Phanom RTAFB, Thailand.

RADIOTELEPHONE COLLECTION PRODUCTION

[redacted] Total radiotelephone collection productivity is shown in chart six.[6] Significant deviations are outlined below and concern increases in Allocated Minutes of Coverage (AMOC) and minutes of copy obtained. AMOC is determined by the amount of time the aircraft is flown in its absolute area of coverage. If the aircraft is flown with both Z1 and Z2 collection positions manned then the AMOC is doubled. The most common factors affecting collection are weather, an increase or lull in target activity, and the communications mode of enemy activity.

[redacted]

Radiotelephone Collection Productivity SEA Area Seven

[redacted] Chart seven shows the radiotelephone collection in SEA Area seven.[7] During May and June more collection missions were flown in this area and radiotelephone position manning increased. Enemy tactical activity, however, was generally low.

Radiotelephone Collection Productivity SEA Area Eight

[redacted] Chart Eight shows the radiotelephone collection in SEA Area eight.[8] The decrease in AMOC and collection during May and June was caused by discontinued coverage of the Southwest portion of the area and a slight decrease in enemy tactical activity.

Radiotelephone Collection Productivity SEA Area Nine

[redacted] Chart nine shows the radiotelephone collection in SEA Area nine.[9] AMOC and collection were stable in April and May. The increase in June resulted from increased position manning, more collection missions being flown, and a more optimum overland orbiting point.

Radiotelephone Collection Productivity SEA Area Ten

[redacted] Chart 10 shows the radiotelephone collection in SEA Area ten.[10] Since the primary responsibility for this area has been turned over to Detachment 3, the AMOC and amount of collection have been greatly reduced.

[redacted]

[redacted]

MANUAL MORSE COLLECTION PRODUCTION

[redacted] Total Manual Morse collection productivity is shown in chart 11.[11] The significant deviations are outlined below and concern increases or decreases in AMCC and minutes of copy obtained. Manual Morse minutes of copy constantly fluctuate, especially when the primary mission is ARDF. For example, the operator on the "Y" position, which is primarily responsible for supporting the "X" position and the ARDF mission, obtains more minutes of copy when ARDF Activity is low. The "Z2" position, which is primarily responsible for collection, is affected by an increase or lull in target activity.

Manual Morse Collection Productivity SEA Area Seven

[redacted] Chart 12 shows the Manual Morse collection in SEA Area Seven.[12] The increase in May was caused by more collection missions being flown as a result of generally good weather. In June, the Detachment was tasked with a great number of late evening and night missions in SEA Area Seven. The very low level of target activity during this time of day was the reason for the decrease in collection productivity.

Manual Morse Collection Productivity SEA Area Eight

[redacted] Chart 13 shows the manual morse collection in SEA Area eight.[13] The decrease in AMCC during May and June was due to [redacted]

[redacted]

the deletion of coverage in the Southwest portion of this area. Adverse weather and a low level of enemy tactical activity in June contributed to the decrease in copy time.

Manual Morse Collection Productivity SEA Area Nine

[redacted] Chart 14 shows the Manual Morse collection in SEA Area nine.[14] While the percent of effectiveness was stable, AMOC and copy time varied, especially during May. During that month, most of the orbits were flown over water and the number of missions reduced. Missions increased in June as orbits reverted to over land.

Manual Morse Collection Productivity SEA Area Ten

[redacted] Chart 15 shows the Manual Morse collection in SEA Area ten.[15] The primary responsibility for this area was turned over to Detachment 3 in May, and the AMOC and amount of collection has been greatly reduced.

POSITION STATUS REPORTS

[redacted] Position Status Reports (PSR) were required in accordance with TECHINS 1056 when a mission resource was unavailable for use in excess of 24 hours. During the 182 days of this period, the Detachment issued 49 PSR's for an average of eight per month.

[redacted]

[redacted]

USS-D3

CHAPTER III

PROCESSING AND REPORTING

REPORTING

ARDF Recovery Report

[redacted] A change to TECHINS 3038 effecting an additional field after the "Information and Accounting" (I&A) line on the ARDF recovery report was received and implemented on 09 June. This change allows producers and users a more effective management tool for monitoring accuracy of the I &A lines on reports destined for computer processing.

PROCESSING

Identification Rate

[redacted] The identification rate of targets has risen to an average level of 51 percent. The levels remain constant and are due primarily to increased emphasis on low-level data base maintenance, effective use of identification change reports, and SEA Technical Summary Re-Ident reports. Increased emphasis placed on interception of high priority targets by airborne operators has enabled us to reduce the tremendous anount of traffic copied without callsigns and has resulted in a higher identification rate. However, we are still encountering continuous communications changes in some areas that are somewhat hampering the

[redacted]

[redacted]

identification rates at this level. One very beneficial TDY performed by three Detachment personnel on 17 and 18 April resulted in mutual agreement on our need for improved TDL's.[1] More reliable information was received from USM-808, and the Detachment generated additional items for inclusion in the TDL's. With the new TDL's the identification rate exceeded 50 percent. Pursant along these lines, manning during April rose to its full peak, enabling the assignment of individual analysts to perform flights in specific areas of coverage, which resulted in increased familiarization of targets and operations in these areas and enabled the analysts to build up a great amount of experience upon which to base identification techniques. Additionally, on 26 January, the 6994 Security Squadron authorized this unit to carry additional analytical aids on board mission aircraft.[2] The provision was that the information carried aboard would not exceed Category II Comint. The working ability of airborne analysts was greatly enhanced with this authorization, allowing a concentrated effort to fulfill mission requirements in fixing identified high priority and special emphasis targets.

TDY Visit to CMA

[redacted] On 17 and 18 April, MSgt Daniel C. Mack, [redacted], TSgt Troy M. Roberts, [redacted], and SSgt Robert G. Baker,

[redacted]

[redacted] performed a TDY trip to the Collection Management Authority (CMA) at Phu-Bai, RVN.[3] Items of discussion included the request for assistance in up-grading the quality of information we received from them, closer monitoring of identification techniques applied by both the Detachment personnel and the CMA, and the need for closer coordination between analysts working the same problem areas. The result of this meeting was the assignment of one Detachment 2 analyst to specifically monitor and up-date our technical data base.

TDY Manning Assistance

(U) Between 13 April and 21 June, Detachment personnel were called upon to augment vacant analysts spaces at the 6994 Security Squadron and Detachment 3, 6994 Security Squadron. Four analysts were TDY for a 30 day period to fulfill these requirements with no adverse effect noted in the analysis and reporting section.

CHAPTER IV

LOGISTICS

MAINTENANCE

Manning:

(U) Manning continued to plague the maintenance section during the first three months of this period. Manning assistance was still required during January, February, and March. In April the assigned strength reached a level that was sufficient to support and accomplish all maintenance requirements. The maintenance technicians continued to work a considerable amount of overtime. During May and June the Detachment provided TDY manning assistance to Detachment 3, 6994th Security Squadron, Nakhon Phanom, Thailand, in the form of 2 maintenance technicians.

Maintenance:

(U) The systems reliability was above the acceptable standards during this period. Routine maintenance functions were accomplished and no peculiar difficulties were experienced.

MATERIEL

Not Operationally Ready Supply (NORS)

(U) The new logistics procedures and controls which were implemented during the last half of 71, have continued to reduce the NORS outage rate. During the period 1 January thru 30 June 72,

the Detachment had only on NORS outage. We believe this to be a record in support of 100 positions on 30 Aircraft, and compares with the 43 NORS outages the Detachment had during the period 1 July thru 30 December 1971.

Supply Difficulties

(U) The Detachment continued to experience difficulty in obtaining some items. The items that we experienced the most difficulty with, were; memory modules, data processors, computers, receiver housing assemblies, oscillators and circuit cards. The only support on these items is through "turn-around" of repairables shipped to the repairing activity. Because of the non-availability of two types of memory modules, the Depot has recommended that we consider "non-repairable-this-station" (NRTS) action on the computers and return the complete item, rather than NRTS out the memory modules. The Depot has advised us that they can, in most cases, provide 30 day "turn-around" on the computer, and in most cases this has been accomplished.

Supply Levels for the AN/ALR-34 System

(U) During January the Materiel Section accomplished approximately 50 AF Forms 1996, to establish supply levels for the AN/ALR-34 system. The AN/ALR-34s were new at this unit, having arrived here in December 1971 when Detachment 1 and Detachment 2 were merged.*

*See: The History of Detachment 2, 6994th Security Squadron, USS-D3 for period 1 July thru 31 December 1971.

Manning

(U) In January the materiel control section implemented 24 hour a day, seven day a week operation. This was necessary in order to support the maintenance section which has the same schedule. In the supply field, the Detachment was authorized six personnel but only four were assigned. In order to attain 24 hour operation with this shortage the supply personnel were required to work 12 hour shifts. In February, after a thorough review of projected gains and losses, the Detachment asked the 6902 Air Base Squadron, Wheeler Air Force Base, Hawaii, to review the projected manning and provide assistance to alleviate this shortage. Since that time the Detachment has gained one SSgt and lost one TSgt and one SSgt, leaving the present strength at three.

[redacted]

CHAPTER V

SUPPORT

(U) Training, Standardization/Evaluation Flight Examiner (SEFE) Section, Communications, and Security Police all continued to support the mission within their specific areas.

TRAINING

Upgrade Training

(U) In January, the Detachment had a total of 19 airmen in upgrade training. There were six 29271s, two 20270s, two 81170s, two 32873s, one 30474, one 20330, three 29251s, one 20250, and one 32853. On 30 June, five personnel remained in upgrade training status.

Ground Training Program

[redacted] The Training Section conducted a ground training class for all airborne AFSCs covering common training areas such as aircraft emergency procedures, local operational policies, and common equipment. The Voice Processing and ARDF Reporting Sections trained their personnel in their respective functions. Failures at all levels of airborne upgrade training were at a very low level. The high degree of success can be attributed to the professionalism of the training instructors and their over-all knowledge of the

[redacted]

[redacted]

systems that the Detachment was associated with. Since 1 January, there was only one initial upgrade training failure.

Category IV Seminar

(U) In February, the Detachment Training Section implemented a Category IV Seminar with an initial class of 15 Category III radio operators who had been recommended for upgrading to Airborne Mission Supervisors (AMS) and Instructor Radio Operators (IRO). Since the initial Seminar was conducted, there were 35 Category III operators graduated and upgraded to AMS or AMS/IRO.

STANDARDIZATION AND EVALUATION

(U) The Standardization/Evaluation Flight Examiner Section (SEFE) continued to review all aircrew members' Flight Records to insure that each aircrew member remained current in all areas of training. During this period, a total of 477 Standardization/Evaluation examinations were administered and 235 checkrides were conducted with 16 failures.

Pacific Security Region Standardization/Evaluation Team Visit

(U) During the period 21 thru 25 January, the Pacific Security Region Standardization Evaluation Team visited the Detachment.[1] Some discrepancies were noted within the Detachments SEFE section and were either corrected during the visit or as soon as possible after the team departed. In their over-all evaluation, the Detachment was rated as excellent. Also, during the visit team members flew seven

[redacted]

operational missions. They rated the crew performance as outstanding.

6994 Security Squadron Standardization/Evaluation Team Visit

(U) During the period 26 thru 30 May, the 6994 Security Squadron Standardization Evaluation Team visited the Detachment.[2] Team members flew four operational missions, and the over-all evaluation of the Detachment SEFE Section was rated as excellent.

Visit by Command Standardization/Evaluation Team Members

During the period 31 May thru 5 June, two members of the United States Air Force Security Service Standardization/Evaluation Team visited the Detachment.[3] One of the more important items discussed during this visit was the possibility of a change to USAFSSM 55-7, Vol II, para 6-6. This portion of the Manual required Flight Examiners to fly as extra crewmembers when conducting examinations, but due to the fuel/weight limitations, especially during the summer months, this was not always possible at Detachment 2. The possibility of rewriting that portion of the manual or obtaining a waiver was to be a subject of discussion at Headquarters, 6994 Security Squadron.

COMMUNICATIONS

Support of project "Iron Horse" at Monkey Mountain

On 17 January the Detachment was tasked by Pacific Security Region to provide TDY support to Monkey Mountain. The requirement was for three communications operators. This requirement still existed at the end of this period.

Communications Support of 328 Radio Research Field Station (RRFS)

[redacted] On 10 June the communications facility was tasked with support of a residual unit of the 328 RRFS due to "Stand-Down" of the parent unit. Two KY-8s were placed on loan to support their requirements and the Detachments circuitry was utilized to transmit and receive traffic destined for the unit.

Seek Silence

(U) As of 30 June, C-E Scheme 0043A3K0, Emergency Secure Air to Ground, Ground to Air requirement was about 95 percent complete. Allied support was complete with the exception of a 30 amp circuit breaker. The Engineering and Installation team was awaiting a project identifier and permission to enter country to complete the work.

[redacted]

USS-D3

CHAPTER VI

SPECIAL INTEREST ITEMS

North Vietnamese Tanks Enroute to Southern Laos and South Vietnam

[redacted] In February, this Detachment was tasked with a special ARDF/AIC mission, targeted specifically against North Vietnamese tank activity in Southern Laos. The first mission was flown on 17 February; the first positive results were obtained on 19 February.

[redacted] A minor equipment problem was encountered during the first few days, but it received immediate attention and was soon overcome. It was discovered during the mission on the 19th that, while the ARDF position was able to monitor and DF the voice signal in the AM mode, the AIC position was unable to obtain a legible recording of the communications. This problem was solved by replacing the long wire antenna, normally utilized on the Low VHF "E" Band, with the whip antenna which is normally utilized on the Medium and High VHF Bands.

[redacted] The first fully successfull mission was flown on 24 February and proved to be highly productive in both ARDF and collection. Three DF Fixes were obtained locating the tanks in Southeastern Laos in the vicinity of 15:26N 107:07E. The voice

[redacted]

[redacted]

communications reflected a minimum of 19 vehicles, positively identified as tanks, involved in the movement southward. The intercepted communications indicated that this major group was divided into three smaller groups and that within these groups the individual tanks were maintaining an interval of one kilometer. Intercept also divulged that the planned parking area, following the movement for the night, would be area "A-3" (unlocated).

[redacted] Positive ARDF and voice collection results were again obtained on 25 February. The callsigns intercepted indicated a different group of tanks involved in this activity. Two DF Fixes placed this tank group in the vicinity of 15:06N 107:12E, a position slightly southeast of the previous days activity. The intercepted communications established the movement to be from "L-2" to "L-3", both unlocated parking areas.

[redacted] Only voice communications intercept was obtained on the mission of 28 February. This intercept revealed a minimum of eight groups of tanks moving southward. The mission was unable to obtain ARDF results and there were no references to locations in the voice communications.

[redacted] Further tank activity occurred on 2 March when ARDF results showed the southward movement of tanks to a location in the vicinity of 15:15N 107:17E. The intercepted voice communi-

[redacted]

cations reflected at least two groups of tanks enroute to a parking area designated as "A-6". (unlocated)

[redacted] During a mission flown on 3 March, two DF Fixes and one DF Cut located tank activity in the vicinity of 15:12N 107:12E and 15:10N 107:22E. Voice communications also reflected a third group of 19 tanks. Enemy communications indicated the destination would be parking area "A-3" (unlocated).

[redacted] The next reflection of tank activity was obtained during a mission flown on 13 March. Voice communications reflected the same groups of tanks that were active on 2 March, and that they were enroute through a "mountain pass". The ARDF fixes located this activity in the vicinity of 15:08N 107:26E, placing them somewhat east of the normal infiltration route in Southeastern Laos. It appears that the enemy was concerned about previous air activity and especially any current air activity in their general area of operation. Tank communications mentioned the twisting route of travel and the very slow progress, further substantiating their deviation into rougher terrain to lessen the possibility of detection.

[redacted] The final reflection of tank movement came during a mission flown on 18 March. No DF Fixes were obtained due to an inflight malfunction of the ARDF equipment. Throughout the period of activity the aircraft flew various patterns in an attempt

[redacted]

to determine, by aural signal strength, the approximate location of the tanks. Voice communications indicated there was a minimum of six groups of tanks moving in a southeasterly direction. Three of the groups had not been reflected previously. The conversations indicated there were still three vehicles remaining near the area "A-3" (unlocated) with maintenance problems and a minimum of three vehicles were proceeding to location "A-4" (unlocated). The text reflected that the six groups involved in the movement were to proceed to a location "A-6" (unlocated) to park and undertake camouflage actions. In general, the conversation indicated that a rather large parking area was involved. References were made to the utilization of various quadrants for parking purposes. The most important aspect, however, was the association of 100 vehicles already in place and the appearance of three new callsigns.

[redacted] An "in-Depth" analysis of all tank communications was undertaken upon the conclusion of the activity, the results of which were forwarded to DIRNSA for confirmation and comments.[1] The subsequent offensive in the "B-3" Front near Kontum, South Vietnam, confirmed the suspected large number of tanks that were located in the area.

Tactical Reporting (TACREP) of Tank Activity:

[redacted] After the first successfull mission was flown

[redacted]

[redacted]

against the tank activity on 24 February, it was evident that the voice communications contained extremely valuable intelligence. On 26 February DIRNSA authorized this Detachment to issue TACREPs on all tank activity. The first TACREP was issued on 2 March. In all, a total of four TACREPs were issued. No technical supplements were required, but to replace these, a Transcript Report containing a "verbatin" transcription of intercepted voice communications was issued. This function required the developement of working aids, consisting of all terminology associated with the tank activity. A thorough and comprehensive vocabulary list was generated which greatly reduces the transcription time and facilitated timely reporting.

Problems Encountered:

[redacted] Many of the missions flown against the tank activity encountered problems which had a direct bearing on the ARDF results and the continuity achieved by analysis of the voice communications. The problem previously mentioned concerning the proper antenna for the intercept and recording of the FM signal reduced the overall effectiveness until it was overcome. Once this problem was solved the intercept was normally good to exceptional in quality.

[redacted] The tanks utilized frequencies in the low VHF range, therefore the AN/ALR 38 with a frequency range of

[redacted]

[redacted]

[redacted]

2-190 MHZ was the only suitable system. The limited number of AN/ALR-38 systems available at this unit sometimes resulted in the non-availability of aircraft, late take-offs, reduced time over target, and, on rare occasion, a cancellation of the mission.

[redacted] Weather was also a factor that detracted from the overall effectiveness of the mission. During this time of the year, the Central Highlands experience weather build-ups which often restrict flying in areas not suitable for optimum coverage. This often necessitated signals being DF'd from a greater stand-off range than desired for the best ARDF results.

[redacted] Anti-Aircraft Artillery (AAA) High Threat Areas probably presented the biggest problem. The Tanks utilized the existing route structure in Laos for transit from North Vietnam into Cambodia, Southern Laos and South Vietnam. This entire route network through Laos was extremely well protected with AAA weapons. Mission aircraft had to avoid the AAA high threat areas and still maintain a flight profile to insure ARDF coverage. As in the case of the weather build-ups, this often required signals being DF'd from a greater stand-off range than desired.

[redacted]

[redacted]

USS-D3

GLOSSARY

ABBREVIATIONS

A

AAA	Anti-Aircraft Artillery
AB	Air Base
ABCCC	Airborne Command Control Center
ACC	ARDF Coordination Center
ACI	Airborne Communications Intelligence
Afld	AIRFIELD
A/G	Air to Ground
AIR-34	ARDF System, Frequency Range 02-16 MHZ
AIR-35	Computerized ARDF System, Frequency Range 02-16 MHZ
AIR-38	Computerized ARDF System, Frequency Range 02-190 MHZ
AMS	Airborne Mission Supervisor
ARDF	Airborne Radio Direction Finding
ARR	ARDF Recovery Report

B

C

CBPO	Consolidated Base Personnel Office
CC	Combat Cross
CMA	Collection Management Authority
COCDC	Consolidated Operational Career Development Courses
CONMSG	Control Message
CUT	In DF, The Point at which two LOB's Intersect
C&D	Continuity and Development

[redacted]

[redacted]

D

DF	Direction Finding
DI	Director of Intelligence
DSU	Direct Support Unit
DURMIS	Daily Unit Resource Management Information Summary

E

EMR	Exploitable Message Report
EUMR	Emergency Unsatisfactory Materiel Report

F

FAC	Forward Air Controller
FIX	In DF, a Point Determined by the Intersection of Three or more LOB's
FM	Frequency Modulated

G

GDRS	General Directorate Rear Services
GSU	Geographically Separated Unit

H

I

ICR	Identification Change Report
IRAN	Inspection and Repair as Necessary
IRO	Instructor Radio Operator

J

JOA	Joint Operations Agreement

K

[redacted]

L

LOB	Line of Bearing

M

MACV	Military Assistance Command VietNam
MHZ	Megahertz
MM	Manual Morse

N

NKP	Nakhon Phanom, Thailand
NORS	Not Operationally Ready-Supply
NSA	National Security Agency
NVA	North Vietnamese Army

O

OPINS	Operating Instructions

P

PACAF	Pacific Air Force
PRC	Page Row Column
PSR	Pacific Security Region

Q

R

RD	Reference Designator
RO	Radio Operator
RRFS	Radio Research Field Station
RT	Radio Telephone
RVN	Republic of VietNam

[redacted]

[redacted]

S

SEA	Southeast Asia
SEATS	Southeast Asia Technical Summary
SEFE	Standardization Evaluation Flight Examiner
SIGINT	Signals Intelligence

T

TDL	Technical Data List
TDY	Temporary Duty
TEWS	Tactical Electronic Warfare Squadron
TECHINS	Technical Instructions
TFW	Tactical Fighter Wing
TOT	Time on Target

U

USAFSS	United States Air Force Security Service

V

VC	Viet Cong
VHF	Very High Frequency

W

WAPS	Weighted Airman Promotion System

X

Y

Z

[redacted]

[redacted]

APPENDIX I

BIOGRAPHICAL SKETCH

APPENDIX I

BIOGRAPHICAL SKETCH

Captain William J. Shea was born in Springfield Massachusetts. He graduated from St Francis College in 1962 with a Bachelor degree in English with a Minor in History. He entered the United States Air Force in November 1962 through the Officer Training and Commissioning Program and was commissioned a Second Leiutenant on 5 February 1963. After a one year tour at Goodfellow Air Force Base Texas, where he attended the Intelligence Officer Course, OBK 8031, he was assigned to the National Security Agency at Fort Meade Maryland. In August 1966, Captain Shea reported to the 6980 Security Squadron, St Lawrence Island, Northeast Cape, Alaska where he was utilized as Exploitation Officer. Also, while at St Lawrence Island he was promoted to the grade of Captain on 13 February 1967 and departed Northeast Cape upon closure in April 1967. His second overseas tour was to Okinawa where he was assigned to the Joint Sobe Processing Center as a Team Chief and later as Branch Chief of the Air Division's 24 hour Current Operations Branch, JSPC-36. After 30 months in Okinawa he returned to the National Security Agency in January 1970 as a USAFSS Representative to the National Security Agency and other DOD Agencies in the Washington D.C. Area. His

duties included, representing the USAFSS on the Vietnamization Program and the ACRP Program. He was also the USAFSS/Ft Meade Representative to the National Cryptologic School. In May 1972, Captain Shea graduated from Johns Hopkins University with a Masters Degree in the History of Ideas.

Effective 16 June 1972, Captain Shea assumed command of Detachment 2, 6994 Security Squadron Danang Airfield, RVN.

APPENDIX II

AWARDS AND DECORATIONS

APPENDIX II

AWARDS AND DECORATIONS

(U) The Awards And Decoration Section was responsible for maintaining a current file of all personnel assigned to the unit to verify award qualifications. The section also typed and coordinated all requests for awards and decorations to ensure timely submission to higher headquarters. In addition, the section processed the approved awards to ensure prompt entry into personnel records. The Awards And Decoration Section was unable to promptly present Basic Air Medals to personnel due to the non-availability of the Medal at this station. Correspondence is currently being exchanged with higher headquarters in an attempt to alleviate this situation. The chart shows the number of awards processed and status as of 30 June 1972.

Award	Submitted	Approved	Disapproved	Pending
Distinguished Flying Cross	43	25	0	18
Bronze Star Medal	5	3	0	2
Air Force Commendation Medal	6	4	0	2
Air Medal	188	122	0	66

APPENDIX III

AIRCRAFT ASSIGNED

[redacted]

USS-D3

APPENDIX III

AIRCRAFT ASSIGNED

Aircraft Number	Type	Equipment
42-100665	EC-47N	AIR-35/Z1/Z2
45-000937	EC-47P	AIR-35/Z1/Z2
42-093814	EC-47N	AIR-35/Z1/Z2
42-023882	EC-47N	AIR-35/Z1/Z2
42-024313	EC-47N	AIR-35/Z1/Z2
44-077254	EC-47P	AIR-35/Z1/Z2
43-048153	EC-47N	AIR-35/Z1/Z2
43-048702	EC-47P	AIR-35/Z1/Z2
43-049491	EC-47P	AIR-35/Z1/Z2
43-048087	EC-47Q	AIR-38/Z1/Z2
43-048636	EC-47Q	AIR-38/Z1/Z2
43-049208	EC-47Q	AIR-38/Z1/Z2
42-024300	EC-47N	AIR-35
43-048072	EC-47N	AIR-35
43-049260	EC-47P	AIR-35

[redacted]

[redacted]

APPENDIX IV

MANNING

[redacted]

USS-D3

APPENDIX IV

MANNING

AFSC	1 January 1972 Authorized	1 January 1972 Assigned	30 June 1972 Authorized	30 June 1972 Assigned
E4044	1	1	1	1
E8035	3	3	2	2
202X0	32	23	19	18
203X1	40	29	23	21
207X1	140	107	67	61
291X0	12	9	12	13
304X4	4	1	0	1
328X3	34	23	34	15
645X0	5	3	6	5
702X0	10	9	8	7
732X0	2	2	2	3
811X0	11	9	10	8
Total	294	221	184	155

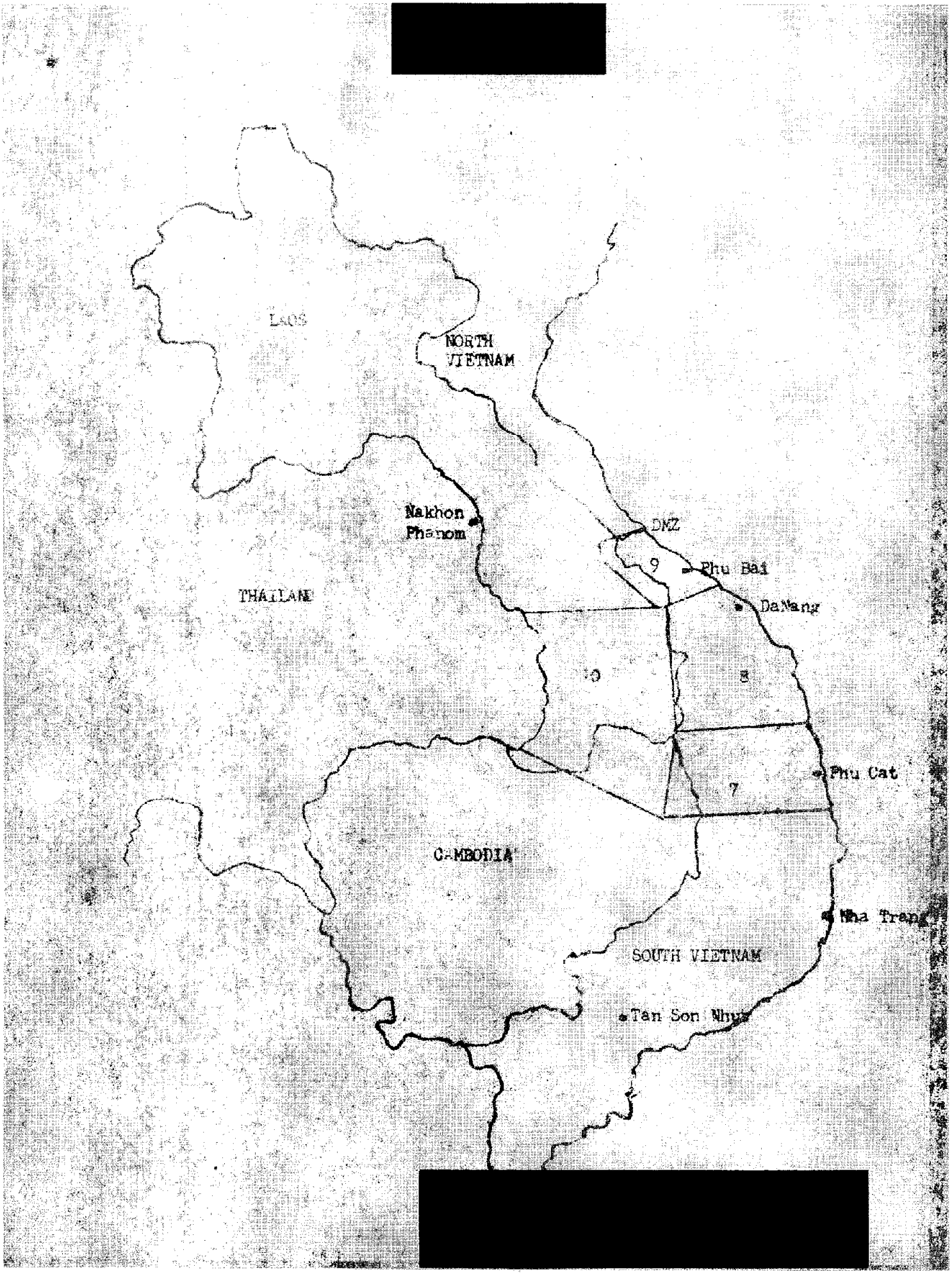
[redacted]

[redacted]

APPENDIX V

SEA ARDF AREAS

[redacted]



[redacted]

APPENDIX VI

ORGANIZATIONAL CHARTS