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291X0

Communications-Computer Systems in Southeast Asia, 1960-72

INTRODUCTION

"The more things change, the more they stay the same."

No where is this more true than mans endeavor for survival and conflict between himself. Quality force, the best force we've ever had, the best people, the best equipment--this is what you hear today. Consider the implications of these statements.

Is that to say our predecessors were less intelligent, less dedicated and less effective than today's Air Force? Will our successors say the same of us?

I'd like to tell you a short story of our enlisted forefathers and their endeavors in conflict--the Vietnam War. I'll specifically discuss Air Force enlisted peoples' contributions to communications and computer systems in Southeast Asia (SEA) during the Vietnam War.

I'll start by describing the organization and issues during the early 1960s through the Gulf of Tonkin incident and 1968's Tet Offensive. I'll briefly conclude by discussing the withdraw from Vietnam in the early 1970s. I'll explain how enlisted people contributed to equipment upgrades, establishing new communications and computer systems in SEA and their sacrifices. I'll also explain how we maintained our dignity and dedication through this time of history.

First, a footnote. I can only touch upon certain organizations, events and people. I've concentrated on

316 words LMB

computer operations, communications operations, technical support, maintenance and installation of these systems. I'll also refer to our forefathers in the first person when practical--"I, we" since their contributions are really "us"--our former team members.

DISCUSSION

The issues in the late 50s and early 60s were the continuing possibility of war in Korea, a drawdown in Japan and disturbances in Taiwan and Vietnam(14:6-7).

Military Air Transport Service (often referred to as MATS), who controlled teletype communications in the Pacific moved units and assets from Japan to Clark Air Base to confront the increase of instability in Republic of Vietnam (RVN) and Thailand. We trained Japanese on the operations and maintenance of communications and computer systems so they could be self reliant(11:12). This allowed us to depart from their soil while maintaining stability. The 1st Airways and Air Communication Service (AACS) Squadron Mobile deployed from Camp Johnson, Japan to Clark Air Base, Philippines. Their temporary mission was to provide air traffic control support during an equipment upgrade in 1961 and to provide support for increase activities in SEA(10:31). They never returned to Japan.

In 1961, the concept of base communications center was established to provide support for other users besides MATS. Air Force Communications Systems? (AFSC) was established to

manage Air Force communications for all users on a base, and would manage the base communications function. Furthermore, tape relay functions would be a separate function of the base communications center. This concept was validated by an assignment of a Telecommunications Specialist, Air Force Speciality Code 29170 Master Sergeant to Pacific Airways and Air Communications Service (PACAACS) during May 1961. He would provide staff guidance in the Pacific region on establishing base telecommunications centers(10:23).

Enlisted communications operators participated in exercises in Thailand, in which personnel from Clark's now permanent party 1st AACS Squadron deployed to Don Muang and Udorn, Thailand(10:32). Operators and maintainers performed training on cryptographic and communications functions. At some locations, communications operators were trained on teletype maintenance functions to augment manning in this area. This augmentation as well as the other training was conducted for enlisted people by enlisted people, and was considered a success(10:..).

Hence, the stage is set--slow buildup in Mainland SEA using Clark Air Base as a staging area. We believed there would be a dignified ending to our efforts. After all Americans are winners. We faced the challenges bestowed upon us and overcame phenomenal barriers. Unit training, equipment

upgrades, quality force and manning to support ever growing mission requirements occupied most of our time. We didn't know what the future brought.

The SEA Communications Region (SEACR) was established on 8 January 1962 at Clark Air Base. Managing communications and air traffic control functions in SEA, particularly RVN were its' mission(11:10). Four officers, three enlisted and four civilians were assigned to perform this function.

Realizing that mobile communications were insufficient to provide communications to RVN, fixed communications sites were planned. These communications stations would accept new automatic digital network (AUTODIN) traffic. To support this new generation of equipment, AUTODIN switching centers (ASC) were strategically located in the region to provide general user traffic to the smaller fixed base communications center. The ASC would act as hub and the base communications centers would act as terminals to the ASCs.

The first Air Force fixed communications center in RVN was the 1964th Communications Squadron at Tan Nhut Airfield. The 1st Mobile Communications Group(1MCG), formally the 1st AACS Squadron Mobile of Clark AIR BASE had already established numerous communications sites in RVN. Operations and maintenance of these sites were turned over to the 1964th. By 16 April 1962 the 1964th established six detachments, totaling 66 enlisted and four officers(11:11).

Shortly after, the 1963rd Communications Squadron established six detachments and the 1MCG deployed to more sites in RVN. Their duty was to establish microwave and tropospheric shots for intra country and inter country communications supporting operations in RVN. These new sites were activated by 30 June 63. Difficulty ensued in that the teletypes were deployed with only 90 days of spares. Since they were actually deployed for 18 months, the spare parts ran out. Consequently, SEACR attempted to establish a base supply to prevent such shortages(17:..). Spare parts shortages were not the only problems.

While upgrading communications in SEA, typical unit problems had to be dealt with. Until 1964, manning was about 100 percent of authorized level. More first termers desired to re-enlist than vacancies, so units could be choosy about who they retained (11:..). The luxuries would not last.

The communications operations career field changing. Air Force cryptographic specialist merged with teletype operations speciality (291X0) by March 1963. This created training problems as those who had no cryptographic experience were assigned to positions requiring experience and training in this function. To overcome this, a shredout was proposed for the Air Force Speciality Code identifying those with cryptographic experience, and training was conducted by all military services for all services(17:..).

Commanders monitored the activities of their units using statistics. On job training was monitored closely by unit, skill level, pass and failure rate. Airman Performance Reports were monitored also. A distribution of ratings for performance reports for Pacific Communications Area (PCA) for 1 Jan to 30 Jun 1962 is below (11:atch13).

Unsat	Mar	Good	Excell	Exceptional	Outstanding
.02	.1	5.8	37.1	36.7	20

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Speak of integrity!

Much of our attention focused on daily menial functions. Slowly, and unbeknownst to us, it was changing.

If there were an event that "started" the Vietnam War, it would be the Gulf of Tonkin incident in 1964. We still don't know exactly what happened, except a U.S. Navy vessel was fired upon by North Vietnamese, disabling the vessel, killing and injuring many of the crew.

An immediate response by U.S. Forces ensued and Air Force communications and computer systems, and the dedicated enlisted people who operated and maintained the systems provided their unquestioned support.

Three hundred and twenty five people went temporary duty (TDY) from 1st MCG to support increased tactical operations in SEA, especially to RVN(7:117). One hundred thirty four

people went TDY and 312,000 pounds of equipment were deployed in only eight days. The mission in mainland SEA increased significantly, but despite shortages of air traffic controllers, operators and maintainers, particularly in Thailand, the mission was completed. Only a small decrease of morale was noted among some airmen who were involuntarily extended.

Chief Master Sergeant Raymond Cullivan, First Sergeant of the 1st MCB at Clark Air Base required dormitory chiefs to place beds in the day rooms and storage areas to accommodate the increase of manning(1B:..) The unit grew by 80 people to a total of 1,004 people from 1 July to 31 December 1964.

The tempo of the war changed. Before the Gulf of Tonkin incident, Vietnam was characterized as a conflict, insurrection or disturbance. Organizations blissfully performed their daily duties such as training, equipment upgrades and personnel matters. Shortages of equipment, manning and eventually death and destruction, including decreased moral support back home were in store.

We contributed in a very personal way. NCOs and airmen were scout masters in Japan, supported orphanages in Vietnam and held a children's Christmas party in Korea. The 1961st Communications Group enlisted wives club provided Christmas cheer to school children by giving gifts and donating their time(1:..).

Airman Second Class(A2C) Daniel E. Koch contributed his time while assigned to Detachment 2, 1964th Communications Group, Ben Hoa Air Base, RVN. He taught English to the Vietnamese. By doing so, he endangered his life because the Viet Cong(the enemy) didn't want the Vietnamese to learn or respect western culture or ways. Consequently, A2C Koch travelled discretely to and from his classes in the cover of darkness only(5:..).

Equipment and personnel continued to be deployed to mainland SEA to support 7th Air Force tactical operations in Vietnam. Six mobile data terminals were requested that were compatible with high speed data and narrative AUTODIN(3:..). Communications sites were set up in defoliated areas, where no electrical power or civilization ever existed. These deployments were accomplished by us, as enlisted people.

Through 1966 and 1967, 1st MCG established at least four mobile sights and quickly turned the sites over to 1876th Communications Squadron of Tan Son Nhut, RVN. Noncommissioned Officers, performing as team chiefs were responsible for the set up, installation and turn over of these communications sites to the 1876th(19:..).

Fixed communications stations were also being installed and tested. Numerous ASCs were becoming operational by 1967. IBM equipment was originally installed but was now being replaced by equipment that was more compatible to AUTODIN.

This new equipment was called Digital Subscriber Terminal (DSTE) and was used extensively at the base communications level. The DSTEs quickly became the mainstay for Air Force fixed and even mobile record communications for years. Twenty-two DSTE terminals were in full operation in Vietnam, Thailand and Taiwan by 30 September 1970(16:..).

Problems quickly arose for the ASCs though. At Clark Air Base, contract technical controllers lacked training and had little knowledge in military communications(8:..). The contractors were supposed to train the controllers, but in a "can do, will do" attitude, we as enlisted people wrote procedures, trained the contractors and we ran the operation. Similar problems existed at Korat ASC in Thailand where contract controllers "slept on duty and were completely incompetent". To a lesser extent problems also existed at Camp Drake, Japan.

Senior Master Sergeant (SMSGT) James L. Long, Superintendent, DCS/Command and Control Teletype Networks, Pacific Communications Area conducted a staff assist visit to SEA on 24-25 January and 20-21 February 1968. He assisted in correcting problems associated with the ASCs' increased mission demand, manning and personnel issues. SMSGT Long's Staff Visit Report is one of the most comprehensive reports of any kind that I've ever read(12:..). He substantiated all findings, made valid recommendations and determined who

should correct the findings. He did this without incriminating anyone. The findings ranged from complex tempest problems, computer problems to dormitory arrangements for the airmen.

As an example, SMSGT Long recommended a re-configuration of Korat ABC terminals after new IBM 360/20s were installed at Udorn, Thailand. His recommendations would decrease message handling time and ultimately save lives on the battlefield. He recommended two operations be combined at Tan Son Nhut Air Base, which gained the use of eight more operators. He recommended Pacific Communications Area (PCA) provided overlap on assignments for training and continuity.

Chief Master Sergeant Martin, Superintendent of "TC" and Master Sergeant Welch, 1st Sergeant of the 1965th Communications Squadron, Udorn took SMSGT Long to the airmens' barracks. SMSGT Long's report accurately recorded the problem.

"This area(the dormitory) is located approximately 3 miles from their duty area. The billets provided are two-story, open bay type, 44 man per bay. Latrine facilities are 3 showers, 3 commodes and 4 washbasins per bay. The majority of personnel living in these billets are shift workers and with the present con-figuration there is no privacy whatsoever. These conditions are a definite morale

factor for all concerned. Recommend 1974th Comm Gp (TC) coordinate with 7/13AF to investigate the possibility of billiting fewer men per bay..."

(2:3)

In February 1968, the North Vietnamese and Viet Cong executed what is now known as the Tet Offensive. Communications and computer technicians worked long hours and also performed perimeter guard to protect their bases from 1 being overrun by the enemy (6:154A (Photograph with explanation)).

Sergeant Bruce L. Carey of the 1876th Communications Squadron and Sergeant Francis X. Turbert of the 1972nd Communications Squadron died during a rocket attack. More than 20 communicators and computer people were injured during the week of the Tet offensive.

Upgrades and training on new equipment continued. UNIVAC 1050-II maintenance responsibilities were assumed from contractors by the 1881st Communications Squadron, Cam Ranh Bay, RVN. UNIVAC-II equipment was installed in some of the larger base communications centers. Two airmen were originally trained on operations of the new equipment, and those two trained nine more operators (6:156-163). The ASCs were operating more efficiently, thanks to the NCOs and airmen who wrote documentation and provided training.

We continued to provide aid and support to our host. For

example, at Binh Thuy, RVN, communicators of the 1980th Communications Squadron solicited their friends and families in the United States for clothing. Sixteen boxes of clothing were sent to them and donated to villagers of Phong Dien. The enlisted people also built 16 homes for refugees of the Tet Offensive(6:196).

Shortages of personnel, supplies and quality training became serious by 1969. Brigadier General Harold Johnson, the Pacific Communications Area Commander vented his frustrations of the situation by informing all his subordinate units by sending a message to them. It stated, "I want every commander to know that the CONUS manning in AFSCs 272X0, 304X1 and 301X1 is extremely critical"(13:..). The implication of this statement of course is subordinate commanders thought people should have been sent from the United States to increase their own manning.

Manning, training and maintenance shortages also existed in other areas. For example, contractors once again were unqualified and spare parts were nonexistent for the UNIVAC 1050-II supply system computer(4:..). Shortages of trained personnel, spare parts, and equipment were chronic problems for DSTE terminals(15:..).

A memo published in May 1970 stated constant on call or on-site requirements for operators and maintainers, lack of computer experience by trainees and apprentice levels (3 and

5 levels), and the short tour were sources of serious problems for the operation of base supply. The memo also stated that the system was not designed to run constantly, as was required in SEA(9:7-11).

By 1970, President Nixon was trying to find a way to end the war, and we were up to our teeth in problems. Our countries leaders attempted to find "peace with honor", and enlisted technicians dealt with problems of such magnitude unthought of in 1960. Our country found peace and by 1970 and 1971, operations were being consolidated, removed from SEA or turned over to the South Vietnamese.

SEA Communications Region was deactivated in 15 June 1971 after nine busy and hectic years. At its peak, it had 6,000 people assigned in Thailand, Vietnam, Taiwan and the Philippines. Shortly after the deactivation, we completely pulled out of South Vietnam, leaving much of the equipment we installed and operated.

In reflection, we started with old 1950s vintage equipment and a communications structure intended for long range airlift. We quickly adapted by using mobility, computers and automated communications despite hostile conditions, shortages and lack of support back home. Enlisted people worked long hours, repaired and operated teletypes and computers, and tolerated a defunct supply system.

The people should not be forgotten. SMSGT Long's effort

with the Staff Visit had a long lasting effect on the mission. A2C Koch taught Vietnamese more than how to speak English. He taught them that Americans are really good, caring people. He risked his life to do so. Sergeant Carey and Sergeant Turbert gave their life for freedom. They were only a few of our heroes.

CONCLUSION

I've told you a story of our heritage. I explained the organization and issues faced by communicators and computer people through the buildup in SEA during the 1960s, and how we proudly completed the mission assigned to us despite the odds. I explained the commitment through the Gulf of Tonkin Incident and the resulting buildup of communications and computer functions in SEA. Then I told you about the sacrifices during the Tet Offensive of 1968, and how the war was never the same. Finally, I briefly explained the overwhelming problems we dealt with, such as shortages and finally our withdraw from Vietnam.

Students of this war already learned many lessons. Many of these lessons were integrated into our National Strategy, our units' missions and the way we execute military operations today. I'm personally grateful for those who didn't quit after the Vietnam War, but decided to work hard and make our military and our country winners again. This post Vietnam dedication may have been the most difficult dedication of all.

BIBLIOGRAPHY

General Order of Listing in Bibliography -

Number, Originating agency, document, "title", publisher, date.

1. AFCS(CSNOI) letter to PCA/DI, 27 Feb 64.
2. AFCS/CSODTP letter to DCA, "Final Summary of Category III Testing", 3 November 1967.
3. CINCPACAF message to DCA, "FINAL SUMMARY OF CAT III TESTING", date unknown.
4. DCS/Material briefing by Col John H. Connor to Gen Gould, Gen Stoney and Gen Johnson, Communications-Computer Problems in SEA, 6 September 1968.
5. DI, letter to AFCS(SSNOI), "Community Relations Activity Summary", 22 March 1965.
6. Historical Division, Office of Information, Headquarters, Pacific Communications Area (prepared by Lola C. Glay). "History of Pacific Communications Area 1 July 1964 - 31 December 1964." Volume I-Narrative. Air Force Communications Service.
7. ----. "History of Pacific Communications Area 1 January - 30 June 1968." ----.
8. HQ AFSC/CSODTP message to DCA, "FINAL SUMMARY OF CAT III TESTING." date unknown.
9. HQ Pacific Communications Area(AFCS), Corona Harvest Report, "U1050-II Base Supply Computers in SEA." May 1970.
10. Office of Information, Headquarters Pacific AAS Area (prepared by TSgt Leland W. Lindemer). "History of the Pacific Airways and Air Communications Service Area, 1 January 1961----30 June 1961." AIRWAYS AND AIR COMMUNICATIONS SERVICE.
11. Office of Information, Headquarters Pacific Communications Area (prepared by TSgt Leland W. Lindemer). "History of Pacific Communications Area, 1 January 1962----30 June 1962." AIR FORCE COMMUNICATIONS SERVICE.
12. PAC Comm Area(TCODT), PCA Form 9 "Staff Visit Report" to SEA Communications Region by SMSgt James L. Long, 27 February 1968.
13. PACCOMMAREA (B.Gen Harold Johnson), message to PACIFIC UNITS, "Manning Shortages", Date Time Group illegible, but about 1968.
14. PCA/HO. "Pacific Communications Area." Wheeler AFB, HI. 1 May 1981.

15. Southeast Asia Communications Region, Pacific Communications Area, USAF (prepared by Vern C. Baily, "History of the Southeast Asia Communications Region 1 April-30 June 1970.")
16. ---- (prepared by TSgt Samuel I. Shreve), "History of the Southeast Asia Communications Region 1 July-30 September 1970."
17. TCS "Staff Assist Visit Report - Far East Comm Div and 1962CG 13-20 Aug 63", to AFCS/TC.
18. 1st Mobile Communications Group, "Semi-Annual History Report 1 Jan-30 June 64."
19. 1st Mobile Communications Group, various memos of acceptance for 1876st CS, 22 Dec 66 through 25 March 67.
20. 1st Mobile Communication Group and 1876st Communications Squadron "Letter of Agreement", 6 September 1967.