

**United States Naval Communications Station, Philippines
(NAVCOMMSTA PHIL)**

Fleet Support Detachment, Da Nang, Republic of Vietnam (Det Bravo)

Command History

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The compilation and writing of this history has been a nearly four year project, and over that time we have identified close to 800 people who were assigned to the detachment at one time or another. In the course of my research I have contacted many of these people and to a man all were helpful both by providing details and documents pertaining to the Detachment. Many of those I would have liked to interview are gone, and since this project started we have lost more. Among those who contributed significantly before leaving us were Wayne Care, Joe Wagner, John Wise and Larry Brosh (VQ-1). A special mention and thanks to Ray Biziorek, who recently departed on his final mission. Ray did an excellent job editing my haphazard writing and will be sorely missed. Thanks to all of you for your contribution and RIP along with all our departed brothers.

The original organizers of the Big Look Spooks deserve special recognition, because had it not been for their interest this project would not have been launched. Among those are Steve White, Tom “OB” O’Brien, John Shipman, David Gilbert, George Purring, Tim Yerdon, Dave Thomas, Chuck DeCourley, and John Phipps. John Shipman, Steve White and David Gilbert planned our three reunions (thus far), and David currently manages our treasury, funded in part by the sale of Big Look Spook coins designed by John Shipman.

Today every group has a website, and our group is no exception thanks to Steve White, the designer and maintainer of the Big Look Spooks web site (www.biglookspooks.com). Steve has put in a lot of hard work and wizardry to provide a virtual home for the Spooks, and if you haven’t yet checked it out, you should. Additional thanks to Duey Mann, who maintains the RIP section that lists our departed brothers; and Bill Dillon who maintains a database detailing the dates of service for the nearly 800 names on our roster. In a similar vein, Tim Yerdon maintains our Facebook page, loaded with lot of good photos and current information.

Allan “Putt” Prevette, the VQ Association historian, also deserves special recognition. Putt steered me to numerous sources within the VQ community when he was unable to answer my questions directly (which wasn’t often), and was always quick with a reply.

And last but certainly not least, thanks to all those who served at Da Nang. When your nation called you were there, and all of you have continued in that same spirit. Whenever I asked anyone for assistance with this project you all stepped up, supplying me with facts, figures, and more good stories than I could use. Sal Godfrey traveled all the way from Oklahoma to spend an afternoon reviewing what I had written about the

origin of the det, and others too numerous to mention assisted with material and memories to replace the official records we couldn't locate. I know there were others that contributed as well, and your submissions were all gratefully received.

Welcome home, Brothers!

Disclaimers

Like any work, there are bound to be errors and omissions. For such I take full responsibility, and welcome any additional information or records that anyone might care to contribute. If warranted a revised edition will be prepared.

In accordance with the agreement I signed when I retired, this work was submitted to the National Security Agency for review. They in turn submitted it to the Department of the Navy and Commander Tenth Fleet for additional review. A copy of their release letter follows.

As requested in their letter, the views and opinions expressed herein are mine and do not reflect those of NSA/CSS.



NATIONAL SECURITY AGENCY
CENTRAL SECURITY SERVICE

FORT GEORGE G. MEADE, MARYLAND 20755-6000

PP-17-0497
31 August 2017

LCDR Robert E. Morrison, USN (ret.)
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Virginia Beach, VA 23464

Re: NSA Prepublication Review of "Naval Communications Station Philippines Fleet Support Detachment, Da Nang, Republic of Vietnam (Det Bravo Command History" **(PP-17-0497)**

Dear LCDR Morrison:

NSA has determined that the submission of your book, titled "Naval Communications Station Philippines Fleet Support Detachment, Da Nang, Republic of Vietnam (Det Bravo Command History by LCDR Robert E. Morrison, USN (ret.)," received at NSA on 06 July 2017, may be publicly released in a private capacity per NSA/CSS Policy 1-30, paragraph 2.a-e.

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Sincerely,

A handwritten signature in cursive script that reads "Megan Anlage".

Megan Anlage
Information Security & Classification
Public Release Review Team

Forward

The history of the Vietnam War would not be complete without some recounting of the role played by Signals Intelligence (SIGINT). Fortunately, forty some years after the end of hostilities, most of what was once highly classified information has now been released to the public. Unfortunately, many of those who could best tell the story are no longer available to tell it. This modest effort is a beginning, and hopefully knowledgeable readers will supply more detail where it is needed.

Some definitions¹ might be useful before getting to specifics. We call ourselves BIG LOOK Spooks (BLS). BIG LOOK is a Navy cover name applied to the specially modified AN/APS-20 radar mounted in the big radome on the bottom of the EC-121M “Willy Victor” and EP-3B “Orion” reconnaissance aircraft flown by Fleet Air Reconnaissance Squadron ONE (VQ-1)². Modifications were made to this radar to allow it to function as a very high-gain, highly directional electronic intelligence (ELINT) receiver (specifically, to collect emissions from hostile radar sites). By extension, BIG LOOK was applied to the entire aircraft (EC-121M/EP-3B). BIG LOOK, along with some other ELINT features, which will be discussed later; and significant communications intelligence (COMINT) capability, made the BIG LOOK aircraft the most efficient and effective airborne collection and early warning platform during the Vietnam conflict. Other airborne platforms could do some of what BIG LOOK could, but only BIG LOOK was capable of simultaneous COMINT and ELINT operations. As a result, we flew a lot, averaging around two missions per day³, even in periods of low activity. Typically, during major air strikes the VQ-1/Naval Security Group (NSG)⁴ team would provide 24- hour coverage if needed.

One thing became apparent as I started on this endeavor: a lot of information is available regarding the Army and Air Force SIGINT efforts in Vietnam; yet very little is said about what the Navy did, airborne or afloat. I don’t think this was due to the classification status of the mission (Army and AF operations were classified at the same level as ours); rather, it was more a reflection of politics within the SIGINT system.

¹ Throughout this history, many abbreviations and acronyms are used. Some of these, radar, for instance, have become common terms in English. Others, especially some of the abbreviations, of which the Navy is so fond, are expanded and defined in Appendix One. Since this history is for limited distribution, the author assumes readers have some experience with the Navy and its unique jargon.

² This squadron had several names during its existence. For standardization, Fleet Air Reconnaissance Squadron ONE, FAIRECONRON ONE and VQ-1 will be used throughout.

³ Combining Big Look and EA-3B Skywarrior missions

⁴ Although this narrative is told from the NSG side, it is impossible to separate NSG and VQ-1. The strength of the platform derived from the COMINT/ELINT fusion developed by the entire aircrew, making us the only true SIGINT collector in the GOT (Gulf of Tonkin). Other platforms had one or the other, but not both.

Navy airborne and afloat NSG operations were Cryptologic Direct Support Elements (CDSE), which were not under the direct control of Director, National Security Agency (DIRNSA)⁵. During the life of Det Bravo, VQ-1 (including the NSG aircrew) worked directly for Commander, Seventh Fleet (COMSEVENTHFLT). Additionally, in the case of VQ-1, not all of the flight crew were cleared for Special Intelligence (SI)⁶. On the afloat side, there were as many as 15 afloat CDSEs during the last year of the war, none of which were controlled or tasked by DIRNSA. The Navy tasked these afloat positions via the CHARGER HORSE coordinator. The CHARGER HORSE coordinator was a cryptologic officer (161X)⁷ or Chief Petty Officer (CPO, usually a Morse collection specialist or linguist – CTCR or CTIC respectively) assigned to the Commander Task Force (CTF) 77 staff. DIRNSA and its field stations provided technical support, advisory tasking, and first heard support⁸, but they had no direct control over what we did. This flexibility allowed us to adjust coverage on-the-fly to meet the early warning needs of the situation at hand. This, in a nutshell, was the concept of direct support: getting info quickly to those who needed it, either to attack with an advantage, or to save lives.⁹ I think this is why we don't receive much official mention by DIRNSA in their history, DIRNSA didn't "own us", and thus, *we didn't exist*. So in the end, the burden is on us to tell our own story.

Finally, a short note concerning this history. What follows is an operational history with some personal reflections mixed in. Some things were left out, for instance, almost everyone has a "diving aircraft" story. Likewise, I've tried to limit rocket attack stories to those that were significant, i.e., those that were heavy attacks, and had an impact on our collective memories. The BIG LOOK spooks have established a web site and forum, other events, such as those experienced on "bennie trips," are better told in the forum venue. Several fellow spooks have been kind enough to write a short reflection on their time as BIG LOOK Spooks. These are included in Appendix Two, verbatim, as I received them. Any other reflections would be welcome and will be included in future editions. This edition is preliminary: additional information based on future research will be included before the final story is told.

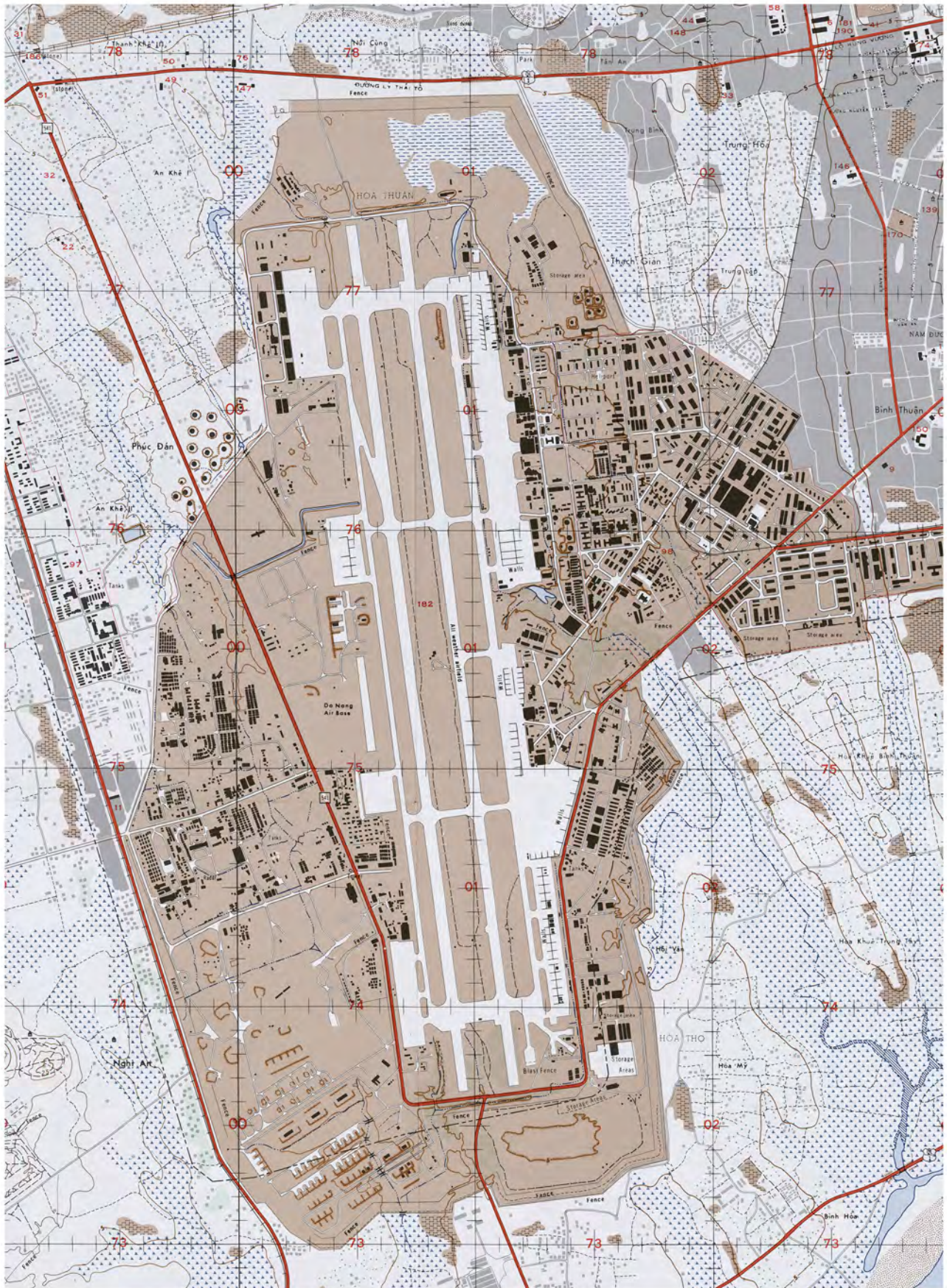
⁵ We did follow technical guidance governing the United States SIGINT System (USSS). We used standard USSS formats, were connected via CRITICOMM, were assigned a SIGINT Activity Designator (SIGAD – USN-843), and forwarded transcribed material to NSA for further analysis.

⁶ This was later changed after Vietnam, and all crew were cleared

⁷ 161X was the former designator for cryptologic officers. They are now designated 1810. Many junior officers detailed to cryptologic duties were designator 110X (general unrestricted line). The last digit of the designator indicated status – 0 for USN, 5 for USNR.

⁸ First heard support refers to the practice whereby the first station hearing a target of interest advises other interested collectors via a short advisory message.

⁹ CAPT Sidney Wood, one of the early Intelligence officers at VQ-1 Det Da Nang, summed it up this way, "This is what we were all about – Direct Fleet Support. Real-time tactical fleet combat support. Not collecting and sending it back to Fort Meade for 'evaluation' and, maybe, getting the 'evaluated' data back to SE Asia eventually. This is what differentiated [the]VQ/SECGRU team's mission from all other air collectors. The NSA types could never accept that and constantly tried to get us into their mode. Our standard answer was, several times over, "fine, just convince COMSEVENTHFLT, or CINCPACFLT, or CINCPAC, or JCS and we'll change." There were actually several shouting matches about this – on the ground in Da Nang in which LT Wood engaged with DIRNSA reps sent to get us to "mend our ways."



Chapter One: Introduction

Initial United States interest in Vietnam dates back to the Second World War when the US supported Allied efforts to expel the Japanese occupiers. At the end of World War II, the French regained control of their Indochinese colonies,¹⁰ today known as Vietnam; however, the restoration of French control was anything but peaceful. Almost simultaneous with the signing of the peace treaty with the Japanese, Ho Chi Minh established the Democratic Republic of Vietnam (DRV).¹¹ Throughout the late 1940s and early 1950s the French struggled to regain control of their former colony, but the decisive French defeat at Dien Bien Phu on May 7, 1954, marked the end of the French presence in Indochina. Peace accords were signed at Geneva on July 21 of that year,¹² which among other things, partitioned Vietnam at the 17th Parallel. The Geneva Accords also imposed a cease-fire and mandated both the withdrawal of French forces from the North and the Viet Minh from the South. Free elections were to be held in 1956 with the goal of reuniting Vietnam under one government. These elections never happened because Ngo Dinh Diem, head of the South Vietnamese government, refused to sign the Accords, and used this failure as an excuse to cancel the elections in the South.¹³

The US began direct military assistance to Vietnam on January 1, 1955, augmenting the economic assistance provided since 1951. The Vietnamese political situation remained in turmoil throughout the latter 1950s and into the early 1960s, and the US gradually increased its military role.

From the SIGINT perspective, NSA had been analyzing the Vietnam problem since the late 1940s. Agency legend has it that a Navy officer first translated Vietnamese traffic in 1949, during the days of the Armed Forces Security Agency, the predecessor to NSA. Early work was hampered by lack of basic things like dictionaries. Intercepts often had to be translated into French and then from French to English. Differences in the Vietnamese and English alphabets further complicated translation, since additional Morse character combinations were necessary to accommodate Vietnamese diacritical marks.¹⁴

Gradually, throughout the 1950s the Viet Minh transitioned from a guerrilla organization into a regular, standardized military, and this change was reflected in COMINT. In addition to reflections of rank and proper military terminology, cryptographic systems began to appear, with training provided by the Chinese. In early

¹⁰ The three French colonies were Annam, Tonkin, and Cochin China.

¹¹ Established Sept 2, 1945 in Hanoi.

¹² Signatories were the DRV, France, Peoples' Republic of China, the Soviet Union, and the United Kingdom. The State of Vietnam (Emperor Bảo Đại) and the United States did not sign.

¹³ Vietnam: A SIGINT Paradox (Part I), released by NSA 2/27/2007 and available from nsa.gov as a PDF file

¹⁴ Ibid.

1959 the Peoples' Army of Vietnam (PAVN) 559th Transportation Group was organized as subordinate to the General Directorate of Rear Services (GDRS) in Hanoi; with the purpose of increasing infiltration operations along the western border of Vietnam via the route known popularly as the Ho Chi Minh Trail.¹⁵ GDRS communications became an important source of information regarding infiltrating supplies and forces into the south.

VQ-1 had been flying missions over the Gulf of Tonkin since 1952. These early missions were flown in support of the French using VQ-1's P4M-1Q aircraft, but no spooks were carried on these missions.¹⁶ Spooks did fly on some P4M-1Q missions during the Korean War, and at least one Spook¹⁷ earned an Air Medal during that conflict.

Regular missions targeted against Vietnam started in the early 1960s after the arrival of the EC-121M aircraft. Those early missions were staged from various airfields outside Vietnam. Ron Schneider¹⁸, an R-brancher stationed at Kamiseya, recalled a temporary assignment (TAD) to Shu Lin Kou AB (Taipei, Taiwan) in 1961. The mission, flown in PR-24, launched 4 January 1961 to fly over the Gulf of Tonkin. In addition to Schneider, the spook crew included CTIC James E. Gerrity¹⁹, a Chinese linguist (Chiling) as supervisor, and two other Chilings (CTI2 James Plum²⁰ and one other linguist). The mission proceeded toward the GOT, but aborted and dove for the deck when Plum detected MiGs launching from Canton, and additionally, one of the electronic warfare operators (EWOP) detected a lock-on. As the plane dove, the top radome was torn off; however, the plane safely recovered at Taipei.²¹ Missions resumed 7 January, using PR-22, flown in from Atsugi.

Throughout the early 1960s occasional flights continued to be flown in the GOT. These were staged out of Don Muang International airport in Bangkok, Naval Air Station Cubi Point in the Philippines, and Taiwan.

In early 1964 VQ-1 received tasking to begin developing the electronic order of battle (EOB) for North Vietnam and to look for evidence of MiGs and SA-2 missile sites, neither of which was known to be in North Vietnam previously. To accomplish this, CDR Al Holt, Commanding Officer (CO) of VQ-1, selected a crew especially for these

¹⁵ Ibid.

¹⁶ Info supplied by CAPT Norm Bull, USN (ret) via e-mail. CAPT Bull did two tours with VQ-1 and was an aircraft commander on both the P4M and EC-121M. On one P4M mission in the mid-1950s CAPT Bull and CDR Dean North overflew downtown Hanoi and Haiphong.

¹⁷ CTCM Ron Paul was attached to NAVCOMUNIT 38C, a detachment from Japan collocated with the Special Projects division at Sangley Point NAS in Cavite, just south of Manila.

¹⁸ Retired CTRCS.

¹⁹ CTIC Gerrity was well-known in Taiwan and was considered an excellent Chinese linguist, both professionally and socially. According to Ron Schneider, "he had been in the Far East for years, spoke [Chinese] dialects, and he ate and drank nothing but fried rice and Scotch". Shortly after this incident he retired, and continued in the intelligence business with the CIA for more than ten years, retiring a second time in 1976. RIP September 11, 2015.

²⁰ Retired as CTICS. RIP April 30, 2015.

²¹ VQ Association Newsletter Summer/Fall 2004, pp 4-5

missions. This became known as Crew 21, with LCDR Norm Bull²² as aircraft commander. In July 1964 the crew deployed from Atsugi to Don Muang International Airport Bangkok, Thailand to fly a series of missions in the Gulf of Tonkin (GOT) using an EC-121M aircraft.

The first VQ-1 plane to land in Da Nang arrived 17 July 1964 after a 9.1 hour mission enroute from Don Muang. The next day the plane took off from Da Nang but lost an engine shortly after takeoff and had to return to Da Nang. The plane returned to Bangkok on the 20th and flew a 9.1 hour Bangkok to Bangkok on the 21st, also over the GOT. The following day the crew flew 8.9 hours Bangkok to Da Nang (over the GOT), and returned to NAS Cubi on the 23rd of July 1964.²³ These July flights were flown to look for evidence of MiGs and SA-2 missile sites.

At this time there wasn't much military presence in Da Nang, and so both officer and enlisted crew were billeted together off base in an old French Batchelor Officers' Quarters (BOQ) located one block over from the Sergeant's Club in downtown Da Nang. The BOQ was in a walled compound and painted white, earning it the nickname of the "White Elephant." Although the war hadn't started in earnest, there was a bit of internal unrest within South Vietnam, which required the crew to maintain some sort of security watch. The missions were somewhat shorter, and two missions per day were not uncommon. When not flying, Doug Stenzel recalls drinking a lot of beer, playing poker, and TAP (a VQ version of blackjack).

Similar to the VQ crew, the Spook crew was probably hand-selected as well. Larry Brosh²⁴, the Airborne Electronic Supervisor (AES) on Crew 21, remembered GySgt Frank S. Sutherland, Jr. USMC as an "I brancher²⁵," who flew all the missions, and CTC Thatcher, who normally sat Position 7²⁶ on the Willy. At least one additional CTI2 flew with the crew as well²⁷. The NSG officer and linguists came from Naval Communications Station Philippines (San Miguel). Other CT crew included CTR2 Doug Stenzel²⁸ (from NSGA Kamiseya) and CTT2 Marvin 'Mac' Metheny²⁹ (also from Kamiseya), who was assigned to search for non-Morse signals.³⁰

Although the accommodations were rather nice (compared with what was to come), some kinks had yet to be worked out with the equipment on the plane. The CTR position consisted of an R-390A receiver secured to a piece of plywood, which was in turn clamped to a table. Unfortunately since the installation was not grounded, the

²² Retired CAPT, USN

²³ Bull, op. cit.

²⁴ LDO LCDR (USN ret.). RIP January 13, 2016 in Midlothian, TX.

²⁵ Vietnamese linguist

²⁶ Referred to in slang as Pos 7 or Poz 7. Most likely Chief Thatcher was a CTTC from Kamiseya.

²⁷ Probably CTI2 Bob Madsen.

²⁸ Retired CTRCM, USN

²⁹ Retired LDO LCDR, USN

³⁰ The non-Morse position used two Nems-Clark VHF receivers targeted against printer in the MERCURY GRASS multichannel system.

operator needed to wear some sort of gloves while operating the receiver to avoid being electrically shocked.³¹

Aerial reconnaissance by VQ-1 was not limited to the EC-121M. Preparations for carrier operations had begun in late 1962, using the EA-3B Skywarrior, a converted light bomber³². The first actual deployment was on board the USS Kitty Hawk (CV-63) in May 1964.

Intelligence collection against North Vietnam also included ship-borne patrols, under the cover name DESOTO³³, which conducted freedom of navigation and intelligence collection along the coast of China and in the GOT starting in the early 1960s. Many of these units had embarked CDSEs. Although the CDSEs received advisory and technical support from NSA, they remained under control of the Navy. USS Maddox was on a DESOTO patrol with a CDSE when attacked on 2 August 1964³⁴. This attack, and another possible attack two days later, became known as the Gulf of Tonkin incident which culminated in propelling the United States into its undeclared war with North Vietnam.

As a result of the North Vietnamese attacks on the DESOTO patrol, the US retaliated with an air strike against North Vietnamese naval targets. VQ-1 provided support for this strike with an EA-3B from the USS Oriskany (CVA-34), but apparently without spooks³⁵. During this strike, two US aircraft were lost to North Vietnamese AAA.³⁶ No MiG reaction to these strikes was noted. On the 9th of August MiG 17s were detected flying from Hanoi in a defensive patrol. Things in and about North Vietnam remained relatively quiet for the remainder of 1964.

The August 2, 1964, attack on the USS Maddox in the Gulf of Tonkin marked the start of the active war in Vietnam. Prior to that time, the US presence had been largely advisory, and in some cases, military personnel assigned to Vietnam were accompanied by dependents.³⁷ To this day the Gulf of Tonkin Incident is shrouded in controversy, but without a doubt it marked a fundamental change in the nature of the US presence in Vietnam.

³¹ Information for the 1964 det supplied by Larry Brosh, Doug Stenzel, and Mac Metheny via e-mail discussions.

³² At one time as many as thirteen were assigned to the squadron.

³³ The first patrol was conducted in April 1962 by the USS De Haven off Tsingtao, China. DESOTO is reported to be an acronym derived from DEhaven Special Operations off TsingtaO. The patrol conducted by the Maddox was the 18th in the series.

³⁴ The CDSE complement included one future Big Look Spook (BLS), CTI2 Charles D. DeCourley.

³⁵ East op. cit. "During one of these EA-3B detes the seven members of LCDR Cunningham's crew won the Navy Unit Commendation for their part in the U.S. response to North Vietnamese aggression during the Tonkin Gulf incident of August 1964" Further details provided by CDR Ted Cunningham, USN (ret.) via e-mail (9/10/13).

³⁶ One of those shot down was LT(jg) Edward Alvarez. He spent the entire war in the Hanoi Hilton and was released at the end of hostilities.

³⁷ At least one BLS, John Shipman, was a dependent in Vietnam in the early 1960s.

For the US Navy's cryptologic community, this meant the establishment of a permanent collection site in Vietnam itself³⁸. This unit, administratively designated Naval Communications Station Philippines Detachment Alfa, was established August 15, 1964 at Phu Bai³⁹ near Hue, Vietnam.⁴⁰ Later on NCSP would establish other detachments in Vietnam, two in Da Nang (Bravo and Delta), and one short-lived detachment (Charlie) in Saigon⁴¹.

Even before the establishment of NCSP Det Bravo, NSG personnel were flying with VQ-1 during missions targeted against North Vietnam. Initially these missions were more strategic in nature, aimed at collecting EOB information together with any supporting communications signatures. Once the air war started in early 1965, the mission fundamentally became one of direct support to the air strikes. Simply put, using the information detected onboard, VQ-1 aircraft (radio callsign DEEPSEA) broadcasted warnings of enemy air and SAM hostile intent to Navy and Air Force strikes over North Vietnam. We successfully did this until the end of the war. Though largely unheralded at the time, many of us have received a quiet "thank you" years afterward from a pilot who was warned in time by DEEPSEA.

³⁸ Prior to the establishment of this unit, the Marines had done some collection in concert with the Army at Pleiku and Phu Bai. Most Navy collection was done from the Philippines. The USAF Security Service AFSS) also had an operation in Da Nang from the early 1960s.

³⁹ Originally USN-27J, later USN-842.

⁴⁰ Even before the formal establishment of Det Alfa, elements of the Army Security Agency (ASA) and the USMC First Radio Battalion were already operating a SIGINT collection station at Phu Bai. Some of the SIGINT reflection of the GOT incident was collected and reported from Phu Bai.

⁴¹ Det Charlie was the River Patrol SIGINT unit, only in operation for a few months (Klar)

Chapter Two: 1965 – 1966

In early 1965 VQ-1 commenced a series of missions in the GOT, aimed at locating enemy radars using BRIGAND.⁴² On 7 February 1965, strikes were launched in retaliation for some Viet Cong guerilla bombings in South Vietnam. The air war over North Vietnam commenced in earnest in March 1965. Nicknamed ROLLING THUNDER, it became one of the longest bombing campaigns ever conducted by US forces. MiG 17 defensive patrols continued but stayed north of the 20th parallel. For the most part, US aircraft lost were shot down by AAA.

As previously mentioned, EC-121M missions supporting these operations were staged from various airfields in Asia. Missions were flown in and out of Da Nang, but weren't supported by a permanent detachment. EA-3B missions were flown from one of several carriers, or in the case of the EC-121M, from NAS Cubi Point in the Philippines. Spooks for these missions came from San Miguel, and flew without any formal TAD orders. Since the missions were flown from Cubi Point, the spooks (enlisted only, no officers flew on these missions) merely rode a van (or some other ground transportation) to the airfield, a ride of a little over an hour from San Miguel. That was just the start of a long, arduous day. Missions were ten to twelve hours in duration, but only two hours or so were spent on station. The remainder was transit time...nearly four hours each way.

In April of 1965, MiG 17s were first noted in offensive posture, and on 25 July, an USAF RB-66C aircraft intercepted FAN SONG B from North Vietnam, signaling the operational introduction of the SA-2 GUIDELINE missile system.⁴³ These significant developments, coupled with the expanding air war, made it clear more on-track time was necessary. On 3 September, 1965, VQ-1 first deployed an EC-121M "Willy Victor" (PR-21, BuNo 135749) to Da Nang full time.⁴⁴ This marked the establishment of a permanent VQ-1 detachment at Da Nang⁴⁵. Spooks assigned to these missions were ordered directly to "Senior Naval Aviator, COMFAIRECONRON ONE Detachment, Danang, Republic of Vietnam." The official establishment of a collocated NSG detachment was still a few years away.

⁴² BRIGAND = Bistatic Radar Intelligence Generation and Analysis, New Development. Invented by Chuck Christman, the legendary "Crab" of VQ-1, BRIGAND passively located circular scanning air search radars by capturing the return pulses. For a good technical description of BRIGAND and BIG LOOK, see Price, Alfred History of US Electronic Warfare, Volume III, pp 14 - 17

⁴³ Price, *ibid*

⁴⁴ Aircraft Commander was LCDR Robert A. Hullander. Information about the first Willy deployment was provided by AFCM Allan "Putt" Prevette, USN (ret) via e-mail. Then ADR2 Prevette was a Flight Engineer on that crew.

⁴⁵ This detachment may have had several letter designations; at least one source refers to the det as Delta. Det Bravo is the most common designator.

Missions over the GOT (Da Nang to Da Nang) commenced 5 September 1965. A small contingent of NSG personnel was assigned TAD, all from NCSP. Ops tempo was heavy from the very start. During the first month 32 Willy missions were flown, despite five days lost for an engine change. Phil Szpiech, one of the first Petty Officers in Charge, recalls flying nearly 200 hours per month during late 1965. Initially there were no Chiefs, and the Petty Officer in Charge (POIC) duties fell to three CTI1s – Damon L. “Sal” Godfrey, Don Boggs, and Phil Szpiech⁴⁶. NSG officer evaluators started flying about this time; one of the very first was LT(jg) David R. Patterson.⁴⁷



(Left to right) CTI1 Phil Szpiech, CTR3 Gary Hughes, CTI1 Don Boggs, CTI1 Damon ‘Sal’ Godfrey, CTR3 Bill Schultz, CTI3 James Lanigan.

(Photo courtesy of Charles Lapsansky⁴⁸)

Daily EC-121M coverage was supplemented with the EA-3B. At first the EA-3B missions continued from NAS Cubi, flying what was known as a double shuttle. The whale would launch from Cubi, fly a mission and land on a carrier, refuel and launch on a second mission. This mission would recover at Da Nang, refuel and return to Cubi. Prior to establishment of the Det at Da Nang, the Whales had flown from Cubi and various carriers. The Whales soon joined the Willies at Da Nang, a much shorter day for their crews.

In the beginning conditions at Da Nang were austere. Initially some 20 personnel lived in an eight man tent⁴⁹ and later were moved to temporary AF barracks on the southeast side of the runway. Of note, the ordered personnel were authorized “*to have in your possession one side arm and any other weapon which your Officer-in-Charge may direct.*” Not a great place for liberty, although at that point there were few restrictions. Spooks, being what they were, took all this in stride and immediately set about to improve their situation. Sergeant Chester V. Harris, a Marine assigned to the Spook contingent, demonstrated extra talent as a “procurement specialist”, and the spook tent soon had an attached screen porch, complete with a small refrigerator and a supply of steaks. This modest effort was the forerunner of the World Famous International Spook Mess of later years.

⁴⁶ Godfrey, a Vietling, retired as CTICM. Boggs and Szpiech were Chilings. Boggs retired as CWO4, Szpiech as CTICS.

⁴⁷ Retired as CAPT, USN and spent an additional 15 years working for NSA. RIP July 2, 2009.

⁴⁸ ATCS USN, Retired. Senior Chief Lapsansky was assigned to VQ-1 in Da Nang various times during the 64-65 period.

⁴⁹ Interview with CWO4 John T. Wise, USN retired (10/31/13)

CDR Thomas F. Hahn, the head of the NSG Department at NCSP, spent almost two months at Da Nang (from November to December 1965), observing operations while flying on BIG LOOK missions.⁵⁰ He recalled one day while sitting on a rubber fuel bladder, a stray shot punctured the bladder near where he was sitting. Luckily the only thing damaged was the bladder. Although he flew as an observer, and had studied Chinese at Yale, he lacked technical, “hands-on” cryptologic skills, and flew as a trainee. Since he wasn’t a primary crew member, he sat on the floor next to the spook positions, much to the surprise of the VQ-1 aircraft commander.

The Secretary of the Navy recognized VQ-1’s service by awarding them the Navy Unit Commendation (NUC) for the period 22 May 1964 to 30 November 1965. The awarding citation read in part:

“...provided direct airborne support for Naval operations in the Gulf of Tonkin and over Laos and North Vietnam. Performing often as single-plane detachments under most adverse operating conditions, elements of Fleet Air Reconnaissance Squadron ONE have flown unarmed reconnaissance flights over hostile territory and adjoining waters. These collective efforts in providing current, pertinent intelligence data have materially contributed to the overall effectiveness of United States Naval operations and have been instrumental in saving countless lives in Southeast Asia....”

The citation went on to add that “*all personnel attached to and serving with*” VQ-1 during the indicated period were authorized to wear the NUC ribbon. This included the Spooks, all of whom were ordered to temporary duty with the squadron.

Records are sparse for the first months of 1966. A summary produced by Navy historians stated in January 1966 “EA-3Bs of TF 77 detected two possible lock-ons by MIG radars during the month. The first occurred 30 miles southeast of Haiphong and the second 40 miles southeast of Thanh Hoa. On the second occasion the EA-3B escorts attempted to intercept the bogeys, but without success. This

America’s Secret War

Even before the Gulf of Tonkin incident, the United States was involved in Southeast Asia, though not in Vietnam. In an unpublicized conflict often referred to as America’s Secret War in Laos, American operatives, mostly CIA, worked to support Royal Lao forces fighting against the Pathet Lao (Communist backed). Although for the most part VQ wasn’t involved, in December 1965 a series of missions was flown from Don Muang International (Bangkok), using an EC-121M. The object of these missions, flown over Laos and Cambodia, was to attempt to locate AAA sites, and identify any SAM sites (SAMs were new to Vietnam at that time). The lone Spook, Don Pountain, joined the VQ crew in Taipei and proceeded to Thailand, flying at least 17 missions before returning to Da Nang for mechanical repairs to the plane. The missions were somewhat successful as several AAA sites were located, sometimes when they fired at the mission aircraft.

Later on during the War EA-3Bs routinely flew over Laos, usually at night. These missions were called Black Track, and on at least one occasion the EP-3 was flown over Laos as well.

⁵⁰ During that period CDR Hahn flew 16 missions (a total of 83.7 hours).

action, plus indications of more MiGs being shipped to North Vietnam from the Soviet Union, augured more activity of this kind in the future.[sic]”⁵¹

In February 108 EA-3B sorties were flown but no airfield/carrier was mentioned.⁵² In May, “five EA-3B aircraft operating from NAS Cubi Pt. and CTF 77 carriers, and 2 VQ-1 EC-121M (BIG LOOK) aircraft based at Da Nang Air Base continued to provide SAM/MIG alert warnings to PACOM strike/recce⁵³ aircraft and furnished Task Force commanders with tactical EOB. 141 SAM and 38 MiG warnings were broadcast to strike/recce pilots from VQ-1 missions flown in the GOT. Two EC-121M aircraft alternated flight operations and provided coverage from the normal BIG LOOK Op-Area from approximately 0630H to 1830H.”^{54 55} During that time, and actually throughout the life of the Det, Da Nang was one of the busiest airfields in the world.

Ensign Myron T. Johnson and Ensign Thomas F. Stevens⁵⁶ followed LT(jg) Patterson in early 1966, serving as airborne evaluators and Officers-in-Charge (OICs). Orders issued in the summer of 1966 continued to direct TAD personnel to report to the “Senior Naval Aviator, Fleet Air Reconnaissance Squadron ONE, Da Nang, RVN”. Although NCSP Det Bravo was not yet established, the Naval Security Group (NSG) now had a permanent presence in Da Nang. The OIC and LCPO/POIC were not permanently assigned but instead were the senior members of the NSG contingent.

In August of 1966 the detachment consisted of two NSG officers, Ens. Airell B. Jenks⁵⁷ and LT Charles “Talley” Malloy, and 24 enlisted flyers from NCSP, and probably additional personnel from Kamiseya, Japan. All the flyers were listed as non-crew, probably because enlisted Communications Technicians only had started to earn wings in 1965. The senior enlisted on the list of flyers was GySgt Alvie E. Smith. He was relieved in late August by Chief Petty Officer Gary Cooper.⁵⁸ Chief Cooper, who was there TAD during August to November 1966 as the leading chief, recalls sleeping in the temporary barracks only two nights out of a 75 day TAD. The remainder of the time he slept in the operations/admin hut shared with the USAF crews from Yokota. Two flights daily seven days per week were normal while Chief Cooper was there. The two missions provided roughly 16 hours total coverage. Approximately 28-30 total personnel were assigned, including two CTI1 (Russian) linguists TAD from Kamiseya, Japan, Dick Williams and Russ Krause.

⁵¹ Selected Naval Documents: Vietnam, United States Naval Operations Vietnam, Highlights; January 1966.

⁵² Selected Naval Documents: Vietnam, United States Naval Operations Vietnam, Highlights; February 1966.

⁵³ Recce = reconnaissance

⁵⁴ H (or Hotel) time was the local time in Vietnam during the War, 8 hours ahead of GMT (or Zulu).

⁵⁵ Selected Naval Documents: Vietnam, United States Naval Operations Vietnam, Highlights; May 1966.

⁵⁶ Johnson retired as CDR, Stevens as RADM after serving as COMNAVSECGRU.

⁵⁷ Jenks, Airell B., A Dangerous Business: US Naval Security Group Operations, NCVA Cryptolog, Pensacola, FL spring 2006, pp 12-13

⁵⁸ CTTC, retired as CTTCs

The Russian linguists were tasked to determine what, if any, direct involvement the Russians had in the training of MiG pilots and SAM operators, since both systems were supplied by the Russians. Dick Williams remembers one particular incident:

“Several F-4 Phantoms were in the area flying cover for the EC-121 when Navy Vietnamese linguists aboard the aircraft detected two North Vietnamese MiG-21s being vectored toward the plane by a North Vietnamese GCI⁵⁹ controller. This information was relayed to US controllers, who directed the Phantoms to intercept the MiGs. A few minutes later, the NVAF GCI controller attempted to contact the MiG flight (in Vietnamese), using calls “Number 1” and “Number 2.” After several unsuccessful attempts, another voice, which was clearly not Vietnamese, called in Russian “Number 2” several times. “Number 2”, also clearly not Vietnamese, answered in Russian. The controller asked where “Number 1” was and “Number 2” answered that he (Number 1) had “left the aircraft” and was “under parachute”, indicating the pilot had bailed out. Since there were no follow-up communications to support an engagement, it could not be determined if “Number 1” had been attacked and shot down by the F-4’s or simply decided to abandon the aircraft rather than engage. “Number 2” was ordered to return to base. Chalk one up for the Spooks.”⁶⁰

In addition to Vietnamese, Chinese and Russian linguists, Korean linguists were flying as well, looking for any support the Democratic Peoples’ Republic of Korea (DPRK)⁶¹ might be providing in the effort against the US.

⁵⁹ GCI = Ground Controlled Intercept

⁶⁰ Account provided by Richard A. Williams via e-mail.

⁶¹ North Korea, or KORCOMs

Chapter Three: 1967 – 1968

By 1967, the BIG LOOK operations tempo was well established. At least one Big Bird mission (EC-121) flew daily, supplemented by Whales (EA-3B), and/or a second Big Bird as needed. By March 1967, 54 enlisted personnel were assigned on temporary orders (TAD) from NCSP, over half of which were designated crew. Additional personnel were TAD from Kamiseya. Living conditions were improving as well, with new barracks and other facilities under construction. Government messing became available effective 25 May 1967, and somewhere about that time NCSP Det Bravo was inaugurated, with LCDR Donald R. Larson as Officer-in-Charge⁶². Much of this “forward movement” came to an abrupt halt the night of July 15.

“Shortly after midnight on 15 July, the Da Nang Air Base was struck by enemy rockets. Eight military personnel were killed during the attack and 155 others were wounded. The enemy barrage, which lasted approximately 45 minutes, started numerous fires and resulted in extensive structural damage to U.S. Navy, Marine and Air Force facilities. In addition, eight aircraft were destroyed and 45 were damaged during the attack.” (NAVFOR Command History, July 1967, p. 45)

This rocket attack was probably the largest experienced during the life of the detachment. Out of a total of 163 casualties, 44 were VQ-1 and NSG Det Bravo personnel.⁶³ Luckily no one was killed, but all three VQ-1/NSG Detachment barracks were destroyed. This was not due to a direct hit on the barracks, but rather to a hit on a nearby ammo dump. The dump exploded and rained shrapnel down onto recently constructed bunkers, which at the time, did not have roofs. Additional damage/injuries were caused by the shock waves of the exploding ammo. The fires from this attack were so intense that former BLS CTR2 Gary Hughes, then stationed 40 some miles away⁶⁴ at Phu Bai, could see the glow on the horizon. Most of the detachment was evacuated from Da Nang, with only a skeleton crew remaining behind.⁶⁵ When they returned, det personnel were temporarily billeted at Camp Tien Sha, located at the base of Monkey

⁶² The earliest reference to NCSP Det Bravo (uncovered thus far) is a Memorandum Endorsement to a set of TAD orders, dated 23 June 1967 and signed by LCDR Larson.

⁶³ Those Spooks wounded included CTI3 Joe Romero, CTR3 Bill Ayers, CTR2 Steven Kull, CTR3 Jackie Judice, CTI2 Joe Wagner, CTR3 T.C. Parker, CTM2 William “Turk” Tokarsky, Jr., CTRC Jack Archebelle, and LT(jg) Sean Byrnes. There were others as well.

⁶⁴ Forty miles as the crow flies, nearly 50 via the highway.

⁶⁵ William Tokarsky in e-mail.

Mountain, east of the base,⁶⁶ until new barracks could be built.⁶⁷ In addition to the destruction of the barracks, all the aircraft were damaged to some extent, and VQ-2 had to temporarily supply EC-121M aircraft from Rota, Spain, so that operations could continue.⁶⁸ Two people enroute to the det from the Philippines, Sgt G.R. Wright, USMC and CTRSN Lowell “Wilkie” Wilks, were at Clark Air Base waiting for a flight when they were told their orders were on hold. They finally arrived in Da Nang two weeks later.



Barracks and Bunker after the rocket attack of July 15, 1967 (photo courtesy of Dan Rogers)

In the fall of 1967 LT(jg) Ike Cole⁶⁹ joined the detachment as an evaluator, TAD from San Miguel for several months. Ike remembers flying a lot, almost every day, and the highly-skilled enlisted operators.

January 30, 1968, marked the start of the Tet offensive by the North Vietnamese. LCDR Carl Strobel, Det OIC at the time, recalls the planes being sent to Udorn Air Base in Thailand because of the increased rocket attacks. Flights continued over the GOT as usual, though, staged from Thailand. As always, a core team stayed behind in Da Nang. CTR3 Bill Erhardt, recognizing a deficiency in the det’s supply of weapons, took the initiative in true Spook fashion. According to his own account, Bill “...took a couple

⁶⁶ Nui Son Tra, or Son Tra Mountain on maps. It is the mountain on the tip of the peninsula which forms the eastern side of Da Nang Bay. Monkey Mountain was also the site of an Air Force command post, callsign RAWBONE.

⁶⁷ Leppert, William B., “CT Duty in Rocket City”, NCVA Cryptolog Spring 2009, p. 5

⁶⁸ Guestbook entry by CTR1 Andrew E. Altes at www.navycthistory.com.

⁶⁹ Isaiah C. “Ike” Cole retired as Rear Admiral, and served as Commander, Naval Security Group (COMNAVSECGRU) before retiring, one of three detachment alumni to reach flag rank and hold that office.

cases of booze up to Hill 327 and brought back a jeep load of rifles, ammo, and hand grenades. The Chief wanted to kill me!”

New crypto systems installed April – June 1968 further improved the capabilities of the detachment.

Liberty (which was never, even good at Da Nang) was further restricted after Tet. One set of TAD orders issued 30 August 1968 had two paragraphs added to the standard TAD order form, specifically spelling out the following restrictions:

“8. You must perform all operational flights and other travel via U.S. Military, fixed wing, non-combat mission, multi-engined aircraft only while in South Vietnam⁷⁰ except that if required, helicopter travel authorized for Da Nang complex provided helos operate in pairs making maximum use of over water routes to ensure maximum protection against possible capture by hostile forces. You must remain within a secure U.S. Military controlled compound at all times when not in a travel status with the following exceptions:

- a. Headquarters, NAVSUPACT, Da Nang*
- b. Camp Tien Sha*
- c. Stone Elephant (CLOSED MESS)*
- d. Marine Exchange*
- e. Air Force Exchange*
- f. China Beach Exchange*

9. Should you be required to travel to any of the locations listed in paragraph above, you must travel with a group of two or more persons, two of which must be armed U.S. military personnel. Travel will be in company of large groups of non-indoctrinated personnel whenever possible. Travel to Camp Tien Sha will be performed during daylight hours only unless exceptional operational necessity dictates night travel.”⁷¹

Despite these restrictions, Spooks would take occasional detours to downtown Da Nang or the small village to the west of Da Nang AB, commonly called Dog Patch⁷² by the Spooks.

Liberty wasn't the only thing that was not great in Da Nang. In addition to the ever-present rockets, nature contributed its share of pests and problems. Foremost of these were mosquitoes, and every newbie soon bought a mosquito net or suffered the consequences. Every once and a while something stranger came along. Sometime toward the start of the monsoon season (late May or June) of 1968 Da Nang was infested for a short time by some sort of wasps. Steve McRoberts recalled it this way:

⁷⁰ CDR Hahn referenced similar restrictions during his travel to Phu Bai in the summer of 1964.

⁷¹ TAD travel orders issued to CTI2 Frederick J. Wagner, USN.

⁷² The area west of Da Nang AB, along what is today National Highway 1 (QL 1).

“I think around May or June of ’68 we were inundated by insects that resembled yellow-jacket wasps. I’m speaking of the insects whose rear legs appear to be dragging when they fly and whose bodies have a distinct threadlike connector between the thorax and abdomen. Yellow jackets are aggressive and can sting multiple times, yet I don’t know that anyone was stung by one of these insects. While yellow jackets have distinctive solid coloring and are not transparent, the insects I am referring to had fainter markings and appeared to be nearly transparent. The black markings were grayer and the yellow markings were much more faint. Were they transparent? I don’t know because I didn’t pick one up to examine it for fear of being stung. I do remember that when one walked to the shower or the P tube one walked on dead or dying insects and that it was a disgusting task to shake them off the mosquito netting regularly and get rid of the detritus...I don’t think the presence of the wasps lasted more than a few days, or perhaps at the most, a week.”⁷³

Late 1968 marked the departure of two experienced operators, Chuck Dibble and Joe Wagner. Both had flown in Da Nang for over two years, and their contributions were significant. In a personal message to Commander Johnson, the NSG Department head at NCSP, Captain De Lorenzi, Commanding Officer of VQ-1, cited both Petty Officers, stating in part,

*“Both of these outstanding Petty Officers have made extraordinary contributions to the detachment operation over a sustained period of time. Their professionalism, devotion to duty and perseverance has on numerous occasions resulted in the development of extremely valuable intelligence, which under other circumstances could have gone unnoticed.”*⁷⁴

He then added in a later paragraph,

*“Regret that I did not personally have the opportunity to speak with CT2 Dibble and Wagner prior to their departure from Da Nang. Would be most appreciative if you would convey to each of them, on behalf of myself and all VQ-1 squadron members who have served with them a sincere ‘Well Done’ and best wishes for every success in the future.”*⁷⁵

Thus, despite the belief of some, VQ-1 recognized the efforts of the Spooks as a vital part of its mission, and was appreciative of what we did.

⁷³ Provided by Claude Hawks [Steve McRoberts] via e-mail.

⁷⁴ [VQ-1] 270226Z NOV 1968 (BOM) {back channel wire note message}.

⁷⁵ Ibid.



Left to right: LCDR Lionel H. Olmer, CTR2 William F. Erhardt, CT3 S.P. Renken, CTR3 Jackie P. Judice, LT(jg) Robert A. Cavaluchi, LT(jg) Shaun M. Byrnes. (Photo courtesy of Rich Ellis via Bill Erhardt – taken circa Dec. 1967)

VQ-1 wasn't the only group who appreciated our work. Joseph A. Haran, Jr., a radio intercept analysis specialist with the 6924th Security Squadron (USAFSS) at Da Nang from 1968 to 1969, stated "...the NSG linguists with whom I worked while at the 6924th Security Squadron were much more receptive to my efforts and were at the same time of immense help: "Mr. Dibble" and Ed Dobarro come to mind. The NSG guys were much more laid back and more job-as-top-priority oriented than the USAFSS turf-defenders. But, we were all in the same bunker (or roadside ditch) when the bad guys' rocket artillery and mortars said hello."⁷⁶

⁷⁶ <http://home.earthlink.net/~swojtkiewicz/203Locator/guestbk99.html> [downloaded 9/29/2015]

Chapter Four: 1969 – 1970

VQ-1's air assets and technical capabilities were significantly upgraded in the spring of 1969 with the arrival of two EP-3B Orion "Bat Rack" aircraft. PR-31 arrived 17 March 69 and PR-32 arrived on 21 June⁷⁷. After their initial checkout at Atsugi, Japan, both aircraft deployed to Det Bravo. Back end equipment⁷⁸ in the EP-3B was similar to that of the EC-121M (Willy). The real advantage of the EP-3B was its cruising altitude, nearly twice that of the venerable Willy.⁷⁹ This resulted in a significant improvement in signal quality. From the squadron standpoint, the EP-3s were more reliable and required less maintenance.⁸⁰ The EA-3B Skywarrior back end equipment was upgraded in August 1969. This upgrade was nicknamed SEAWING, a name sometimes applied to EA-3B missions in general.^{81 82}

Major damage occurred to the NSG spaces on Sunday, April 27, 1969. Unlike other significant explosions, this one was not caused by a rocket attack, but by a brush fire. According to one account,⁸³ some Vietnamese were burning trash outside the fence surrounding Ammo Supply Point One (ASP-1) when the fire got out of control, and caught the dry grass on fire inside the fence of ASP-1. Initial attempts by assigned Marines to put out the fire were unsuccessful, and the Marines soon abandoned the cause when a pallet of white phosphorus illumination rounds caught on fire. Things went downhill from there and soon spectacular explosions and shock waves raked the area again. The fire spread to the Air Force bomb dump and bulk fuel area. Soon debris from exploding 1,000 pound bombs filled the air. The explosions lasted into the night, presenting an eerie effect, with fire and mushroom-like clouds from detonating high explosive rounds.

The fire burned for almost two days. Our personnel were safely evacuated, but the operational spaces were destroyed by debris from the explosions.⁸⁴ As a temporary measure, the detachment worked from an equipment van, with a desk and one recorder to check tapes and a second desk for the evaluator to write post mission reports. Communications support was provided by AFSS, the Air Force counterpart to the Naval

⁷⁷ Bureau Numbers (BuNo) 149678 and 149669 respectively.

⁷⁸ Backend equipment for the Spooks included HF, VHF and UHF receivers, recorders, demodulators and other special equipment when installed. Equipment in the two EP-3Bs was built by LTV.

⁷⁹ The Willy typically flew at 9000 feet, sometimes climbing to 11,000. The EP-3B flew at 18-20K feet.

⁸⁰ Many airframe parts, including engines, were interchangeable with regular P-3s. Since a squadron of ASW P-3s was always deployed to NAS Cubi in the PI, a much larger pool of engines was available if needed.

⁸¹ SEAWING avionics carried the JAN designator AN/ALR-40. Built by Sylvania (later GTE Sylvania)

⁸² EA-3B missions also used the cover name WEE LOOK.

⁸³ Account by Sgt. Bill Letendre, USMC as posted on www.grunt.com Sgt Letendre was assigned to ASP-1 and was one of the initial firefighters.

⁸⁴ Some files were destroyed by thermitite as part of an emergency destruction.

Security Group. AFSS had a ground-based operation on the opposite (east) side of the runway. New spaces were quickly erected. In fact, after losing a high stakes poker game, of which our new building was part of the pot, the Seabees built a new operations space of approximately 1300 square feet, with room for comms, operations and admin. Security fencing, generators, and defensive positions completed the package. The new building went up in one day, using some 35 Seabees and a few available Spooks. This compound was home to the detachment for the remainder of its existence.⁸⁵

Another milestone occurred when LCDR Donald C. McKenne assumed command of the detachment on June 1, 1969, becoming the first *permanently* assigned OIC. In addition to the new OIC, the detachment was allotted a small cadre of permanently assigned enlisted personnel. All of the CT branches (except T⁸⁶) were represented. Earlier in 1969, on 15 March, Naval Facility (NAVFAC) Da Nang was established at Camp Tien Sha, combining NCSP Detachments Alfa, Bravo and Delta, with Commander William H. Barber as its first commanding officer.⁸⁷ Commander George L. Jackson relieved Commander Barber in August of 1969.⁸⁸ The old Det Bravo was renamed Fleet Support Detachment (FLTSUPDET or FSD), and the OIC of FSD also served as the Executive Officer (XO) of NAVFAC.

Tragedy struck just before noon on March 16, 1970 when PR-26⁸⁹ crashed on landing at Da Nang, with the loss of 23 VQ-1 air crewmen. The plane was repositioning from Tainan in Taiwan to Da Nang, and thus there were no Spooks on board. Witnesses and survivors (there were eight) stated the plane was trying to land with only three engines working. The crew self-aborted their approach, and while trying to come around for a second approach, the wing tip clipped the edge of an F-4 revetment. At that point the aircraft crashed and broke into pieces, with the tail section (and the survivors) relatively intact.⁹⁰ VQ-1's LT Richard Haver, who was watching the approach, went to the Spook shack and used the OPSCOMM circuit to contact Kamiseya, who patched him directly to the VQ-1 spaces in Building 181, Atsugi. After the initial report, further status reports were passed to VQ-1 home base in Atsugi by the CTO operator on duty, using the same circuit⁹¹. The detachment was also involved, in a small way, with the investigation afterwards when CTIC Harvey "Rusty" Buckley was tasked to transcribe the tape containing the final minutes of voice traffic between Da Nang Tower and the ill-fated PR-26.⁹²

⁸⁵ E-mail exchange with CDR Karl Bernet, USN (ret.), last TAD OIC of the Det.

⁸⁶ CTT aircrew were assigned to VQ-1 (instead of NSG). They were ELINT specialists who operated the "Lab" position on the big birds, responsible for fingerprinting various enemy radars.

⁸⁷ Klar, Norman, "The Naval Security detachments in Vietnam played a significant role in the Gulf of Tonkin incident", *Vietnam* (magazine), Feb. 2003, pp 18-21

⁸⁸ Based on Flight Orders issued in the fall of 1969, which had as letterhead Naval Facility Da Nang, and were signed by CDR Jackson, and awards data for CDRs Barber and Jackson.

⁸⁹ BuNo 145927.

⁹⁰ There is a PR-26 memorial website at <http://pr26-vietnam.com> which provides more detail on the crash, and personnel recollections of surviving aircrew and ground personnel who assisted.

⁹¹ <http://pr26-vietnam.com> guestbook entry by Richard Haver, 20 Mar 2016

⁹² Retired CWO2. Info from e-mail exchange.

LCDR Kent B. Pelot assumed command of the detachment June 1, 1970, relieving LCDR McKenne. Later that summer, on August 15, CDR Jackson was relieved as CO of NAVFAC Da Nang by CDR Joseph C. Lewis, Jr.⁹³ CDR Lewis was the last CO of NAVFAC, which was decommissioned on May 1, 1971. The FLTSUPDET was re-subordinated to NCSP, retaining the FSD title.

Later in 1970 on November 20, VQ-1 was tasked to support the Son Tay prisoner-of-war rescue operation. The Navy's role in this operation was to provide a diversion while a specially selected U.S. Army Special Forces team, with USAF support, attempted to rescue POWs held at Son Tay. The operation was partially successful, the camp was destroyed and there were no U.S. casualties; however, the prisoners had been moved some days before the raid, so none were there to be rescued.

BIG LOOK had two missions during this operation. One was to initiate jamming when necessary. This was done by passing a code word warning on a special jammer control frequency, for example: "Jammers, Jammers, ALPHA – Deep Sea 31." If called for, the actual jamming was to be done by a carrier based EKA-3B⁹⁴. The second mission was our normal role of SIGINT support. The operations order (opord) called for:

"[SIGINT] support will be provided by an EP-3 Big Look aircraft from H minus 2 hours 55 mins to H plus 1 Hr 30 min. One EC-121 will be available as back up at Da Nang. One airborne EA-3B positioned overhead the CVA force at H minus 1 hr will provide relay as required and airborne back up for the EP-3 in case of airborne abort."

However, none of this information was passed to the Spooks until after the planes were airborne to reflect the especially sensitive nature of the raid. On the ground the Spooks were only told there was a special mission, and the crews were picked up around nine P.M. (2100H) to be taken to the briefing room next to the spaces, where they waited for about two hours before finally launching both the EP-3 and the EA-3B called for in the opord. Once airborne they were given more detail, but detected only minimal NVAF reaction, however, the Vietnamese did track the large number of Navy aircraft coming in from the GOT.

This operation was the largest Navy strike mounted during the Vietnam War, and strangely enough, no live ordinance was carried by the strike aircraft. Flares were dropped to simulate bombs, and chaff was used to simulate mining Hai Phong harbor. The EP-3 was selected for this mission because it was felt to be more reliable.⁹⁵

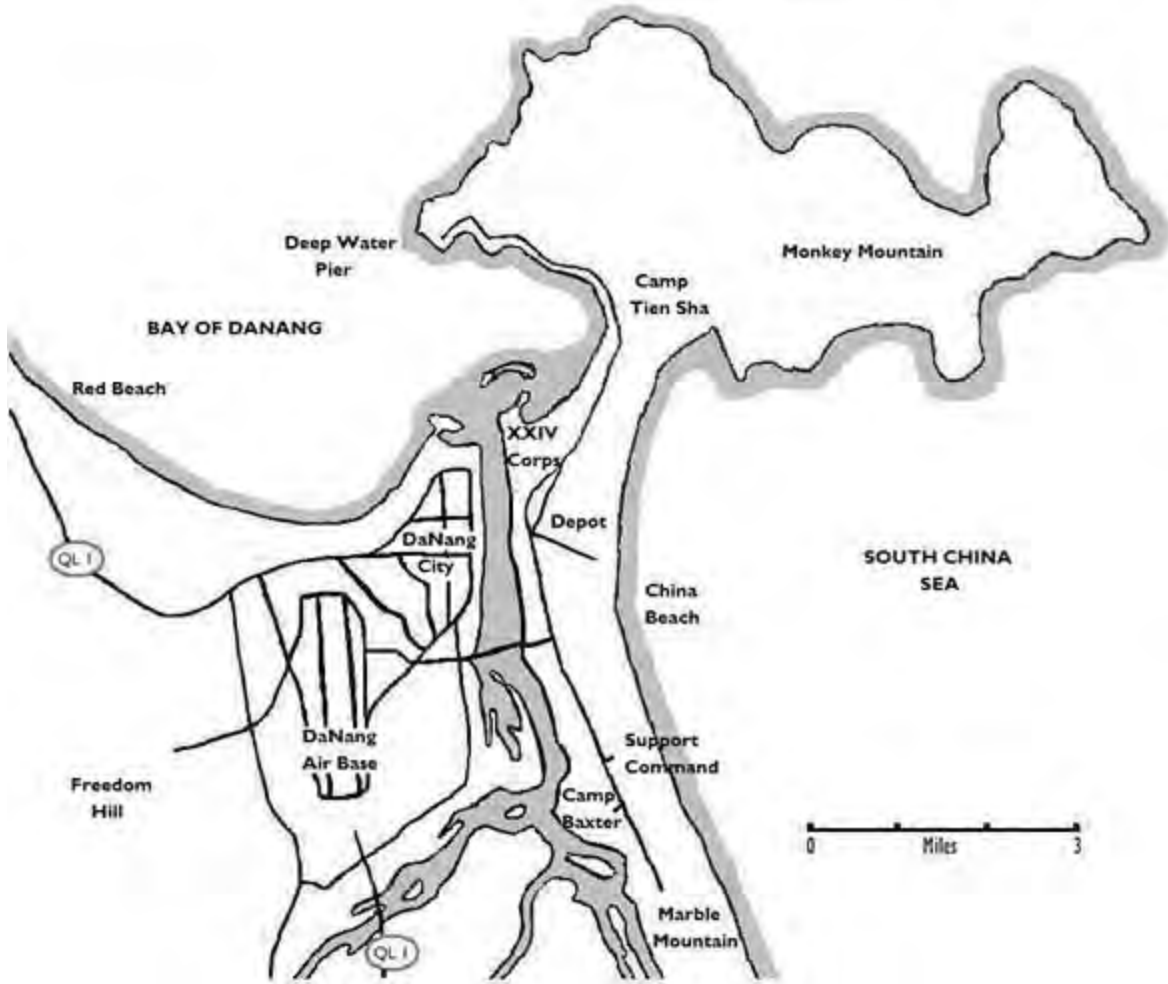
⁹³ After assuming command, CDR Lewis did fly enough to earn an Air Medal.

⁹⁴ The EKA-3B was a carrier-based aircraft with a dual role (jamming and tanker). Although similar to the EA-3Bs flown by VQ-1, the EKA-3B was not assigned to our squadron.

⁹⁵ Commander JCS Joint Command Task Group, Report on the Son Tay Prisoner of War Rescue Operation, Part II, page 1-9, DS557.8.S6J74. Further information provided by Allan Prevette, Thomas P. Baxter, William Dillon, and Thomas G. O'Brien.

The day following this operation, Hal Gamble arrived in Da Nang in the middle of a rocket attack. As the new arrival headed toward a bunker, Hal asked someone, “Is this the way it is every day here?” It wasn’t quite that bad, but Da Nang certainly deserved the nickname of “Rocket City.” No one is sure just how many rocket attacks occurred during the course of the war, but virtually everyone who served there remembers at least one.

DANANG
JULY 1970





Personnel permanently assigned to the Detachment – January 1971
(Photo courtesy of Kent Pelot)

Front Row (L-R): CTI3 Bob Sawicki, CTA2 Mike Flynn, unid, CTR2 Roger Blecha, CTO3 William Bonsell, CTI3 Phillip Worley, CTI2 Robert “Skipper” Brown. **Back Row (L-R):** CT1 unid, CTO1 James Sundwall, CTIC Richard Miller, LCDR Kent Pelot, CTOC William Swartout, CTR1 William Dillon.

Tom Clements provided the following background:

This article was published in the San Miguel base newspaper, the South China Sea Sentinel, probably in Jan 69. Captain Burke, NCSP's Commanding Officer, was known for taking pride in the landscaping of the homes at San Miguel and every month a sign designating 'Yard of the Month' was placed on the winning yard. We found a rake somewhere and CTO2 Steve Tesmer dressed up as our Japanese gardener. Someone wrote the article and submitted it to the Sentinel, and to everyone's surprise it was published.

You will notice Steve is wearing shorts, something we never did until Captain Burke visited about that time. We discovered that local regulations permitted wearing shorts, so a group of Spooks who were to receive Air Medals altered their pants and showed that way to receive their award. One of those was CT12 Bobbie Brand, who received his 6th Air Medal. When the CO remarked that he should be proud, Bobbie replied in typical fashion that he had yet to receive his 4th!

Story was that because of the shorts some of the guys were removed from Da Nang and sent to sea, but good linguists were in demand, and most returned after a short absence.

CTO2 Steve Tesmer was one of those lost on 15 April 1969 when PR-21 was shot down off the east coast of North Korea.



NCSP DET B WINS DANANG AIR BASE "YARD OF THE MONTH" AWARD

Da Nang Gardener?

Smiling with pride is NavCommSta Phil Det Bravo's Japanese gardener Tetsuro Tesmer. Tetsuro's handiwork is the result of his keen appreciation for gardening detail. While no grass is used, he has skillfully terraced the red mud yard into a series of miniature rivers to allow them to drain into a moss laden moat which fronts the barracks area.

He has created a charming Japanese effect by bridging the moat with a rustic square of plywood and placing various pieces of material, found on the road side, in the moat to simulate samurai castles. His use of green fiber bags filled with sand and placed against the barracks suggests a brick-like styling so common in Japanese architecture.

Tetsuro's future plans call for digging a deep pit in the side yard where he will construct a medieval Japanese fortress which will be opened to the public during the forthcoming Tet holiday period. (Note construction in the background.)

Chapter Five: 1971 – 1972

By the beginning of 1971, the US policy of “Vietnamization” was in full swing, and troop strengths were being rapidly reduced. The net result for Da Nang and the Det was a relatively quiet year, with only 13 rocket attacks against Da Nang recorded, for a total of 58 rockets impacting throughout the airbase. These attacks resulted in 44 casualties, five of which were KIA. Although some of the rockets were targeted at the west side of the base occupied by Spooks, there were no recorded casualties among them..

Despite the relative quiet, flight operations continued at about the same pace. In addition to flying, Spooks were assigned other duties outside of flight operations. On his arrival the first week of February, 1971, Tom O’Brien (“OB”), like others who were new to the detachment, was referred to as a “new guy”, or “nug” for short. While not flying, OB recalls being assigned to more mundane duties, including duty driver, courier, and sand-bag filler.

The duty driver was assigned on a daily basis, and was responsible for driving the detachment’s vehicles (usually a pickup truck, jeep, or covered, stake-sided truck), to deliver flight crews from the barracks area to the operational spaces near the flight line, and to return the crews back to the barracks at the end of their flights. Between flights, the duty driver would make runs west, through Dog Patch, to the Army compound at Hill 327, also known as Freedom Hill. Located at Freedom Hill was a large Army-run Post Exchange (PX) where we could purchase a variety of items with Military Payment Certificates (MPC or script, substitute money also known as *funny money* which was used in lieu of US currency).



Five Dollar MPC bill used in 1972 - New designs were introduced aperiodically to prevent counterfitting and other illegal use. Paper script was also used in lieu of coinage.

Another common task was courier duty, which involved hand-carrying classified material to other intelligence entities at and near the airbase. These included the USMC First Radio Battalion, the Army Security Agency (ASA), and AFSS. Occasionally they made runs to Marble Mountain and the USMC Combat Base at An Hoa, both of which were located just southeast and south of the airbase, respectively. Additional trips were made to Camp Tien Sha at the base of Monkey Mountain, and Cua Viet. As the US began to pull its combat troops from Vietnam, they ran fewer courier trips, particularly to Marine and Army units outside of the airbase.

Nearly everyone, but especially the lower-ranking enlisted Spooks, experienced the joy of filling sandbags and also 55 gallon oil drums that were set against the Spook barracks and the operations spaces as protection against rocket and mortar shrapnel. This duty, never a favorite among Spooks, was particularly unpleasant during the hottest months of May through September. Invariably, after a “sandbag party”, cold beer was available in trash cans filled with ice. Sometimes, we “obtained” steaks from the mess hall, and, together with the beer, we then had a deserved, lively party. Re-doing sandbags was routine since the plastic or cloth bags would deteriorate in the heat and sun.

The Spooks were responsible for Fire Point 13, a defensive bunker located just outside of the Spook spaces near the flight line. It was a two-tiered wood frame and steel revetment structure with sandbags packed around its walls and on the roof. During rocket attacks, the lower part of the bunker would offer some protection.

Fire Point watch was assigned by the CO for periods beginning at sunset and ending at sunrise. The watch periods changed according to the CO, but generally, covered four to six hour periods. The assigned Spook would check out an M16 with bandolier, “hand-launchable” illumination flares, helmet, and flak jacket. At the start of a watch period or shift, the Spook would do a communications check using the field telephone provided at the fire point. The field telephone was connected to the security unit, which was responsible for the larger compound security. To most, the shifts seemed longer than they actually were, especially during the rainy season, when the roof would leak, and the only company you had were mosquitoes and the sound of jets taking off. When the rain would stop, the sound of frogs would compete with the sound of flight operations.

Typically, there were many fewer flights during the wee hours (0000-0400). Except for the frogs and mosquitoes, it became eerily quiet. Those on watch would strain to see movement across the wire fence and concrete ditch bordering the fire point, and across the open grounds defining the cement plant beyond. The fire point had a spot light located atop the bunker, which could be swung around to light up areas where movement might be suspected. From time to time, the sentry would “pop a flare” sending an illumination round into the sky. The sentry also had an M-79 grenade launcher with a variety of ordnance rounds including antipersonnel grenades, flechette⁹⁶, and illumination rounds. Typically, the watch-stander would listen to the outgoing artillery that would respond to frequent calls for fire, from outlying units near Hill 327,

⁹⁶ A type of anti-personnel round.

watch as napalm dumps would burn from recent rocket or mortar hits, or simply stare into the dark. Otherwise, time was spent watching and listening for enemy sappers.

Another additional duty was the burn detail. Here, a designated individual would gather bags that had been stuffed with shredded, classified material and take them to an incinerator just outside the operations spaces. As the bags were burned, they would be recorded as destroyed as a matter of record.

During downtime, particularly during the monsoons when air strikes against the north subsided, Spooks took the opportunity to hone their cryptologic skills. Linguists would improve their language skills by reviewing and transcribing previously recorded tapes of North Vietnamese target communications. Likewise, R-branchers would practice Morse code intercept by intercepting actual target signals with an R-390A receiver they had set up at the R-branch desk.

Occasionally, the spooks would gather their weapons and ammunition, and visit the ARVN range near the base of Hill 327. They would practice their shooting skills with M16s, .45 caliber semi automatic pistols, M-79 grenade launchers, and others. The more skilled M-79 grenadiers could hit the remains of an old M45 tank on the hillside at the end of the range. On one occasion, as recalled by "OB," he found an unexploded M-79 antipersonnel grenade lying near a berm at the range. He placed the grenade onto the berm, and using it as a target, hit it on his third round. Fortunately, it was far enough from the others that no one was hurt.

LCDR George Purring relieved LCDR Pelot as OIC in June of 1971, shortly after NAVFAC was decommissioned. One of the reasons for the decommissioning was to reduce the overall number of billets in Vietnam. In fact, this was an act on paper to show fewer numbers of in-country combat and combat support personnel, in keeping with President Nixon's plan for reducing US troop strength. It was also meant to force more of the responsibility of the war onto the Vietnamese. This actually benefited FSD, which gained eight billets from NAVFAC. All cryptologic operations at Da Nang were now consolidated at the air base where security was assumed to be better.

Like 1971, the first three months of 1972 were rather peaceful (for Da Nang) with only a few rocket attacks noted. Despite the seeming lull, flight tempo was heavy, with 200 missions flown by March 20. As Tet approached, there were indications the North Vietnamese were planning an offensive, and so on February 12, two aircrews were deployed from Da Nang to Cubi Point, Philippines. Missions were flown from Cubi for about two weeks, using PR-31 and PR-32. The rumored threat never materialized and the crews returned to Da Nang about 1 March⁹⁷.

⁹⁷ A supposed Tet offensive was not the only reason for going to the Philippines. During this time President Nixon made his historic visit to the Peoples Republic of China, reestablishing diplomatic relations.

Shortly after, on 10 March 1972, CTIC Charles “Chuck” DeCourley relieved CTICS Huff as the leading chief. Chief DeCourley was the Det’s last leading chief, leaving when the Det closed 12 February 1973.

Despite the peace initiatives in Paris, the war escalated on 30 March 1972 with the start of the long-anticipated North Vietnamese offensive. This offensive, known as the Easter Offensive or 1972 Spring Offensive, was launched by the North in an attempt to gain a better bargaining position at the peace talks. The two northernmost provinces of South Vietnam fell quickly, but despite these initial successes, the offensive was contained. In reaction to this offensive, RVN and US forces countered with a serious resumption of the air war over the north, including bombing and mining of Hai Phong harbor in May. Rocket attacks increased and were numerous throughout the remainder of 1972. Ninety seven impacts were recorded between April 13 and December 26 of that year.

Of the many rocket attacks, one in particular was unusual, in that the rocket did not explode. The rocket landed between the spook bunker and the VQ-1 barracks, and stuck in the concrete pad outside the door of the barracks. No one was injured seriously, but one VQ-1 sailor got a chunk of concrete in his back.⁹⁸

For the most part aircraft flying in and out of Da Nang were familiar workhorses of the war. In addition to VQ aircraft, USAF F-4s were based there (366th Tactical Fighter Wing, more commonly known as the Gunfighters), along with AC-119 gunships (callsign STINGER), AC-47 gunships (callsign SPOOKY, aka Puff the Magic Dragon), and USN airwing aircraft diverted from various carriers (F-4, A-6, A-7 being most common). Transport/cargo aircraft (C-130 or C-123) routinely flew in and out of Da Nang using the 15th Aerial Port as a staging point. Occasionally something a little more unusual landed at Da Nang, usually the result of some sort of emergency. Sometime in early 1972 a U-2 was forced to land there, and its impressive departure was watched from the balcony of the Spook Mess. Perhaps the most interesting of these visitors was the B-52 that landed sometime in April of 1972. David Gilbert recalls it this way:

“This story begins sometime in April 1972 when a B52 landed at Da Nang after being damaged by a SAM during a bombing mission. This was not long into the NVN Easter Offensive when the NVN had moved SAM battalions close to the DMZ and were firing on American aircraft flying support for South Vietnamese forces.”

“After landing at Da Nang the B52 taxied just off the taxiway at the northwest corner of the airfield almost just past the FASU flight line and just beyond the VQ1 revetments. I was in the barracks when someone announced the B52 was on the runway. Someone suggested we go take a look so we all hustled toward the spaces and strolled out onto the flight line. Sure enough, there was the Buff. There was no security around the plane. I did not see any crewmembers. I had my Minolta and took a picture of the entire

⁹⁸ The rocket was subsequently rendered safe (by EOD) and retained by the det as a souvenir. When the det closed in 1973 this dud rocket and other trophies of war were moved to NCSP, where they were stored in the I-branch spaces at the Receivers Building. They were there in June 1973. Final disposition unknown.

aircraft then walked closer and took a picture of the nose [of] the plane, one of [the] vertical stabilizer which appeared to have a single shrapnel hole in it, one of the tail gunner position with a rope hanging down from an open hatch, and another of the damage to the port side wing.”

But the story doesn't end there. David's narrative continues:

“I learned a few years ago that a B52 was on static display at [the] Wright-Patterson Air Force Museum. Using the virtual tour app on the museum website, I discovered that the B52 on display carried the same tail number as the B52 which had landed at Da Nang [tail number 60665].” David's photographs were donated to the museum for use as part of their exhibit, an interesting footnote to this warbird's distinguished history.⁹⁹

Another significant event occurred about this time. Shortly before his relief as Commander Seventh Fleet, Vice Admiral William Mack arrived at Da Nang to participate in a mission with VQ-1. PR-32 was the bird chosen for the mission, and the crew members were issued blue dickeys to wear along with their normal flight suits. This flight has often been referred to since as “the blue dickey flight”, and it was significant because VADM Mack was probably the most senior officer to ever fly on a VQ-1 mission.¹⁰⁰

Ops tempo only got heavier toward the end of the year, as the US increased bombing over North Vietnam in an attempt to force an accord in Paris. By the end of the year, over 1,000 missions had been flown in 1972. Chief DeCourley met the crew of the 1,000th mission with a bottle of champagne.

The significant contribution of VQ-1 and FSD was recognized by none less than the Secretary of the Navy, who awarded VQ-1 Detachment Da Nang the Meritorious Unit Commendation (MUC) for the period of 1 April 1972 to 27 January 1973. The citation accompanying the award, quoted below, provides a capsule description of the contribution we made not only during the period of the award, but during the entire Vietnam conflict.

“For meritorious service from 1 April 1972 to 27 January 1973 while providing electronic intelligence surveillance missions in support of units of Task Force 77, during intensive aerial warfare operations against the enemy in Southeast Asia. Expertly utilizing their complex, sophisticated airborne electronic equipment to identify hostile locations, units of Fleet Air Reconnaissance Squadron ONE, Detachment DANANG (TE 70.2.3.1) significantly assisted various interservice agencies in compiling and

⁹⁹ 60665 was based at the Royal Thai AFB in U-Tapao. The aircraft was most likely hit while bombing the Mu Gia Pass area of the Ho Chi Minh trail.

¹⁰⁰ The exact date of the flight has yet to be established, but it occurred sometime between the end of March 1972 and 23 May 72, when VADM Mack was relieved as COMSEVENTHFLT. Among those on the flight was BLS CTR2 Jim Felts. VADM William Paden Mack (6 Aug 1915 – 15 Jan 2003) was a submarine officer who after his tour as C7F (18 Jun 71 – 23 May 72) went on to become Superintendent of his alma mater, the Naval Academy. He retired from that position 1 Aug 75.

maintaining an accurate order of battle of North Vietnam. Monthly listings of locations, produced by Task Element 70.2.3.1, were of invaluable assistance to aircraft strike leaders in determining the optimum ingress and egress routes to targets. Warnings of airborne hostile aircraft provided air controllers aboard surface units with timely information with which they were able to conduct engagements more efficiently. The sustained professional performance of personnel of Task Element 70.2.3.1 reflected credit upon each individual team member and was in keeping with the highest traditions of the United States Naval Service.”



*“In keeping with the highest traditions of the United States Naval Service”
- FSD 1972*

Chapter Six: End Game and Afterwards

On 27 January 1973, representatives of the United States, North Vietnam, South Vietnam, and the Viet Cong signed “An Agreement Ending the War and Restoring Peace in Vietnam” in Paris. The agreement called for the withdrawal of the last 23,700 U.S. troops and advisors left in South Vietnam by the end of March.¹⁰¹

The ceasefire negotiated by the Paris Peace Accords took place 31 Jan 1973. Det operations wound down quickly after that, and the last scheduled combat support mission from Da Nang was flown 1 Feb 73, a whale mission¹⁰² with CTISN John V. Phipps (tacair) and CTI2 Gary Nelson (SAM) as the BLS participants. The NavFor historical summary for the first quarter of 1973 marked the end of operations in Da Nang, under the 16 Feb entry, “Fleet Air Reconnaissance Squadron ONE, Detachment Da Nang, RVN and Naval Communications Station, Philippines, Detachment Da Nang, RVN, departed FASU Da Nang and relocated at NAS Cubi Point, Philippines.” FASU Da Nang terminated all operational support to squadron detachments and transient aircraft the following day, and was formally disestablished 4 March 1973. All remaining FASU personnel were withdrawn the following day.¹⁰³

The Big Look Spook presence in the Republic of Vietnam was over, but missions continued to be flown out of Cubi in support of Operation HOMECOMING, the return of the POWs from Hanoi negotiated as part of the Paris Peace Accords.



¹⁰¹ Purple Dragon p 81

¹⁰² Aircraft was PR-15, BuNo 144854. Crew: (L to R in photo) LT(jg) Steve Berbick (Seval), LT Ken Anderson (Pilot), LT(jg) Tom Stark (Nav), AT3 Robin Shertzer (EWOP), AMS2 Andres Barbre (Plane Captain), AT2 Wilson (EWOP), AN Boekman (EWOP), CTI2 Gary Nelson, CTISN John Phipps (Spooks)

¹⁰³ NAVFORV command history

Afterward

The Det continued operations in support of VQ-1, flying out of Cubi and operating from aircraft carriers. The last mission actually flown out of Da Nang was 6 May, 1973, and it happened more or less unplanned.

Gary Nelson was one of the spooks on the mission, and recalls it happening this way:

“I remember CDR Otto¹⁰⁴ as being the senior of the two pilots for the two VQ-1 EA-3B’s that bingo’d to Da Nang along with five USS Constellation based A-7s because of the weather. After we had refueled and were ready to depart, sitting at the end of the runway, the tower refused to give us permission to take-off. CDR Otto argued with the tower controller, then making a “command decision,” he radioed the second VQ-1 EA-3B’s pilot and told them we were all leaving, with or without permission. It was the only time I ever remember two EA-3Bs rolling down the runway for takeoff simultaneously. We were closely followed by all five of the A-7s. The Det had long been closed when we landed at Da Nang on May 6th. All seven planes landed because the weather was too severe to conduct any carrier landings, and it was land in Da Nang or bail out over the Gulf of Tonkin (we didn’t have enough fuel to return to Cubi Pt.). None of the crew were allowed to leave the vicinity of the airplanes during our time on the ground. We packed the chute, refueled, and got back on the plane. CDR Otto took charge of the situation and got us out. I think the problem was the lack of a diplomatic clearance to land because we weren’t supposed to have used Da Nang as our bingo field.”¹⁰⁵

Because of the distance to track, EP-3B missions from Cubi could only manage about 6 hours on station. The EA-3B missions were flown similar to the “double shuttle” concept used during the first year of the Det. The whale would launch from Cubi and proceed to station, refuel in-flight, for a total 4 hour mission. After being relieved by the second whale, they would trap aboard the carrier, refuel and relaunch for the second four hour mission (while the second EA-3B trapped and refueled). They would then be relieved by the second EA-3B, plug and return to Cubi. The second whale would be relieved by the EP-3B.¹⁰⁶

Gary Nelson also recalls his longest mission in a whale. “(It) was a 14 hour-plus mission when the second EA-3B had mechanical issues and couldn’t make its schedule that day. We flew to station, flew our mission, refueled in-air, flew the second four hour mission, refueled in-air, then completed the 3rd four hour mission before the P-3 arrived

¹⁰⁴ Lieutenant Commander Max William Otto, 1310 USN.

¹⁰⁵ Taken from e-mails from Gary Nelson to John Phipps. Gary stayed in and retired as CTICS.

¹⁰⁶ Nelson, *ibid*

to relieve us on station. We refueled in-air again, and returned our tired sore buttocks to Cubi Pt.”¹⁰⁷ This might be one of the longest EA-3B operational missions on record.

The final sustained operations were flown in the spring of 1975 as part of Operation FREQUENT WIND¹⁰⁸ and in support of the Mayaguez rescue operation. With the conclusion of the latter, the U.S. involvement in Indochina came to an end.

SIGINT interest in Southeast Asia faded during the remainder of the 1970s. Concurrent with the waning interest, the pool of linguists also shrank. In 1976 there were 60 some Vietnamese linguists, most of whom were senior enlisted, many of them BLS. By the early 1980s most of these had retired or were no longer active linguists, and the available pool had shrunk to less than 30. Only a few Vietnamese linguists were available when VQ-1 was tasked to reactivate a PARPRO¹⁰⁹ track off the coast of southern Vietnam, none of them former Det Bravo Spooks¹¹⁰. Several missions were flown in November of 1982 using an EP-3 staged from Cubi, but no significant information was collected. Going north to the old track used during the war was not considered due to the risk and lack of supporting air cover.

The Defense Language Institute stopped training Vietnamese linguists in 2004.¹¹¹

Postscript

One of the most interesting things about any story is the ending. For most of us, Da Nang was the beginning. We were all young, fresh out of high school or college, and didn't think too much about the distant future. Outside of a few bad moments, Da Nang was an exciting job, one that we volunteered for. For nearly everyone, it was a stepping stone to success.

Those who chose to stay in the Navy and become “lifers” rose to the top of the enlisted and officer ranks. At least three alumni became Rear Admirals and commanded the entire Naval Security Group¹¹². Others achieved top enlisted or warrant officer status.

Those who decided the Navy was not for them were equally as successful in civilian life. Some worked for the government in other capacities; others launched successful businesses or became valued employees. Several became authors, including

¹⁰⁷ Nelson, *ibid*

¹⁰⁸ Cover name for the final evacuation of US personnel from Saigon.

¹⁰⁹ PARPRO = Peacetime Aerial Reconnaissance PROgram. All flights flown along the Asian periphery, except those in the GOT during the Vietnam War, were flown under the rules of this program. PR-21's ill fated flight was a PARPRO flight.

¹¹⁰ The COMEVAL was a former BLS

¹¹¹ DLI (then the Army Language School) began teaching Vietnamese in 1954. Over a 50 year period some 23,000 Vietnamese linguists were trained, ultimately serving as translators, interrogators, advisors and cryptolinguists.

¹¹² Thomas F. Stevens, Isaiah C. Cole, Joseph D. Burns.

Wayne Care, who wrote a fictional account of a year flying in Da Nang.¹¹³ I'd like to think our Da Nang experience gave us some good guidelines to follow – do what you have to do to accomplish the mission, and don't sweat the small stuff.

In early 2013, thanks to the internet, a small group of former Big Look Spooks connected and started a web site and forum. Things snowballed from this small beginning, and in October 2013, nearly 40 of our group got together for a reunion in St. Petersburg, FL. Most of us hadn't seen each other for over 40 years, and after some reintroductions (somehow we didn't look the same, except for Huong); it was like we had never been apart.

A second reunion, held in Sterling, Virginia in August 2015, brought together even more of our group, validating our efforts to identify and locate all who served with the Detachment. More reunions are in the works, including one in Charleston, SC in November of 2017, and there has even been some discussion about a visit to Da Nang, where we all started.

¹¹³ The book, [Vietnam Spook Show](#), is available on Amazon.com. Recommended reading for anyone who was there.

Appendix One: Supplemental Notes

Included here is supplemental information regarding personnel, aircraft and awards, and other information which was pertinent but did not fit well into the chronological narrative.

Tab Alfa - Vietnamese Employees:

There were at least six known civilian employees of the detachment, and probably more. In the early 1970s three women provided cleaning and housekeeping services to the detachment, and another three women worked as bartenders in the Spook Mess. Hương, a young lady from Hue, was the daytime Spook Mess Manager; and the other two ladies, who were married to members of the Vietnamese Air Force, worked in the evening.

Fortunately we still have contact with one of these ladies, Hương, who is a member of our group. Sadly we have lost contact with the others, and can only hope that someday we will find them as well.



Left to right - CTR3 William "Wild Bill" Holden, Hương, Corporal Nick Gutierrez (photo courtesy of Hương)



Thuy in Spook Mess (circa 1972)

*“Rod” Hufford with two of the housekeeping staff circa 1968
(Photo courtesy of Tom Clements)*



Tab Bravo - The Orphanage:

Early on the Detachment established an informal relationship with the Sacred Heart Nursery Orphanage in Da Nang City. Staffed by nuns of the order of Saint Paul of Chartres, the orphanage cared for over 150 children at any given time. Depending on the liberty policy, Detachment members visited the orphanage, bringing cash and needed supplies to help support the children. Those who visited often established friendships with the children, and in at least one case, successfully adopted a child.

After the fall of Saigon, in 1975, some of the orphanage property was seized by the new government, and converted to other uses. Orphanage records were confiscated as well, but some of these were reconstructed by the nuns, who were able to gain some access to the records held by the government.

Today the convent and orphanage facilities still stand, but part of the orphanage is now an old-age home for the nuns. The nuns who cared for the orphans are still there, but quite old in many cases. A visitor in 2006 remarked that the orphanage was clean and seemed to be a happy place (unlike some others in Ho Chi Minh City). She stated,

“We passed through a yard with dozens of toys and games, all in good condition. The rooms were clear [sic] and didn’t smell of disinfectant or urine. Most of the children we saw were sleeping on mats on the floor for napttime, although the toddlers and infants were in cribs.”¹¹⁴



Dave Thomas at Sacred Heart Orphanage (Photo courtesy of Dean Carstens)

¹¹⁴ <http://babyliftrerevisited.typepad.com>

Tab Charlie – Awards:

This section covers both individual and unit awards.

Individual:

Air Medal – The Air Medals awarded to BLS were “strike/flight”, that is, they were awarded based on time spent flying in the designated combat zone¹¹⁵. S/F Air Medals (AS) were authorized in Vietnam between July 4, 1965 and Jan 28, 1973. Early on they were awarded based on a points system, with one point given for “support” flights, and 2 points given for “strike” flights¹¹⁶. A total of 20 points qualified one for the Air Medal. At some point this was changed to a system based on flight hours, with 250 hours required to earn the Air Medal. Normally hours accrued to an individual on an hour for hour basis, with the exception being Black Track flights over Laos. Typically flown in the EA-3B, these flights were nominally four to five hours in duration, but were awarded 25 hours credit toward Air Medals. S/F Air Medals were worn with a bronze number designating the number earned, to distinguish them from individual Air Medals, awarded for specific acts.

Two Spooks were awarded individual Air Medals in addition to the strike/flight medals they earned. CTI2 Robert F. Brown and CTI2 Daniel P. Blyth received individual Air Medals for an EA-3B mission flown on December 19, 1969.¹¹⁷

Purple Heart – awarded to those wounded in action. Wounds from rocket shrapnel qualified one for this award.

Bronze Star - At least two Bronze Stars were awarded to enlisted flyers¹¹⁸, and most of the PCS OICs were given a Bronze Star as an end-of-tour award.

Navy Commendation/Navy Achievement Medals – Some personnel were awarded these medals, usually as end-of-tour awards, and almost always were authorized to wear the Combat “V” on the award.

RVN Air Cross of Gallantry (aka Blue Max) – The Blue Max was awarded to a number of Det personnel between 1967 and 1973. It was awarded based on total

¹¹⁵ Air Medals are also awarded for individual acts or achievement involving flight. For example, the crew of PR-32 which landed in Hainan Island after a mid-air collision with a PRC F-8 received individual Air Medals, based on their actions during that flight only.

¹¹⁶ “Strike” flights were those flown with the objective of neutralizing enemy radar sites, done in conjunction with aircraft equipped with anti-radiation missiles (ARM).

¹¹⁷ Full crew: CDR JD Meyer (pilot), LT Bruce Townsend (SEVAL), LT Thomas Williams (Nav), LTjg Lewis Stoddard, SCPO John Jones, CTI2 Robert F. Brown, CTI2 Daniel P. Blyth

¹¹⁸ James Lanigan and Bob Sluter

missions, 150 missions were required. This award was given by the Republic of Vietnam.

Unit:

The parent command, NavCommSta Phil, received unit citations covering almost the entire period of the Vietnam War. The detachments were also included in these. The following unit citations were awarded to NCSP during the war:

| | | |
|--------------------|---------------------------|------------------------|
| NUC ¹¹⁹ | 1 Aug 1964 – 1 Aug 1966 | |
| NUC | 2 Aug 1966 – 1 Sep 1967 | Det Alfa, Bravo, Delta |
| NUC | 1 Mar 1968 – 1 Mar 1971 | |
| MUC ¹²⁰ | 30 Mar 1972 – 28 Jan 1973 | |

VQ-1 also received unit citations, and since in most cases the Spooks were considered to be assigned to VQ-1 while flying, they became eligible for these unit awards as well.¹²¹

| | | |
|-----|------------------------------|---|
| NUC | VQ-1 | 22 May 1964 – 30 Nov 1965 |
| NUC | VQ-1 | 01 Dec 1965 – 30 Nov 1967 |
| NUC | VQ-1 | 01 Dec 1967 – 01 Dec 1969 |
| MUC | CTE 70.2.3.1 (including FSD) | 1 Apr 1972 – 27 Jan 1973 ¹²² |

Philippine PUC - Personnel who were permanently assigned to NCSP between 21 July 1972 and 15 Aug 1972 are authorized to wear the Philippine Presidential Unit Citation (PPUC), awarded for flood relief efforts following a series of bad typhoons. Personnel who were TAD (to Da Nang or elsewhere) were authorized the award, so long as they were permanently assigned to NCSP.

In addition to these unit awards, all Navy and Marine Corps personnel who were stationed “in country” Vietnam were eligible for two Vietnamese unit citations. The Republic of Vietnam Meritorious Unit Citation was awarded by the Chief of the Joint General Staff, Republic of Vietnam Armed Forces in two colors: Gallantry Cross Color with Palm and Frame (8 Feb 62 – 28 Mar 73) and Civil Actions First Class Color with

¹¹⁹ Navy Unit Commendation

¹²⁰ Meritorious Unit Commendation

¹²¹ In most cases personnel assigned temporarily to a command (i.e. TAD) are not eligible for unit awards. The exception to this is where those temporarily assigned provide a skill not normally resident within the unit. CTs assigned to units for direct support always fell under this exception.

¹²² Note that the eligibility dates are slightly different for FSD. These dates correspond to the dates for a MUC awarded to Fleet Air Reconnaissance Squadron ONE, Detachment Da Nang (Task Element 70.2.3.1), indicating the FSD MUC may have been awarded as part of the VQ-1 corresponding MUC. If that were the case, personnel assigned from NCSP would be eligible for two MUCs, one from NSCP and one from FSD.

Palm and Frame (1 Jan 65 – 28 Mar 73). Anyone serving in country during the eligibility periods received for both awards¹²³.

Some confusion exists from time to time regarding these awards, since there was also an individual award for valor, the Vietnam Cross of Gallantry, which had a medal with an accompanying ribbon the same color as the unit citation. The unit citation has no medal authorized, there is no accompanying certificate or citation, and the ribbon is always worn with a gold frame and palm. The ribbon for the valor award (which typically was awarded to Army personnel on a case by case basis, similar to the Blue Max) would be worn without the frame.

Campaign:

There were two campaign awards received by almost all while they served at Da Nang, one awarded by the US, and the other by the Republic of Vietnam.

The Vietnam Service Medal (VSM) was awarded by the US to members of the naval service (Navy and Marine Corps) for service between 3 July 1965 and 28 March 1973¹²⁴ meeting one of the following qualifications:

- (1) Be attached to or regularly serve for 1 or more days with an organization participating in or directly supporting military operations,
- (2) Be attached to or regularly serve for 1 or more days aboard a naval vessel directly supporting military operations.
- (3) Actually participate as a crewmember in one or more aerial flights into airspace above Vietnam and contiguous waters directly supporting military operations.
- (4) Serve on temporary duty for 30 consecutive days or 60 nonconsecutive days in Vietnam or contiguous areas, except that time limit may be waived for personnel participating in actual combat operations.

Individuals qualified for the Armed Forces Expeditionary Medal (AFEM) for reason of service in Vietnam between 1 July 1958 and 3 July 1965 (inclusive) remain qualified for that medal, but at their option, may have that AFEM converted to a VSM. No person is entitled to both awards for Vietnam service.¹²⁵

The VSM has a yellow ribbon with three red stripes and green borders. Stars are worn on this ribbon denoting participation in specific campaigns, which are listed below, with the associated time periods:

1. Vietnam Advisory Campaign 15 Mar 62 – 7 Mar 65

¹²³ In many cases these unit awards were not approved until several years afterward, and may not be listed on an individual's DD214, especially if the service member was immediately discharged.

¹²⁴ In addition to this time period, the Naval Service also awarded the medal to those participating in Frequent Wind.

¹²⁵ Taken from data provided on the Navy History Center website, and Wikipedia

| | |
|-------------------------------------|--------------------------------------|
| 2. Vietnam Defense Campaign | 8 Mar 65 – 24 Dec 65 |
| 3. Vietnamese Counteroffensive | 25 Dec 65 – 30 Jun 66 |
| 4. Vietnamese Counteroffensive II | 1 Jul 66 – 31 May 67 |
| 5. Vietnamese Counteroffensive III | 1 Jun 67 – 29 Jan 68 |
| 6. Tet Counteroffensive | 30 Jan 68 – 1 Apr 68 |
| 7. Vietnamese Counteroffensive IV | 2 Apr 68 – 30 Jun 68 |
| 8. Vietnamese Counteroffensive V | 1 Jul 68 – 1 Nov 68 |
| 9. Vietnamese Counteroffensive VI | 2 Nov 68 – 22 Feb 69 |
| 10. Tet 69 Counteroffensive | 23 Feb 69 – 8 Jun 69 |
| 11. Vietnam Summer-Fall 1969 | 9 Jun 69 – 31 Oct 69 |
| 12. Vietnam Winter-Spring 1970 | 1 Nov 69 – 30 Apr 70 |
| 13. Sanctuary Counteroffensive | 1 May 70 – 30 Jun 70 |
| 14. Vietnamese Counteroffensive VII | 1 Jul 70 – 30 Jun 71 |
| 15. Consolidation I | 1 Jul 71 – 30 Nov 71 |
| 16. Consolidation II | 1 Dec 71 – 29 Mar 72 |
| 17. Vietnam Ceasefire | 30 Mar 72 – 28 Jan 73 ¹²⁶ |
| 18. Operation Frequent Wind | 29 Apr 75 - 30 Apr 75 |

The second campaign award routinely earned for service in Vietnam was the Republic of Vietnam Campaign Medal, awarded by the Republic of Vietnam. The period of eligibility for this award is 1 Mar 1961 to 28 Mar 73, inclusive. Naval service personnel are eligible for this medal under one or more of the following conditions:¹²⁷

- (1) Wounded or injured in hostile action
- (2) Captured by the opposing force during actions or in the line of duty, but later rescued or released
- (3) Killed in action or in the line of duty
- (4) Served a cumulative six months in South Vietnam
- (5) Served a cumulative six months outside the geographical limits of South Vietnam, but contributing direct combat support to the Republic of Vietnam Armed Forces during such period¹²⁸
- (6) Assigned in Vietnam on 28 Jan 73 and served during the entire period from 29 Jan to 28 Mar 73, inclusive.

Combat Action Ribbon:

¹²⁶ Although the Ceasefire campaign ended 28 January, there were still people stationed in Vietnam, including VQ and FSD personnel. The peace accords specified all US personnel were to be withdrawn from Vietnam by 29 Mar 73, except those stationed at the Embassy. The eligibility for the VSM ended on 28 Mar 73, so it was still possible to be awarded the medal for service during a two month period when there was no campaign designated. Those so awarded would wear the medal with no campaign star.

¹²⁷ SECNAVINST 1650.1H, dated Aug 22, 2006. Sometimes referred to as the Navy-Marine Corps Award Manual

¹²⁸ Only those personnel who meet the criteria established for the AFEM (Vietnam) or VSM are considered to have contributed direct combat support.

Some detachment aircrews were awarded the combat action ribbon, usually based on a situation where a plane was landing or took off during a rocket attack. Although the criteria for award of the CAR were not clearly defined, generally an exchange of fire needed to be involved, or fire directed at an aircraft. Merely being on the ground during a rocket attack did not qualify.

Naval Air Crewman Wings:

Nearly everyone who flew qualified for air crew wings. For a number of years after CT's started flying with VQ, the CT rating was not eligible to earn air crew wings. This changed sometime in 1965 when John Wise became the first CT to qualify, after receiving special training on the EC-121M and attending the AF Sea Survival school at Numazu, Japan. Rusty Buckley was another of the first to earn wings.

The requirements to be awarded wings varied from time to time. In 1972 the requirements were these:

- (1) Orders to flight duty
- (2) Completion of air crew training, which included SERE, DWEST, aircrew swim, Low Pressure chamber and night vision training
- (3) Successful completion of ten missions
- (4) Successful ditching and bailout drill
- (5) Recommendation of the chain of command

Tab Delta - Personnel:

Officers-in-Charge:

In the early days of the Detachment the senior officer present was the de facto officer in charge, in addition to being an airborne evaluator. Sometime in early 1967 officers were actually assigned from NCSP to duty as Officer in Charge (OIC).

TAD Officers in Charge

The first Officers in Charge were temporarily assigned, usually from San Miguel. Exactly who was assigned when is difficult to determine, due to the lack of official records. The below named were assigned at one time or another, based on personal recollection, Navy awards records¹²⁹ and some limited documents available. Some of these OICs served more than once during the life of the det, and so the years indicated below are approximate.

| | |
|-------------------------|-------------|
| LTjg David R. Patterson | (1965) |
| ENS Myron T. Johnson | (1965-1966) |
| ENS Thomas F. Stevens | (1965-1966) |
| LT Grover S. Perkins | (1966) |
| ENS Airell B. Jenks | (1966) |
| LT Charles J. Malloy | (1966) |
| LCDR James E. Woodhouse | (1966-1968) |
| LCDR Donald R. Larsen | (1967) |
| LCDR Carl Strobel | (1967-1968) |
| LCDR David Wentz | (1967) |
| LCDR Lionel H. Olmer | (1967) |
| LCDR Donald L. Brown | (1968) |
| LCDR Selby W. Jacobs | (1968-1969) |
| LCDR Leonard B. Swanson | (1968-1969) |
| LCDR Karl Bernet | (1969) |

Almost certainly others served as well, hopefully further research will uncover more names.

¹²⁹ Any NSG personnel with an S/F Air Medal earned during Vietnam is presumed to have been in Da Nang. There is one known exception, a medically grounded aviator who transferred to the NSG after earning an Air Medal as a helo pilot.

PCS Officers in Charge

Donald C. McKenne (1 Jun 69 – 1 Jun 70)
Kent B. Pelot (1 Jun 70 – 1 May 71)
George A. Purring (1 May 71 – 1 May 72)
James C. Gamrath (1 May 72 – 1 Mar 73)

Leading Chiefs (TAD)

The same situation exists for the Chiefs as did for the officers. Records are sparser, since most official correspondence was signed by the OIC. Most of the below is based on recollection.

TAD Leading Chiefs/Petty Officers:

CTI1 Damon L. Godfrey (1965)
CTI1 Philip M. Szpiech (1965)
CTI1 Donald G. Boggs (1965)
GySgt Alvie E. Smith, USMC (1966)
CTTC Gary Cooper (Aug – Nov 1966)
CTRC Joseph A. Truelove (11/1966 - Feb1967)
GySgt Forest T. Overall, USMC (1967)
CTRC Franklin W. Batchelor (1967 – 68)
CTRCS Ralph Edwards (Jul 67 – 68)

PCS Leading Chiefs:

CTIC Richard G. Miller (1970 – 1971)¹³⁰
CTICS William G. Huff 1971 – Mar 1972
CTIC Charles D. DeCourley Mar 1972 – Feb 1973
CTIC Dennis R. Culbertson Post Det (in PI)

It's all in the name...

One of those who served as Detachment LCPO was CTCRC Joseph A. Truelove. After his time in Da Nang Joe rotated back to San Miguel, as did most of the Spooks at that time. Soon after finishing his time in Da Nang, a junior Spook who worked with Joe (and who will remain unnamed) rewarded himself with a trip to Manila to enjoy nightlife in the big city. While in a crowded bar, the junior Spook thought he spotted his fearless leader from Da Nang across a crowded dance floor.

Doing the only thing a true Spook would do, he offered to buy Joe a beer by shouting out, "Yo Truelove; let me buy you a beer." Unfortunately for our hero, the object of his attention wasn't Joe, and things went downhill from there.

The narrator of this tale recalls that things got worse upon his return to San Miguel, where he made his second mistake by telling the real Joe Truelove about his recent misadventure. The Chief thought it was hilarious and couldn't stop laughing for a week.

As a sage once said, "Anything can happen in the P.I..."

¹³⁰ There were two CPO assigned during this period. CTCRC William J. Swartout was also assigned but not as leading CPO. Chief Swartout was in charge of the Communications Center.



CTIC Denny Culbertson at the entrance to the Spook Mess. Sign reads "Happy Birthday Uncle Hô." (May 1972)

Tab Echo - Aircraft:

(This section dedicated to the memory of Bob Sluter, who read Jane's Fighting Ships and Jane's Aircraft like the rest of us read cheap pulp fiction!)

Navy aircraft are designated by model number, bureau number, and a squadron assigned designator called a MODEX. Prior to 1962, the Navy used its own unique system to designate types of aircraft. After 1962, the Navy changed its system of designating types of aircraft to conform to that used by the other services, changing the designators of the planes flown by the squadron.

Three types of planes were flown by VQ-1 during the life of the Det. These were the EC-121M Super Constellation (aka Willy Victor or Willy)¹³¹, the EA-3B¹³² Skywarrior (aka Seawing or the Whale), and the EP-3B Orion. The name BIG LOOK was also used in reference to the EC-121M and EP-3B, and WEE LOOK for the EA-3B. Informally the EC-121M and EP-3B were referred to as 'big birds.'

Listed below are the specific aircraft flown by VQ-1 during the duration of the Det. Naval aircraft generally have two numeric designations, the Bureau Number (BuNo) which is a permanent 6 digit number; and the modex, a letter-number combination assigned by the squadron. The latter can be changed, as was sometimes the case with the EA-3B's. The BuNo remains with the aircraft until the plane is retired or lost.¹³³

EC-121M:

There were eight original conversions done in 1958 by Martin Aircraft, with four delivered to each VQ squadron. Those received by VQ-1 included PR-21, PR-22, PR-23 and the original PR-24.¹³⁴

¹³¹ The original Navy designation was WV-2Q, and that is where the terms Willy and Willy Victor came from.

¹³² Originally designated A3D-2Q. An earlier version, the A3D-1Q, only had four crew total.

¹³³ Generally this is the case; however, there are some exceptions. Prior to full involvement in Vietnam, while VQ-1 was based at Atsugi, Japan, the Japanese government would not permit US aircraft based in Japan to actively participate in Southeast Asian missions. To circumvent this, the aircraft were flown from Japan to Cubi, where the Bureau Number was changed. Once the missions were completed, the aircraft returned to Cubi where the correct BuNo was restored.

¹³⁴ Much of the information on the disposition of the EC-121M aircraft provided by Rich Haver, former VQ-1 Intel officer, and Larry Brosh.

PR-21/135749 - Was the first VQ-1 “Big Bird” in Da Nang, flown in from Atsugi in September 1965. PR-21 was shot down by the North Korean Air Force 15 April 1969 with loss of all on board, including several BLS.

PR-22/135751 - Sustained significant damage in January 1966 due to a fire while undergoing maintenance in Atsugi. Aircraft was stricken on site.

PR-22/143209 - The second PR-22, delivered to the squadron in 1966.

PR-23/135752 - Flew with VQ-1 until August 1969 when it was transferred to VQ-2

PR-24/135747 - the first PR-24, had a landing gear failure during a touch and go at Atsugi in the fall of 1965. This aircraft was stricken on site and used for fire training.

PR-24/145936 - the second PR-24, one of three “Kelly G” birds¹³⁵, along with PR-26 and PR-27. Delivered to the squadron in early 1967. Survived the war, but in April of 1974 a backend fire on the ground at Atsugi resulted in the aircraft being stricken on site. The derelict aircraft was still there in 1975.

PR-25/145940 - originally a bone yard bird, sent to Atsugi when the first PR-24 was stricken, and the equipment from the first PR-24 was cross-decked into PR-25.

PR-26/145927 - crashed at Da Nang 16 March 1970 while trying to recover from an aborted approach. 23 crew killed, eight survived. There were no Spooks on board; the flight was a repositioning flight from Atsugi via Tainan, Taiwan.

PR-27/143186 - PR-27 was specially configured and did not spend as much time in Da Nang. It was more commonly flown in the SOJ.

PR-50/ - C121J Cargo Willy



EC-121M PR-23 taxiing for takeoff

¹³⁵ These three “Kelly G” birds (24 (new), 26 and 27) were delivered to VQ in the late 1960’s, PR-26 crashed in Da Nang, and the others were destroyed in the late ‘70’s at Davis-Moahan.

EP-3B:

PR-31/149678 - Transferred to VQ-1 on 17 March 1969. First flight in the squadron was 21 March 69 from Atsugi to Atsugi. Originally delivered to the Navy 29 Aug 1962 as a P-3A (ASW variant) and assigned to VP-44 at NAS Patuxent River with Modex LM 01. Flew during the October 1962 Cuban Missile crisis.¹³⁶

PR-32/149669 - Transferred to VQ-1 on 21 June 1969

The two EP-3B's were the only aircraft of their kind. Later EP-3 aircraft assigned to VQ-1 (and VQ-2) were EP-3E, with different back end avionics (AIRES/DEEPWELL). The "B Birds" (also called BAT RACK), started life as P-3A's in 1962. In May 1963 they were obtained by the CIA and converted from straight ASW P-3A's to a SIGINT configuration by LTV Aerosystems, Greenville, TX. The transfer to the CIA became official in the summer of 1964. Their use by the CIA has still not been fully disclosed, but in 1966 they were sent to Taiwan and assigned the ROCAF 34th "Black Bat" squadron. While assigned they were armed with Sidewinder missiles, and flew missions along the China coast, collecting SIGINT and air samples. Their use by ROCAF ended in January 1967, and they were transferred back to the Navy and sent to NAS Alameda for long term storage.¹³⁷ Demands of the Vietnam War dictated otherwise, and in September 1967 they were sent to Lockheed Burbank for conversion into EP-3B's. Conversion and testing was completed and the two aircraft were delivered to VQ-1 in spring of 1969.

These two aircraft flew long after the Vietnam War, and were very reliable. Sometime in the early 1980's PR-31 went over 20,000 flight hours (that were recorded by the Navy, no one knew how many CIA/ROCAF hours were on the airframes). PR-32 had almost as much time in the air. Both were retired in the late 1980's/early 1990's, when VQ-1 and VQ-2 EP-3's were replaced with a new set of EP-3's. The previously used P-3 modex numbers were reassigned to the new BuNo's. So the "PR-32" which collided with the Chinese F-8 off Hainan Island in 2001 was not the plane we flew during Det days in Vietnam.

¹³⁶ Orion Service Digest Issue 4, May-June 1963

¹³⁷ A third P-3A (149673) also served with the ROCAF, and was returned to Alameda with the other 2 planes. It was later converted for another special purpose (not related to VQ operations).



EP-3B PR-31 BuNo 149678 parked at Naval Air Station Cubi Point, Philippines (Feb 1972)

EA-3B:

In the list below, in some cases only the BuNo is listed for each Whale. The modex numbers were sometimes changed, depending on where the aircraft operated, especially when assigned to aircraft carriers. Modex numbers associated with a BuNo below are based on logs or photos.

- 142257 (PR-2). This plane was the one that launched from Cubi 5/26/66 with a VQ-2 crew. After both engines flamed out in bad weather, the pilot ordered the crew to bail out, and the four back-enders jumped. The pilot was able to restart engines and stopped the navigator and plane captain from leaving, and the plane safely returned to Cubi. The four who bailed out did not survive, although there were indications they made it to the ocean alive. No CTs were on board. The plane was later transferred to VQ-2, redesignated as Ranger 11 (JQ-11) and was lost in the Med. The crew, including CTI1 Darrell Hawkins¹³⁸, escaped safely.
- 142671 (PR-6). Actually the second PR-6. The first PR-6 crashed before the Vietnam War. Transferred to Davis Montham 8/89.
- 142673 (PR-13) Specially configured for use by an Army backend crew (SEA BRINE). Transferred to VQ-1 (from VQ-2) 12/69. Transferred to Davis Montham 2/71.
- 144848 (PR-1). Acquired by VQ-1 12/65. Damaged during a rocket attack 9/28/68. The plane was towed through Da Nang city escorted by armed guards and placed on a MSTS ship. Lost in Tokyo Bay 12/14/68 during bad weather while enroute CONUS for repair.
- 144849 (PR-3). Acquired by VQ-1 12/60. Inducted into NARF Alameda 5/17/68 to 8/22/69 for SEAWING conversion. Transferred to VAQ-33 12/87.
- 144851 (PR-14). Acquired by VQ-1 12/65. Transferred 2/20/69 to VQ-2.
- 144854 (PR-15), (PR-10), (PR-7). Acquired by VQ-1 3/60. Flew the last operational mission from Da Nang as PR-15. Crashed at NAS Miramar 26 Jun 87 while doing night Field Carrier Landing Practice (FCLP), stricken.

¹³⁸ Darrell Hawkins was a Vietling (but not a flyer) who retrained as a Ruling. Commissioned as an LDO, retired LCDR. Service in Vietnam was with the USMC 1st RadBn (as CTI2) at Da Nang and Dong Ha.

- 144855 (PR-11). Acquired by VQ-1 3/60. Crashed in Philippine Sea 10/19/73 during a training accident (no Spooks involved).
- 146449 (PR-9), (PR-16). Acquired by VQ-1 4/60. Originally PR-9, reassigned as PR-16 10/68. Specially configured for use by an Army backend crew (SEA BRINE). Transferred to VQ-2 5/14/75.
- 146450 (PR-12). Acquired by VQ-1 3/60. Lost in the Indian Ocean 8/4/1982 after launching from USS Ranger.
- 146451 (PR-8). Acquired by VQ-1 4/60. Transferred to VQ-2 8/89.
- 146452 (PR-3), (PR-7). Acquired by VQ-1 4/60. Transferred to VQ-2 8/89.
- 146456 (PR-6). Acquired by VQ-1 6/60. The original PR-6, crashed 1/13/61, no service in Vietnam.
- 146457 (PR-5). Acquired by VQ-1 7/60. Transferred 8/89 to VQ-2 as JQ-7. Now on the USS Yorktown in Charleston, SC.
- 146459 (PR-4). Acquired by VQ-1 1/61. Transferred 8/89. May have crashed in Miramar in 1994.



VQ-1 EA-3B aircraft parked at Naval Air Station, Cubi Point, Philippines. Several variants of the EA-3 are visible. 144831, 144834 and 144840 are RA-3Bs acquired when VQ-1 absorbed VAP-61. (Official USN photo)

Tab Foxtrot – The Spook Mess:

No history of the Detachment would be complete without some mention of the Spook Mess. Built on the second (top) deck of the barracks used by the Detachment, the World Famous International Spook Mess (usually referred to as just the Spook Mess) occupied half of the top floor and featured a well-stocked bar, a pool table, a stage in one corner and a few chairs and tables. In addition to drinks the bar sold snacks and cigarettes.

No exact date for the construction of the Spook Mess has been identified, but Butch Hand, who arrived at the Det in 1969, recalls moving the pool table up the outside stairs into the mess, no easy feat for sure. So it appears that the Mess, at least in its final form, was established about that time. But the roots of the Spook Mess go back much further than that.

Spooks are resourceful creatures, and the roots of the Spook Mess can really be traced all the way back to the beginning, when the Spooks still resided in tents. The Spook tent soon acquired a refrigerator and other accoutrements, thanks to the efforts of a resourceful Marine, Sergeant Chester V. Harris, who was assigned to the Det. Living conditions gradually improved, and then were set back in 1967 with the July rocket attack, but by 1969 the Spooks were established in the barracks used until the Det stood down. This was the home of the Spook Mess.

The Spook Mess served as a social mustering place for off-duty Detachment members, and was open to outsiders by invitation only. Often these outsiders were other CTs passing through Da Nang enroute ships in the Gulf of Tonkin, or selected friends from VQ-1. For the most part, however, the Spook Mess remained exclusive territory for the junior enlisted Spooks who actually lived in the barracks, and the Chiefs and Officers assigned to the Det.

The Mess was generally open whenever somebody was there. During the day the Mess employed a full time bartender (Huong); and during the evening two different bartenders (Cam and Hoa). The evening bartenders were married to Vietnamese Air Force personnel and thus could remain on base since they lived in Vietnamese housing. During the midnight hours the Det-assigned firewatch doubled as bartender.

Supplies for the Spook Mess were obtained by pooling everyone's ration and purchasing the booze and cigarettes in bulk. This probably wasn't allowed, but no one seemed to care, and had the added advantage of ensuring all the rations were used. Cigarettes rationed to non-smokers could be purchased and resold to those who did, for instance. Occasionally the Mess would be able to acquire San Miguel beer from the Philippines, usually courtesy of VQ-1. Squadron planes arriving from Japan or Guam often managed to stop in Cubi, and one plane could transport up to 100 cases of bottled beer. San Miguel was a premium, since the base package store typically only carried

Budweiser, Olympia and Carling Black Label. The latter was almost as undrinkable as the local Vietnamese beer, Ba Mười Ba.¹³⁹ The San Miguel usually didn't last long, and on occasion a case would be traded for other supplies to improve the Mess.

The snacks available seemed to center around Van Camp "Beanie Weenies" and Vienna sausages, both available in a can. Other light snacks, chips in a bag and that sort of thing, could be purchased as well.

Payment could be made using almost any sort of currency available in Asia. In addition to Military Payment Certificates (MPC) and Vietnamese đồng (the only two authorized currencies for American forces in Vietnam), the till often contained American 'green' dollars, Thai baht, Philippine pesos, and occasionally New Taiwan Dollars, Hong Kong Dollars and even Japanese Yen, depending on who might be transiting through. Thai baht and Philippine pesos were probably most common, since the vast majority of 'bennie trips' were to airfields in Thailand, and most of the Detachment members were permanently assigned to San Miguel in the Philippines.

From time to time enough profit would accrue that the Mess could hire live entertainment in the form of a band or floor show.

¹³⁹ Ba Mười Ba, literally "33" in Vietnamese, was not a world beer of distinction. It was probably called "33" because they were unsuccessful the first thirty two times.

Tab Golf – Detachment Dogs¹⁴⁰:

At least as early as the fall of 1968 the Detachment had one or more dogs as mascots. Two of the earliest reported dogs were *Beggar* and *Lifer*, who came from the same litter and were nearly identical. Shortly after the dogs joined the Det, Tom Clements recalls fellow R-brancher Roger “Rod for short because it isn’t” Hufford out on the porch of the Spook Mess calling out “Beggar, Lifer, here Beggar and Lifer.” This was just as two Chiefs (probably SeaBees) were walking by and giving him a dirty look.



One of the pups was run over by a deuce and a half shortly after Tom left in early 1969.

CTRSN Wayne Nowell with Beggar or Lifer (photo courtesy of Tom Clements)

During the 1969 to 1970 period Gary Shiomichi remembered at least three dogs, *Anno*, *Willy Victor*, and *Willy Victor II*. *Willy Victor* was black. Hal Gamble and Bill Dillon took care of one of the litters during 1970. Hal recalls it this way:

“Oh, how many times the front of my fatigue shirt was full of lunch meat ‘appropriated’ from the chow hall, as a trail of dogs followed in my path back to the barracks. Taking care of the dogs’ dietary needs was an enjoyable diversion for me, thus my nickname back then – ‘Uncle Hal the Doggies’ Pal.”

Bill Dillon shared feeding duties with Hal for these dogs. Reportedly one of the puppies was given to one of the Vietnamese cleaning ladies. As she departed with the puppy, Hal found out this puppy was destined for the dinner table, and he immediately ran off to intercept and rescue the departing puppy. (The success or failure of his effort was not reported!).

Sometime in 1971 *Spook* joined the Detachment. *Spook* apparently had no trouble finding male companionship, and produced several litters. *Beggar (II)* was the first of several offspring kept by the det. Born in 1971, she turned out to be alcoholic; and on one occasion fell off the balcony of the Spook Mess. Fortunately no harm came of this incident, but sometime in 1972 she was found dead of suspected poisoning.

¹⁴⁰ Info and photos compiled by Duey Mann, with input from Gary Shiomichi, Hal Gamble, Bill Dillon, Tom Clements and others.

Spook had another litter in the summer of 1972 during the monsoon season. This litter almost drowned. Duey Mann recalls it this way:

“Spook would regularly come to my room for peace and quiet as well as some chow hall snacks. One evening she woke me up frantically trying to get my attention. She led me out of the barracks and under the steps where she had dug a hole to deliver her pups. By the time I got there, the hole had filled up with rain water with all her pups in the hole. I quickly got a box and some dry sheets (or whatever was available) and placed each pup and Spook in the box. One of those pups was named Brutus. He was obviously the strongest of the litter and we named him accordingly.”

When the Paris Peace Accords took effect at the end of January, 1973, plans were almost immediately made to withdraw the Det to the Philippines. No one wanted to abandon the dogs, at least *Spook* and *Brutus*, so a plan had to be formulated to extract them along with other det equipment and personnel. Duey describes the plan finally implemented:

“The exit was somewhat comical as the Spooks needed to ‘invent’ a way to ‘legally’ get them through customs. Crates were built by Mike Barnowski and John Phipps and then we got Valium from the corpsmen to drug the dogs. Several inventive ideas on just how to get them out of the country were discussed. The final one being (as I recall), take a ONE PESO¹⁴¹ coin and use it for a seal. We took the coin and used carbon paper on the reverse and used it like an official raised seal (watermark). Lieutenant Commander Gamrath then declared that the contents of the crates (the dogs) were in fact DRUG DOGS. This was indeed the truth, except that the past tense (DRUGGED) would have been more accurate! No issues were noted in the PI. Both Spook and Brutus lived with me in San Antonio.”

“I don’t recall specifically where Spook ended up, although I believe she went to live with my landlord and her family in San Antonio. Brutus went to Clark with Terry Stiebel when San Miguel folks were transferred there.”



“Omar” Maresca with Lifer



Hal Gamble with Spook and Litter

¹⁴¹ The Philippine One Peso coin in use at that time was approximately the diameter of a Notary seal.



Spook ready for travel



Duey Mann with Brutus in San Antonio, PI

Tab Hotel – Project Factor:

Project Factor¹⁴² was an NSA designed and sponsored project targeted against North Vietnamese infiltration trawlers, using a special collection package installed onboard regular (ASW) P-3B aircraft. Project operators most likely included some Big Look Spooks.

The squadron deploying the package was VP-19 and missions were flown from Cam Ranh Bay.

¹⁴² (Johnson), pp 571-572

Tab India – Seventh Fleet Organization:

Every military organization can be subject to several chains-of-command. In the case of Detachment Bravo/Fleet Support Detachment, we were administratively a part of the Naval Communications Station Philippines. Operationally, however, we were subordinate (along with VQ-1) to the Commander of the Seventh Fleet (COMSEVENTHFLT), homeported in Yokosuka Japan aboard the USS Oklahoma City (CLG-5).

Directly subordinate to Seventh Fleet were a number of Task Forces, or CTFs (for Commander Task Force). The best known of these was CTF 77, the carrier strike force, responsible for management of all the carriers operating off Vietnam. CTF 75, the Cruiser-Destroyer Force commander, was responsible for the other ships, including those assigned to Primary Identification Radar Advisory Zone (PIRAZ) duties (aka RED CROWN).

The next lower echelon is the Task Group (TG). Task Groups are further divided into Task Units (TU), which in turn are composed of Task Elements (TE). Task Elements are typically detachments or in some cases individual ships or aircraft. A combination of numbers and decimal points is used to specifically delineate and identify each unit or echelon in this system. At the end of the Vietnam War the VQ-1 Detachment at Da Nang was identified as Task Element (TE) 70.2.3.1. The parent squadron's operational designator would have been Task Unit (TU) 70.2.3.

As a supporting command, whenever we were on the aircraft we were a part of TE 70.2.3.1, and therefore worked for Seventh Fleet.

Tab Juliet – Tiger Security:

As Vietnamization progressed and American forces withdrew from Vietnam, the need for physical security of Naval Security Group operations at Da Nang gradually became more pronounced. After serious consideration at the highest echelons of command, the Detachment was given no direction except to solve the problem as best as possible, using their own initiative. The situation became even more acute in early 1972 when during a threat period planes and aircrew were temporarily withdrawn to Cubi, leaving only a skeleton force behind in Da Nang.

Those remaining behind included several Marines assigned to the Detachment as communications specialists. Marines by their very nature are “take charge” guys, and have the additional advantage of basic infantry training. With tacit command approval the assigned Marines established an elite security force, with the Marines as the core augmented by a few highly motivated detachment sailors.

Due to the sensitivity of the installations guarded, the official details surrounding this security force remain shrouded in secrecy even after forty years, and will likely never be totally declassified. However, some of the story has been revealed, including the unofficial name of the unit, Tiger Security.

Realizing that the best defense is a good offense, Tiger Security from the beginning was proactive. Immediately they established a perimeter around the Spook Mess and further announced their presence by painting a water tower on the FASU compound with the unit name “Tiger Security” and the names of several of the senior leaders. The intent of this latter action, of course, was to strike fear into the Viet Cong spies known to be lurking just outside the base in the small village commonly referred to as Dogpatch.

This strategy proved effective, and for the remainder of the Detachment’s existence (approximately one year) the Spook Mess was never attacked by sappers or any assault force. In one case Tiger Security was able to neutralize a 122mm Vietnamese rocket, which was promptly put on display by Tiger Security as a trophy of war. In fact, Tiger Security was one of the most successful security forces in all of military history, suffering only one (non-combat) casualty. That casualty required a medivac, but was non-fatal.

All things come to an end, and so it was with Tiger Security, decommissioned concurrently with the withdrawal of the Detachment after the signing of the Paris Peace Accords. Its mission complete, and official records sealed, Tiger Security faded into the obscurity of military history, remembered only by the few who served or were protected by the Naval Security Group’s most successful security force.



Tiger Security Team at Bunker(photo courtesy of David Gilbert)



Part of the perimeter established by Tiger Security. In some cases covernames (e.g. "Strawhead") were used to mask the true identity of force members. (photo taken 1972)

Tab Kilo – Agent Orange:

Everyone who served on the ground in Vietnam (including the inland waters, aka “brown waters”); and in some cases those who served off-shore (“blue waters”) were at some point exposed to Agent Orange (AO), a dioxin-laced defoliant used widely during the war to denude jungle vegetation. Although only a few of the Big Look Spooks traveled within Vietnam away from the confines of Da Nang Air Base, we were all most likely exposed due to the proximity of the AO loading area to our barracks and operations spaces.

Nearly forty years after the end of the U.S. involvement in Vietnam, funds were appropriated by the U.S. Congress to begin remediation of AO “hot spots” at the former Da Nang AB along with other locations in the former South Vietnam. As part of this effort the area surrounding the base was surveyed and maps produced identifying the areas requiring clean-up. The clean-up operation, conducted jointly by the U.S. and Vietnamese governments, is still on-going at the time of this writing (2017).

The following article from Wikipedia provides details on AO and Operation RANCH HAND, the covername for the project which deployed the defoliant. A second article (also from Wikipedia) describes Operation PACER IVY, the Air Force operation that removed remaining AO stocks to Johnston Atoll for further disposition in 1972. Following these articles is information taken from a USAID-supplied document, describing Da Nang airport circa 2011. Accompanying the description is a map showing the areas requiring AO remediation. Note that most are at or near the north end of the runways, not far from where the Spook barracks and working spaces were located.

A number of health issues have been identified with exposure to Agent Orange, including diabetes, prostate issues, and peripheral neuropathy. Slowly the Veteran’s Administration has agreed that those who can prove service within the land confines of Vietnam (in-country or “boots on the ground”) and who exhibit problems within the above categories probably have a legitimate claim for some percentage of disability. Any awards are subject to periodic review, and in at least one case this has presented a problem (the VA attempted to reduce disability percentage). In some cases proving a presence “in-country” is a problem, since the vast majority of the Spooks went to Vietnam on temporary orders (TAD) from NCSP or some other command within the Pacific Theater. To assist with claims, the Big Look Spooks have assembled a file of official and unofficial documents listing names of people who served, but the file is not complete and more documents (copies are fine) are always welcome.

Agent Orange



U.S. Army Huey helicopter spraying Agent Orange over Vietnamese agricultural land.

Agent Orange—or **Herbicide Orange (HO)**—is one of the herbicides and defoliants used by the U.S. military as part of its herbicidal warfare program, Operation Ranch Hand,^[1] during the Vietnam War from 1961 to 1971.^[2] It was a mixture of equal parts of two herbicides, 2,4,5-T and 2,4-D.

During the late 1940s and 1950s, the US and Britain collaborated on development of herbicides with potential applications in warfare. Some of those products were brought to market as herbicides. The British were the first to employ herbicides and defoliants to destroy the crops, bushes, and trees of communist insurgents in Malaya during the Malayan Emergency. These operations laid the groundwork for the subsequent use of Agent Orange and other defoliant formulations by the US.^[3]

In mid-1961, President Ngo Dinh Diem of South Vietnam asked the United States to conduct aerial herbicide spraying in his country. In August of that year, the South Vietnamese Air Force conducted herbicide operations with American help. But Diem's request launched a policy debate in the White House and the State and Defense Departments.^[1] However, U.S. officials considered using it, pointing out that the British had already used herbicides and defoliants during the Malayan Emergency in the 1950s. In November 1961, President John F. Kennedy authorized the start of Operation Ranch Hand, the code-name for the U.S. Air Force's herbicide program in Vietnam.

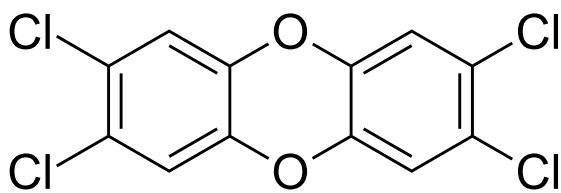
Agent Orange was manufactured for the U.S. Department of Defense primarily by Monsanto Corporation and Dow Chemical.^{[4]:6} It was given its name from the color of the orange-striped barrels in which it was shipped, and was by far the most widely used of the

so-called "Rainbow Herbicides".^[5] The 2,4,5-T used to produce Agent Orange was contaminated with 2,3,7,8-Tetrachlorodibenzodioxin (TCDD), an extremely toxic dioxin compound. In some areas, TCDD concentrations in soil and water were hundreds of times greater than the levels considered safe by the U.S. Environmental Protection Agency.^{[6][7]}

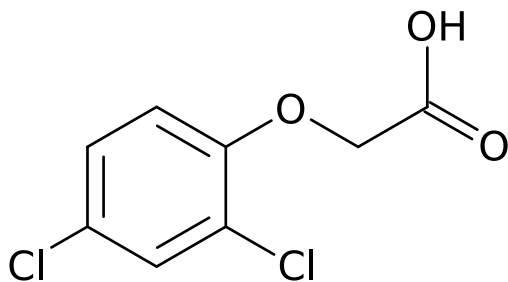
In the absence of specific customary or positive international humanitarian law regarding herbicidal warfare, a draft convention, prepared by a Working Group set up within the Conference of the Committee on Disarmament (CCD), was submitted to the UN General Assembly in 1976. In that same year, the First Committee of the General Assembly decided to send the text of the draft convention to the General Assembly, which adopted Resolution 31/72 on December 10, 1976, with the text of the Convention attached as an annex thereto. The convention, namely the Environmental Modification Convention, was opened for signature and ratification on May 18, 1977, and entered into force in October 5, 1978. The convention prohibits the military or other hostile use of environmental modification techniques having widespread, long-lasting or severe effects. Many states do not regard this as a complete ban on the use of herbicides and defoliants in warfare but it does require case-by-case consideration.^{[8][9]}

Although in the Geneva Disarmament Convention of 1978, Article 2(4) Protocol III to the weaponry convention has "The Jungle Exception", which prohibits states from attacking forests or jungles "except if such natural elements are used to cover, conceal or camouflage combatants or military objectives or are military objectives themselves" this voids any protection of any military or civilians from a napalm attack or something like agent Orange and is clear that it was designed to cover situations like U.S. tactics in Vietnam. This clause has yet to be revised.^[10]

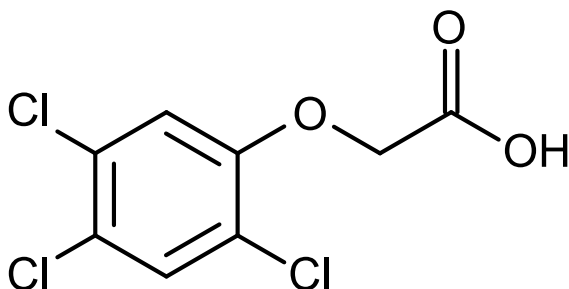
Following the conclusion of the War in Southeast Asia, contention over the Agent Orange topic has not subsided. Two primary threads of the controversy now relate to toxicity of the agent or potential long-term health effects and to additional potential exposure locations outside of the war-zone.



2,3,7,8-TCDD



2,4-D



2,4,5-T

1 Chemical description and toxicology

Chemically, Agent Orange is an approximately 1:1 mixture of two phenoxy herbicides – 2,4-dichlorophenoxyacetic acid (**2,4-D**) and 2,4,5-trichlorophenoxyacetic acid (**2,4,5-T**) – in iso-octyl ester form.^[11]

Numerous studies have examined health effects linked to Agent Orange, its component compounds, and its manufacturing byproducts.^[12]

A 1969 report authored by K. Diane Courtney and others found 2,4,5-T could cause birth defects and stillbirths in mice.^[13] Several studies have shown an increased rate of cancer mortality for workers exposed to 2,4,5-T. In one such study, from Hamburg, Germany, the risk of cancer mortality increased by 170% after working for 10 years at the 2,4,5-T-producing section of a Hamburg manufacturing plant.^[14] Three studies have suggested prior exposure to Agent Orange poses an increased risk of acute myelogenous leukemia in the children of Vietnam veterans.^[12]

In 1969 it was also revealed to the public that the 2,4,5-T was contaminated with a dioxin, 2,3,7,8-tetrachlorodibenzodioxin (**TCDD**), and that the TCDD was causing many of the previously unexplained adverse health effects which were correlated with Agent Orange exposure.^[15] TCDD has been described as “perhaps the most toxic molecule ever synthesized by man”. (Galston 1979,^[16] cited in^[17])

It has often been claimed^{[18][19][20][21]} that the contamination with dioxin was discovered only *later*. However, prior to **Operation Ranch Hand** (1962-1971), health-risks had become apparent, from several accidents in 2,4,5-T-production in the U.S. and in Europe.^[22] The causes had been investigated, and results published^[23] in 1957, specifically stating “tetrachlorodibenzodioxine proved very active”. Additionally “Boehringer, which used the relatively safer low-temperature-process since 1957, in the same year warned the other producers of 2,4,5-TCP, which were using the high-temperature-process, pointing out the risk and providing suggestions how to avoid them.”^[24]

Internal memoranda revealed that Monsanto (a major manufacturer of 2,4,5-T) had informed the U.S. government in 1952 that its 2,4,5-T was contaminated.^[25] In the manufacture of 2,4,5-T, accidental overheating of the reaction mixture easily causes the product to condense into the toxic self-condensation product TCDD. At the time, precautions were not taken against this unintended side reaction, which also caused the Seveso disaster in Italy in 1976.

The employment of 2,4,5-T by the military rapidly ended, according to the **American Cancer Society**, following the convincing results of a study in 1970 that found 2,4,5-T could cause birth defects in lab animals.^[26]

In 1979, Yale biologist Arthur Galston, who specialized in herbicide research, published a review of what was known at the time about the toxicity of TCDD. Even “vanishingly small” quantities of dioxin in the diet caused adverse health effects when tested on animals.^[17] Since then, TCDD has been comprehensively studied. It has been associated with increased neoplasms in every animal bioassay reported in the scientific literature.^[14] The National Toxicology Program has classified TCDD as “known to be a human carcinogen”, frequently associated with soft-tissue sarcoma, non-Hodgkin’s lymphoma, Hodgkin’s lymphoma and chronic lymphocytic leukemia (CLL).^{[27][28]}

Starting in 1991, Congress asked the Institute of Medicine to review the scientific literature on Agent Orange and the other herbicides used in Vietnam, including their active ingredients and the dioxin contaminant. The IOM found an association between dioxin exposure and diabetes.^{[29][30]}

Of the two herbicides that make up Agent Orange, 2,4-D and 2,4,5-T, the latter is considered to be less biodegradable.^[31] While degradation of 2,4,5-T with a

half-life on a scale of days can be achieved by adding bacteria of a special strain, “no substantial degradation” was observed in the same soil without addition of bacteria.^[32] The half-life of dioxins in soil is more than 10 years,^[33] and that of TCDD in human fat tissue is about 7 years.^[34]

1.1 Discovery of herbicides and defoliants and first use in war

Several herbicides were discovered as part of efforts by the US and the British to develop herbicidal weapons for use during WWII. These included 2,4-D (2,4-dichlorophenoxyacetic acid), 2,4,5-T (coded LN-14, and also known as trioxone), MCPA (2-methyl-4-chlorophenoxyacetic acid, 1414B and 1414A, recoded LN-8 and LN-32), and isopropyl phenylcarbamate (1313, recoded LN-33).^[35]

In 1943, the U.S. Department of the Army contracted the University of Chicago to study the effects of 2,4-D and 2,4,5-T on cereal grains (including rice) and broadleaf crops. From these studies arose the concept of using aerial applications of herbicides to destroy enemy crops to disrupt their food supply. In early 1945, the U.S. Army ran tests of various 2,4-D and 2,4,5-T mixtures at the Bushnell Army Airfield in Florida, which is now listed as a Formerly Used Defense Site (FUDS). As a result, the U.S. began a full-scale production of 2,4-D and 2,4,5-T and would have used it against Japan in 1946 during Operation Downfall if the war had continued.^{[36][37]}

By the end of the war, the relationship between the two countries was well established. In the years after the war, the U.S. tested 1100 compounds, and field trials of the more promising ones were done at British stations in India and Australia, to establish their effects in tropical conditions, as well as at the U.S.'s testing ground in Florida.^[35]

Between 1950 and 1952, for example, trials were conducted in Tanganyika, at Kikore and Stunyansa, to test arboricides and defoliants under tropical conditions. The chemicals involved were 2,4-D, 2,4,5-T, and endoathall (3,6-endoxohexahydrophthalic acid). During 1952/53, the unit supervised the aerial spraying of 2,4,5-T over the Waturi peninsula in Kenya to assess the value of defoliants in the eradication of tsetse fly.^[35]

During the Malayan Emergency, Britain was the first nation to employ the use of herbicides and defoliants to destroy bushes, trees, and vegetation to deprive insurgents of cover and targeting food crops as part of a starvation campaign in the early 1950s. A detailed account of how the British experimented with the spraying of herbicides was written by two scientists, E.K. Woodford of Agricultural Research Council's Unit of Experimental Agronomy and H.G.H. Kearns of the University of Bristol.^[35]

After the Malayan conflict ended in 1960, the U.S. considered the British precedent in deciding that the use of defoliants was a legal tactic of warfare. Secretary of State



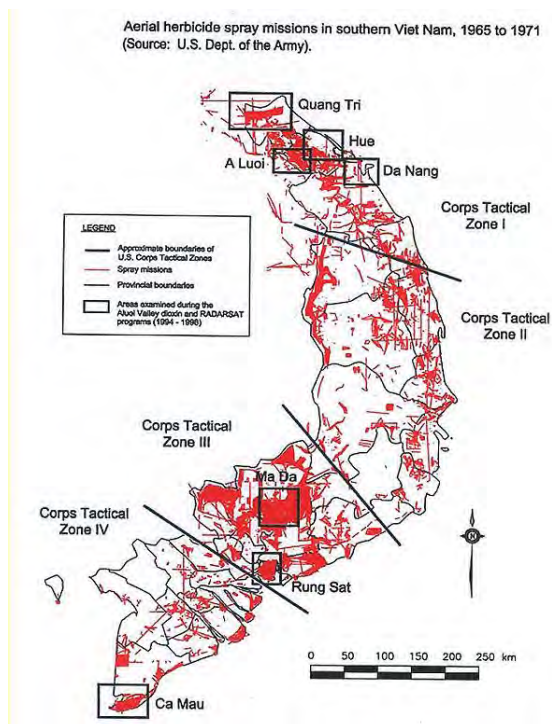
British General Sir Gerald Templer authorized the use of 2,4,5-T and 2,4-D (Agent Orange) throughout the Malayan Emergency to destroy bushes, trees, and vegetation in order to deprive the insurgents of cover. Later, the Americans used Agent Orange during the Vietnam War.

Dean Rusk advised President John F. Kennedy that the British had established a precedent for warfare with herbicides in Malaya.^[3]

2 Use in the Vietnam War

During the Vietnam War, between 1962 and 1971, the United States military sprayed nearly 20,000,000 U.S. gallons (75,700,000 L) of chemical herbicides and defoliants in Vietnam, eastern Laos, and parts of Cambodia as part of the aerial defoliation program known as Operation Ranch Hand, reaching its peak from 1967 to 1969.^{[38][39][40]} Like the British did in Malaya, the goal was to defoliate rural/forested land, depriving guerrillas of food and cover and clearing sensitive areas such as around base perimeters.^[41] The program was also a part of a general policy of forced draft urbanization, which aimed to destroy the ability of peasants to support themselves in the countryside, forcing them to flee to the U.S. dominated cities, depriving the guerrillas of their rural support base.^{[39][42]}

Spraying was usually done either from helicopters or from low-flying C-123 Provider aircraft, fitted with sprayers and “MC-1 Hourglass” pump systems and



Map showing locations of U.S. army aerial herbicide spray missions in South Vietnam taking place from 1965 to 1971.



Military film footage of U.S. troops spraying Agent Orange from a riverboat in Vietnam.

1,000 U.S. gal (3,800 L) chemical tanks. Spray runs were also conducted from trucks, boats, and backpack sprayers.^{[43][44][45]}

The first batch of herbicides was unloaded at Tan Son Nhut Air Base in South Vietnam, on January 9, 1962.^[51] U.S. Air Force records show at least 6,542 spraying missions took place over the course of Operation Ranch Hand.^[46] By 1971, 12 percent of the total area of South Vietnam had been sprayed with defoliating chemicals, at an average concentration of 13 times the recommended U.S. Department of Agriculture application rate for domestic use.^[47] In South Vietnam alone, an estimated 10 million hectares of agricultural land was ultimately destroyed.^[48] In some areas, TCDD concentrations in soil

and water were hundreds of times greater than the levels considered safe by the U.S. Environmental Protection Agency.^{[6][17]}

The campaign destroyed 5 million acres (20,000 km²) of upland and mangrove forests and millions of acres of crops. Overall, more than 20% of South Vietnam's forests were sprayed at least once over a nine-year period.^{[42][49]}

In 1965, members of the U.S. Congress were told "crop destruction is understood to be the more important purpose ... but the emphasis is usually given to the jungle defoliation in public mention of the program."^[49] Military personnel were told they were destroying crops because they were going to be used to feed guerrillas. They later discovered nearly all of the food they had been destroying was not being produced for guerrillas; it was, in reality, only being grown to support the local civilian population. For example, in Quang Ngai province, 85% of the crop lands were scheduled to be destroyed in 1970 alone. This contributed to widespread famine, leaving hundreds of thousands of people malnourished or starving.^[50]

The U.S. military began targeting food crops in October 1962, primarily using Agent Blue; the American public was not made aware of the crop destruction programs until 1965 (and it was then believed that crop spraying had begun that spring). In 1965, 42 percent of all herbicide spraying was dedicated to food crops. The first official acknowledgement of the programs came from the State Department in March 1966.^{[37][42]}

Many experts at the time, including Arthur Galston, the biologist who developed and intensively studied 2,4,5-T and TCDD, opposed herbicidal warfare, due to concerns about the side effects to humans and the environment by indiscriminately spraying the chemical over a wide area. As early as 1966, resolutions were introduced to the United Nations charging that the U.S. was violating the 1925 Geneva Protocol, which regulated the use of chemical and biological weapons. The U.S. defeated most of the resolutions,^{[51][52]} arguing that Agent Orange was not a chemical or a biological weapon as it was considered a herbicide and a defoliant and it was used in effort to destroy plant crops to deprive the enemy of cover and not meant to target human beings. A weapon, by definition, is any device used to injure, defeat, or destroy living beings, structures, or systems, and Agent Orange did not qualify under that definition. It also argued that if the U.S. were to be charged for using Agent Orange, then Britain and its Commonwealth nations should be charged since they also used it widely during the Malayan Emergency in the 1950s.^[53] In 1969, during a debate in the First Committee of the UN General Assembly on the question of chemical and bacteriological (biological) weapons, Britain stated with respect to the then still draft Resolution 2603 (XXIV): "The evidence seems to us to be notably inadequate for the assertion that the use in war of chemical substances specifically toxic to plants is pro-

hibited by international law.”^[54]

- Stacks of 55-gallon (200 L) drums containing Agent Orange.
- Defoliant spray run, part of Operation Ranch Hand, during the Vietnam War by UC-123B Provider aircraft.
- U.S. Army armored personnel carrier (APC) spraying Agent Orange over Vietnamese rice fields during the Vietnam War.
- A UH-1D helicopter from the 336th Aviation Company sprays a defoliation agent over farmland in the Mekong Delta.



Handicapped children, most of them victims of Agent Orange.

2.1 Effects on the Vietnamese people

Main article: Health effects of Agent Orange on the Vietnamese people

2.1.1 Health effects



Major TỰ ĐỨC PHẠNG was exposed to dioxin-contaminated Agent Orange.

The government of Vietnam says that 4 million of its citizens were exposed to Agent Orange, and as many as 3 million have suffered illnesses because of it; these figures include the children of people who were exposed.^[55] The Red Cross of Vietnam estimates that up to 1 million people are disabled or have health problems due to contaminated Agent Orange.^[56] The United States government has challenged these figures as being unreliable.^[57]

According to a study by a Vietnamese scientist, Dr Nguyen Viet Nhan, children in the areas where Agent Orange was used have been affected and have multiple health problems, including cleft palate, mental disabilities, hernias, and extra fingers and toes.^[58] In the 1970s, high levels of dioxin were found in the breast milk of

South Vietnamese women, and in the blood of U.S. military personnel who had served in Vietnam.^[59] The most affected zones are the mountainous area along Truong Son (Long Mountains) and the border between Vietnam and Cambodia. The affected residents are living in sub-standard conditions with many genetic diseases.^[60]

The scientific data supporting a causal link between Agent Orange/dioxin exposure and birth defects is controversial and weak, in part due to poor methodology. In 2006 Anh Duc Ngo and colleagues, of the University of Texas Health Science Center, published a meta-analysis that exposed a large amount of heterogeneity (different findings) between studies, a finding consistent with a lack of consensus on the issue.^[61] Despite this, statistical analysis of the studies they examined resulted in data that the increase in birth defects/relative risk (RR) from exposure to agent orange/dioxin “appears” to be on the order of 3 in Vietnamese funded studies but 1.29 in the rest of the world. With a casual relationship near the threshold of statistical significance in still-births, cleft palate, and neural tube defects, with spina bifida being the most statistically significant defect.^[62] The large discrepancy in RR between Vietnamese studies and those in the rest of the world has been ascribed to bias in the Vietnamese studies.^[61]

About 28 of the former U.S. military bases in Vietnam where the herbicides were stored and loaded onto airplanes may still have high level of dioxins in the soil, posing a health threat to the surrounding communities. Extensive testing for dioxin contamination has been conducted at the former U.S. airbases in Da Nang, Phu Cat and Bien Hoa. Some of the soil and sediment on the bases have extremely high levels of dioxin requiring remediation. The Da Nang Airbase has dioxin contamination up to 350 times higher than international recommendations for action.^{[63][64]} The contaminated soil and sediment continue to affect the citizens of Vietnam, poisoning their food chain and causing illnesses, serious skin diseases and a variety of cancers in the lungs, larynx, and prostate.^[58]

2.1.2 Ecological effects

See also: Environmental impact of war

About 17.8 percent—3,100,000 hectares (12,000 sq mi)—of the total forested area of Vietnam was sprayed during the war, which disrupted the ecological equilibrium. The persistent nature of dioxins, erosion caused by loss of tree cover and loss of seedling forest stock meant that reforestation was difficult (or impossible) in many areas.^[65] Many defoliated forest areas were quickly invaded by aggressive pioneer species (such as bamboo and cogon grass), making forest regeneration difficult and unlikely. Animal-species diversity was also impacted; in one study a Harvard biologist found 24 species of birds and five species of mammals in a sprayed forest, while in two adjacent sections of unsprayed forest there were 145 and 170 species of birds and 30 and 55 species of mammals.^[66]

Dioxins from Agent Orange have persisted in the Vietnamese environment since the war, settling in the soil and sediment and entering the food chain through animals and fish which feed in the contaminated areas. The movement of dioxins through the food web has resulted in bioconcentration and biomagnification.^[67] The areas most heavily contaminated with dioxins are former U.S. air bases.^[68]

2.1.3 Sociopolitical effects

The RAND Corporation's *Memorandum 5446-ISA/ARPA* states: “the fact that the VC obtain most of their food from the neutral rural population dictates the destruction of civilian crops ... if they (the VC) are to be hampered by the crop destruction program, it will be necessary to destroy large portions of the rural economy – probably 50% or more”.^[69]

Rural-to-urban migration rates dramatically increased in South Vietnam, as peasants escaped the war in the countryside by fleeing to the cities. The urban population in South Vietnam nearly tripled, growing from 2.8 million people in 1958 to 8 million by 1971. The rapid flow of people led to a fast-paced and uncontrolled urbanization; an estimated 1.5 million people were living in Saigon slums.^[70]

2.2 Effects on U.S. veterans

Studies have shown that veterans have increased rates of cancer, and nerve, digestive, skin, and respiratory disorders, in particular, higher rates of acute/chronic leukemia, Hodgkin's lymphoma and non-Hodgkin's lymphoma, throat cancer, prostate cancer, lung cancer, colon cancer, Ischemic heart disease, soft tissue sarcoma and liver cancer. With the exception of liver cancer, these

are the same conditions the U.S. Veterans Administration has determined may be associated with exposure to Agent Orange/dioxin, and are on the list of conditions eligible for compensation and treatment.^[71]

Military personnel who loaded airplanes and helicopters used in Ranch Hand probably sustained some of the heaviest exposures. Members of the Army Chemical Corps, who stored and mixed herbicides and defoliated the perimeters of military bases, and mechanics who worked on the helicopters and planes, are also thought to have had some of the heaviest exposures. However, this same group of individuals has not shown remarkably higher incidences of the associated diseases, leading to disagreement within certain circles of just how much effect the defoliants actually have on the health of those exposed. Others with potentially heavy exposures included members of U.S. Army Special Forces units who defoliated remote campsites, and members of U.S. Navy river units who cleared base perimeters.^[72] Military members who served on Okinawa also claim to have been exposed to the chemical but there is no verifiable evidence to corroborate these claims.^[73]

More recent research established that veterans exposed to Agent Orange suffer more than twice the rate of highly aggressive prostate cancers.^[74] Additionally, recent reports from the Institute of Medicine of the National Academy of Sciences show that Agent Orange exposure also doubles the risk of invasive skin cancers.^[75]

While in Vietnam, the veterans were told not to worry, and were persuaded the chemical was harmless.^[76] After returning home, Vietnam veterans began to suspect their ill health or the instances of their wives having miscarriages or children born with birth defects might be related to Agent Orange and the other toxic herbicides to which they had been exposed in Vietnam. Veterans began to file claims in 1977 to the Department of Veterans Affairs for disability payments for health care for conditions they believed were associated with exposure to Agent Orange, or more specifically, dioxin, but their claims were denied unless they could prove the condition began when they were in the service or within one year of their discharge.

By April 1993, the Department of Veterans Affairs had compensated only 486 victims, although it had received disability claims from 39,419 soldiers who had been exposed to Agent Orange while serving in Vietnam.^[77]

2.3 Legal and diplomatic proceedings

2.3.1 U.S. veterans class action lawsuit against manufacturers

Since at least 1978, several lawsuits have been filed against the companies which produced Agent Orange, among them Dow Chemical, Monsanto, and Diamond Shamrock.^{[4]:6}

Attorney Hy Mayerson was an early pioneer in Agent Orange litigation, working with environmental attorney Victor Yannacone in 1980 on the first class-action suits against wartime manufacturers of Agent Orange. In meeting Dr. Ronald A. Codario, one of the first civilian doctors to see afflicted patients, Mayerson, so impressed by the fact a physician would show so much interest in a Vietnam veteran, forwarded more than a thousand pages of information on Agent Orange and the effects of dioxin on animals and humans to Codario's office the day after he was first contacted by the doctor.^[78] The corporate defendants sought to escape culpability by blaming everything on the U.S. government.^[79]

Mayerson, with Sgt. Charles E. Hartz as their principal client, filed the first US Agent Orange class-action lawsuit, in Pennsylvania in 1980, for the injuries military personnel in Vietnam suffered through exposure to toxic dioxins in the defoliant.^[80] Attorney Mayerson co-wrote the brief that certified the Agent Orange Product Liability action as a class action, the largest ever filed as of its filing.^[81] Hartz's deposition was one of the first ever taken in America, and the first for an Agent Orange trial, for the purpose of preserving testimony at trial, as it was understood that Hartz would not live to see the trial because of a brain tumor that began to develop while he was a member of Tiger Force, Special Forces, and LRRPs in Vietnam.^{[82][83]} The firm also located and supplied critical research to the Veterans' lead expert, Dr. Codario, including about 100 articles from toxicology journals dating back more than a decade, as well as data about where herbicides had been sprayed, what the effects of dioxin had been on animals and humans, and every accident in factories where herbicides were produced or dioxin was a contaminant of some chemical reaction.^[78]

The chemical companies involved denied that there was a link between Agent Orange and the veterans' medical problems. However, on May 7, 1984, seven chemical companies settled the class-action suit out of court just hours before jury selection was to begin. The companies agreed to pay \$180 million as compensation if the veterans dropped all claims against them.^[84] Slightly over 45% of the sum was ordered to be paid by Monsanto alone.^[85] Many veterans who were victims of Agent Orange exposure were outraged the case had been settled instead of going to court, and felt they had been betrayed by the lawyers. "Fairness Hearings" were held in five major American cities, where veterans and their families discussed their reactions to the settlement, and condemned the actions of the lawyers and courts, demanding the case be heard before a jury of their peers. Federal Judge Julius Weinstein refused the appeals, claiming the settlement was "fair and just". By 1989, the veterans' fears were confirmed when it was decided how the money from the settlement would be paid out. A totally disabled Vietnam veteran would receive a maximum of \$12,000 spread out over the course of 10 years. Furthermore, by accepting the settlement payments, disabled veterans would be-

come ineligible for many state benefits that provided far more monetary support than the settlement, such as food stamps, public assistance, and government pensions. A widow of a Vietnam veteran who died of Agent Orange exposure would only receive \$3700.^[86]

In 2004, Monsanto spokesman Jill Montgomery said Monsanto should not be liable at all for injuries or deaths caused by Agent Orange, saying: "We are sympathetic with people who believe they have been injured and understand their concern to find the cause, but reliable scientific evidence indicates that Agent Orange is not the cause of serious long-term health effects."^[87]

2.3.2 New Jersey Agent Orange Commission

In 1980, New Jersey created the New Jersey Agent Orange Commission, the first state commission created to study its effects. The commission's research project in association with Rutgers University was called "The Pointman Project". It was disbanded by Governor Christine Todd Whitman in 1996.^[88]

During Pointman I, commission researchers devised ways to determine small dioxin levels in blood. Prior to this, such levels could only be found in the adipose (fat) tissue. The project studied dioxin (TCDD) levels in blood as well as in adipose tissue in a small group of Vietnam veterans who had been exposed to Agent Orange and compared them to those of a matched control group; the levels were found to be higher in the former group.^[89]

The second phase of the project continued to examine and compare dioxin levels in various groups of Vietnam veterans, including Army, Marines and brown water riverboat Navy personnel.

2.3.3 U.S. Congress

In 1991, Congress enacted the Agent Orange Act, giving the Department of Veterans Affairs the authority to declare certain conditions 'presumptive' to exposure to Agent Orange/dioxin, making these veterans who served in Vietnam eligible to receive treatment and compensation for these conditions.^[90] The same law required the National Academy of Sciences to periodically review the science on dioxin and herbicides used in Vietnam to inform the Secretary of Veterans Affairs about the strength of the scientific evidence showing association between exposure to Agent Orange/dioxin and certain conditions.^[91] The authority for the National Academy of Sciences reviews and addition of any new diseases to the presumptive list by the VA is expiring in 2015 under the sunset clause of the Agent Orange Act of 1991.^[92] Through this process, the list of 'presumptive' conditions has grown since 1991, and currently the U.S. Department of Veterans Affairs has listed prostate cancer, respiratory cancers, multiple myeloma, type II diabetes mellitus, Hodgkin's disease, non-Hodgkin's lymphoma, soft tissue

sarcoma, chloracne, porphyria cutanea tarda, peripheral neuropathy, chronic lymphocytic leukemia, and spina bifida in children of veterans exposed to Agent Orange as conditions associated with exposure to the herbicide. This list now includes B cell leukemias, such as hairy cell leukemia, Parkinson's disease and ischemic heart disease, these last three having been added on August 31, 2010. Several highly placed individuals in government are voicing concerns about whether some of the diseases on the list should, in fact, actually have been included.^[93]

In 2011 an appraisal of the 20 year long *Air Force Health Study* that began in 1982 indicates that the results of the AFHS as they pertain to Agent Orange, do not provide evidence of disease in the Ranch Hand veterans due to "their elevated levels of exposure to Agent Orange".^[94]

The VA denied the applications of post-Vietnam C-123 aircrew veterans because as veterans without "boots on the ground" service in Vietnam, they were not covered under VA's interpretation of "exposed.". At the request of the VA, the Institute Of Medicine evaluated whether or not service in these C-123 aircraft could have plausibly exposed soldiers and been detrimental to their health. Their report "Post-Vietnam Dioxin Exposure in Agent Orange-Contaminated C-123 Aircraft" confirmed it.^[95] In June 2015 the Secretary of Veterans Affairs issued an Interim final rule providing presumptive service connection for post-Vietnam C-123 aircrews, maintenance staff and aeromedical evacuation crews. VA now provides medical care and disability compensation for the recognized list of Agent Orange illnesses.^[96]

2.3.4 U.S.-Vietnamese government negotiations

In 2002, Vietnam and the U.S. held a joint conference on Human Health and Environmental Impacts of Agent Orange. Following the conference, the U.S. National Institute of Environmental Health Sciences (NIEHS) began scientific exchanges between the U.S. and Vietnam, and began discussions for a joint research project on the human health impacts of Agent Orange.^[97]

These negotiations broke down in 2005, when neither side could agree on the research protocol and the research project was cancelled. More progress has been made on the environmental front. In 2005, the first U.S.-Vietnam workshop on remediation of dioxin was held.^[97]

Starting in 2005, the U.S. Environmental Protection Agency (EPA) began to work with the Vietnamese government to measure the level of dioxin at the Da Nang Airbase. Also in 2005, the Joint Advisory Committee on Agent Orange, made up of representatives of Vietnamese and U.S. government agencies, was established. The committee has been meeting yearly to explore areas of scientific cooperation, technical assistance and environmental remediation of dioxin.^[98]

A breakthrough in the diplomatic stalemate on this issue

occurred as a result of United States President George W. Bush's state visit to Vietnam in November 2006. In the joint statement, President Bush and President Triet agreed "further joint efforts to address the environmental contamination near former dioxin storage sites would make a valuable contribution to the continued development of their bilateral relationship."^[99]

On May 25, 2007, President Bush signed the U.S. Troop Readiness, Veterans' Care, Katrina Recovery, and Iraq Accountability Appropriations Act, 2007 into law for the wars in Iraq and Afghanistan that included an earmark of \$3 million specifically for funding for programs for the remediation of dioxin 'hotspots' on former U.S. military bases, and for public health programs for the surrounding communities;^[100] some authors consider this to be completely inadequate, pointing out that the U.S. airbase in Da Nang, alone, will cost \$14 million to clean up, and that three others are estimated to require \$60 million for cleanup.^[7] The appropriation was renewed in the fiscal year 2009 and again in FY 2010. An additional \$12 million was appropriated in the fiscal year 2010 in the Supplemental Appropriations Act and a total of \$18.5 million appropriated for fiscal year 2011.^[101]

Secretary of State Hillary Clinton stated during a visit to Hanoi in October 2010 that the U.S. government would begin work on the clean-up of dioxin contamination at the Da Nang airbase.^[102]

In June 2011, a ceremony was held at Da Nang airport to mark the start of U.S.-funded decontamination of dioxin hotspots in Vietnam. \$32 million has so far been allocated by the U.S. Congress to fund the program.^[103]

A \$43 million project began in the summer of 2012, as Vietnam and the U.S. forge closer ties to boost trade and counter China's rising influence in the disputed South China Sea.^[104]

2.3.5 Vietnamese victims class action lawsuit in U.S. courts

On January 31, 2004, a victim's rights group, the Vietnam Association for Victims of Agent Orange/dioxin (VAVA), filed a lawsuit in the United States District Court for the Eastern District of New York in Brooklyn, against several U.S. companies for liability in causing personal injury, by developing, and producing the chemical, and claimed that the use of Agent Orange violated the 1907 Hague Convention on Land Warfare, 1925 Geneva Protocol, and the 1949 Geneva Conventions. Dow Chemical and Monsanto were the two largest producers of Agent Orange for the U.S. military, and were named in the suit, along with the dozens of other companies (Diamond Shamrock, Uniroyal, Thompson Chemicals, Hercules, etc.). On March 10, 2005, Judge Jack B. Weinstein of the Eastern District – who had presided over the 1984 U.S. veterans class-action lawsuit – dismissed the lawsuit, ruling there was no legal basis for the plaintiffs'

claims. He concluded Agent Orange was not considered a poison under international law at the time of its use by the U.S.; the U.S. was not prohibited from using it as a herbicide; and the companies which produced the substance were not liable for the method of its use by the government.^[105] Weinstein used the British example to help dismiss the claims of people exposed to Agent Orange in their suit against the chemical companies that had supplied it.

The Department of Defense's Advanced Research Project Agency's (ARPA) Project AGILE was instrumental in the United States' development of herbicides as a military weapon, an undertaking inspired by the British use of 2,4-D and 2,4,5-T to destroy jungle-grown crops and bushes during the insurgency in Malaya. The United States considered British precedent in deciding that the use of defoliants was a legally accepted tactic of war. On November 24, 1961, Secretary of State Dean Rusk advised President John F. Kennedy that herbicide use in Vietnam would be lawful, saying that "[t]he use of defoliant does not violate any rule of international law concerning the conduct of chemical warfare and is an accepted tactic of war. Precedent has been established by the British during the emergency in Malaya in their use of helicopters for destroying crops by chemical spraying."^{[106][107]}

George Jackson stated that "if the Americans were guilty of war crimes for using Agent Orange in Vietnam, then the British would be also guilty of war crimes as well since they were the first nation to deploy the use of herbicides and defoliants in warfare and used them on a large scale throughout the Malayan Emergency. Not only was there no outcry by other states in response to Britain's use, but the U.S. viewed it as establishing a precedent for the use of herbicides and defoliants in jungle warfare." The U.S. government was also not a party in the lawsuit, due to sovereign immunity, and the court ruled the chemical companies, as contractors of the U.S. government, shared the same immunity.

The case was appealed and heard by the Second Circuit Court of Appeals in Manhattan on June 18, 2007. Three judges on the Second Circuit Court of Appeals upheld Weinstein's ruling to dismiss the case. They ruled that, though the herbicides contained a dioxin (a known poison), they were not intended to be used as a poison on humans. Therefore, they were not considered a chemical weapon and thus not a violation of international law. A further review of the case by the whole panel of judges of the Court of Appeals also confirmed this decision. The lawyers for the Vietnamese filed a petition to the U.S. Supreme Court to hear the case. On March 2, 2009, the Supreme Court denied certiorari and refused to reconsider the ruling of the Court of Appeals.^{[108][109]}

In a November 2004 Zogby International poll of 987 people, 79% of respondents thought the U.S. chemical companies which produced Agent Orange defoliant should compensate U.S. soldiers who were affected by the toxic chemical used during the war in Vietnam. Also, 51% said they supported compensation for Vietnamese Agent Orange victims.^[110]

2.4 Help for those affected in Vietnam

To assist those who have been affected by Agent Orange/dioxin, the Vietnamese have established "peace villages", which each host between 50 and 100 victims, giving them medical and psychological help. As of 2006, there were 11 such villages, thus granting some social protection to fewer than a thousand victims. U.S. veterans of the war in Vietnam and individuals who are aware and sympathetic to the impacts of Agent Orange have supported these programs in Vietnam. An international group of veterans from the U.S. and its allies during the Vietnam War working with their former enemy — veterans from the Vietnam Veterans Association — established the Vietnam Friendship Village^[111] outside of Hanoi.

The center provides medical care, rehabilitation and vocational training for children and veterans from Vietnam who have been affected by Agent Orange. In 1998, The Vietnam Red Cross established the Vietnam Agent Orange Victims Fund to provide direct assistance to families throughout Vietnam that have been affected. In 2003, the Vietnam Association of Victims of Agent Orange (VAVA) was formed. In addition to filing the lawsuit against the chemical companies, VAVA provides medical care, rehabilitation services and financial assistance to those injured by Agent Orange.^[112]

The Vietnamese government provides small monthly stipends to more than 200,000 Vietnamese believed affected by the herbicides; this totaled \$40.8 million in 2008 alone. The Vietnam Red Cross has raised more than \$22 million to assist the ill or disabled, and several U.S. foundations, United Nations agencies, European governments and nongovernmental organizations have given a total of about \$23 million for site cleanup, reforestation, health care and other services to those in need.^[113]

Vuong Mo of the Vietnam News Agency described one of centers:^[114]

May is 13, but she knows nothing, is unable to talk fluently, nor walk with ease due to for her bandy legs. Her father is dead and she has four elder brothers, all mentally retarded ... The students are all disabled, retarded and of different ages. Teaching them is a hard job. They are of the 3rd grade but many of them find it hard to do the reading. Only a few of them can. Their pronunciation is distorted due to their twisted

lips and their memory is quite short. They easily forget what they've learned ... In the Village, it is quite hard to tell the kids' exact ages. Some in their twenties have a physical stature as small as the 7- or 8-years-old. They find it difficult to feed themselves, much less have mental ability or physical capacity for work. No one can hold back the tears when seeing the heads turning round unconsciously, the bandy arms managing to push the spoon of food into the mouths with awful difficulty ... Yet they still keep smiling, singing in their great innocence, at the presence of some visitors, craving for something beautiful.

On June 16, 2010, members of the U.S.-Vietnam Dialogue Group on Agent Orange/Dioxin unveiled a comprehensive 10-year Declaration and Plan of Action to address the toxic legacy of Agent Orange and other herbicides in Vietnam. The Plan of Action was released as an Aspen Institute publication and calls upon the U.S. and Vietnamese governments to join with other governments, foundations, businesses, and nonprofits in a partnership to clean up dioxin "hot spots" in Vietnam and to expand humanitarian services for people with disabilities there.^{[115][116][117]} On September 16, 2010, Senator Patrick Leahy (D-VT) acknowledged the work of the Dialogue Group by releasing a statement on the floor of the United States Senate. The statement urges the U.S. government to take the Plan of Action's recommendations into account in developing a multi-year plan of activities to address the Agent Orange/dioxin legacy.^[118]

3 Use outside Vietnam

3.1 Australia

In 2008, Australian researcher Jean Williams claimed that cancer rates in the town of Innisfail, Queensland were 10 times higher than the state average due to secret testing of Agent Orange by the Australian military scientists during the Vietnam War. Williams, who had won the Order of Australia medal for her research on the effects of chemicals on U.S. war veterans, based her allegations on Australian government reports found in the Australian War Memorial's archives. A former soldier, Ted Bosworth, backed up the claims, saying that he had been involved in the secret testing. Neither Williams or Bosworth have produced verifiable evidence to support their claims. The Queensland health department determined that cancer rates in Innisfail were no higher than those in other parts of the state.^[119]

3.2 Brazil

The Brazilian government used herbicides to defoliate a large section of the Amazon rainforest so that Alcoa could build the Tucuruí dam to power mining operations. Large areas of rainforest were destroyed, along with the homes and livelihoods of thousands of rural peasants and indigenous tribes.^[120]

3.3 Cambodia

Agent Orange was used as a defoliant in eastern Cambodia during the Vietnam War, but its impacts are difficult to assess due to the chaos caused by the Khmer Rouge regime.^[121]

3.4 Canada

New Brunswick

The U.S. military, with the permission of the Canadian government,^[122] tested herbicides, including Agent Orange, in the forests near the Canadian Forces Base Gagetown in New Brunswick for three days in 1966 and four days in 1967. Soldiers working on the base at that time were advised that the chemicals would have no harmful effects on them, to the point they would spray each other with the chemical to cool off. This inaccuracy led many to later seek compensation for medical bills. Veteran John Chisholm worked on behalf of fellow veterans to help with claims for the compensation package.^[123] On September 12, 2007, Greg Thompson, Minister of Veterans Affairs, announced that the government of Canada was offering a one-time *ex gratia* payment of \$20,000 as the compensation package for Agent Orange exposure at CFB Gagetown.^[124]

On July 12, 2005, Merchant Law Group LLP on behalf of over 1,100 Canadian veterans and civilians who were living in and around the CFB Gagetown filed a lawsuit to pursue *class action* litigation concerning Agent Orange and Agent Purple with the Federal Court of Canada.^[125] On August 4, 2009, the case was rejected by the court due to lack of evidence. The ruling was appealed.^{[126][127]}

In 2007 the Canadian government announced that a research and fact-finding program initiated in 2005 had found the base was safe.^[128]

Ontario

On February 17, 2011, the *Toronto Star* revealed that the same chemicals used to strip the jungles of Vietnam were also employed to clear extensive plots of Crown land in Northern Ontario.^[129] The *Toronto Star* reported that, "records from the 1950s, 1960s and 1970s show forestry workers, often students and junior rangers, spent weeks at a time as human markers holding red, helium-filled balloons on fishing lines while low-flying planes sprayed

toxic herbicides including an infamous chemical mixture known as Agent Orange on the brush and the boys below.”^[129] The same day, in response to the Toronto Star article, the Ontario provincial government launched a probe into the use of Agent Orange.^[130] On February 18, 2011, the next day, Ontario’s Ministry of Natural Resources widened the probe of Agent Orange spraying to include all areas of the province where government managed forests on Crown land.^[131]

British Columbia

Records show tens of thousands of gallons of the toxic mixture were applied to clear brush near highways and along power lines in the late 1960s and early 1970s – and in some cases the substance was sprayed next to homes. In B.C., the mix of 2-4-D and 2-4-5-T was called “Type B Weed and Brush Killer” in government invoices. Sometimes, the engineers ordered 2-4-5-T by itself, and dubbed it “Type C Weed and Brush Killer.”

In total, about 26,000 gallons of Type B Weed and Brush Killer were ordered between 1965 and 1972. About 10,000 gallons of Type C Weed and Brush Killer were ordered in the same time period. The barrels were shipped to all four of the regions of B.C. as designated by the Ministry of Highways: Kamloops, Nelson, Prince George and Vancouver.

In 1976, documents from BC Hydro show that 2-4-5-T and 2-4-D were sprayed along Hydro lines Vernon-Monashee and Nicola-Brenda circuits. The documents also say “brushkiller” was sprayed in Pemberton and Daisy Lake.^[132]

3.5 Guam

An analysis of chemicals present in the island’s soil, together with resolutions passed by Guam’s legislature, suggest that Agent Orange was among the herbicides routinely used on and around military bases Anderson Air Force Base, Naval Air Station Agana, Guam. Despite the evidence, the Department of Defense continues to deny that Agent Orange was ever stored or used on Guam. Several Guam veterans have collected an enormous amount of evidence to assist in their disability claims for direct exposure to dioxin containing herbicides such as 2,4,5-T which are similar to the illness associations and disability coverage that has become standard for those who were harmed by the same chemical contaminant of Agent Orange used in Vietnam.^[133]

3.6 Korea

Agent Orange was used in Korea in the late 1960s.^[134] Republic of Korea troops were the only personnel involved in the spraying, which occurred along the Korean Demilitarized Zone (DMZ). “Citing declassified U.S. Department of Defense documents, Korean officials fear

thousands of its soldiers may have come into contact with the herbicide in the late 1960s and early 1970s. According to one top government official, as many as ‘30,000 Korean veterans are suffering from illness related to their exposure’. The exact number of GIs who may have been exposed is unknown. But C. David Benbow, a North Carolina attorney who served as a sergeant with Co. C, 3rd Battalion, 23rd Infantry Regiment, 2nd Infantry Division, along the DMZ in 1968–69, estimates as many as ‘4,000 soldiers at any given time’ could have been affected.”^[135]

In 1999, about 20,000 South Koreans filed two separated lawsuits against U.S. companies, seeking more than \$5 billion in damages. After losing a decision in 2002, they filed an appeal.^[136]

In January 2006, the South Korean Appeals Court ordered Dow Chemical and Monsanto to pay \$62 million in compensation to about 6,800 people. The ruling acknowledged that “the defendants failed to ensure safety as the defoliants manufactured by the defendants had higher levels of dioxins than standard”, and, quoting the U.S. National Academy of Science report, declared that there was a “causal relationship” between Agent Orange and 11 diseases, including cancers of the lung, larynx and prostate. The judges failed to acknowledge “the relationship between the chemical and peripheral neuropathy, the disease most widespread among Agent Orange victims” according to the *Mercury News*.

The United States local press KPHO-TV in Phoenix, Arizona alleged that the United States Army had buried Agent Orange in Camp Carroll, the U.S. Army base located in Gyeongsangbuk-do, Korea.^[137] It is based on the claim of three U.S. Army veterans. They claimed approximately 250 drums of Agent Orange were buried at Camp Carroll in 1978. The South Korean Ministry of Environment announced that they will request cooperative investigation at Camp Carroll officially.^[138] The USFK issued a statement that confirmed that barrels were buried there, but all (plus an additional 60 tons of soil) were removed in 1996.^[139]

Currently, veterans who provide evidence meeting VA requirements for service in Vietnam, and who can medically establish that anytime after this ‘presumptive exposure’ they developed any medical problems on the list of presumptive diseases, may receive compensation from the VA. Certain veterans who served in Korea and are able to prove they were assigned to certain specified around the DMZ during a specific time frame are afforded similar presumption.^[140] The differences in requirements between Vietnam and Korea service stem from the fact that congress has not made any laws to provide for the same sweeping presumption of exposure similar to the Agent Orange Act of 1991 for Korean veterans.

3.7 Laos

Parts of Laos were sprayed with Agent Orange during the Vietnam War.^[141]

3.8 New Zealand



The Ivon Watkins-Dow factory in New Plymouth, New Zealand

The use of Agent Orange has been controversial in New Zealand, because of the exposure of New Zealand troops in Vietnam and because of the production of Agent Orange for Vietnam and other users at an Ivon Watkins-Dow chemical plant in Paritutu, New Plymouth. There have been continuing claims, as yet unproven, that the suburb of Paritutu has also been polluted; see *New Zealand in the Vietnam War*.^[142] There are cases of New Zealand soldiers developing cancers such as bone cancer but none has been scientifically connected to exposure to herbicides.

3.9 Philippines

Herbicide persistence studies of Agents Orange and White were conducted in the Philippines.^[143] The Philippine herbicide test program was conducted in cooperation with the University of the Philippines, College of Forestry and was described in a 1969 issue of *The Philippine Collegian*.

3.10 Johnston Atoll

The U.S. Air Force operation to remove Herbicide Orange from Vietnam in 1972 was named Operation Pacer IVY, while the operation to destroy the Agent Orange stored at Johnston Atoll in 1977 was named Operation Pacer HO. Operation Pacer IVY (InVentoY) collected Agent Orange in South Vietnam and removed it in 1972 aboard the ship *MV Transpacific* for storage on Johnston Atoll.^[144] The Environmental Protection Agency (EPA) reports that 1,800,000 gallons of Herbicide Orange was stored at Johnston Island in the Pacific and 480,000 gallons at Gulfport Mississippi.^[145]



Leaking Agent Orange barrels at Johnston Atoll circa 1973.



Rusting Agent Orange barrels at Johnston Atoll, circa 1976.

Research and studies were initiated to find a safe method to destroy the materials and it was discovered they could be incinerated safely under special conditions of temperature and dwell time.^[145] However, these herbicides were expensive and the Air Force wanted to resell its surplus instead of dumping it at sea.^[146] Among many methods tested, a possibility of salvaging the herbicides by reprocessing and filtering out the 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) contaminant with carbonized (charcoaled) coconut fibers. This concept was then tested in 1976 and a pilot plant constructed at Gulfport, Mississippi.^[145]

From July to September 1977 during Operation Pacer HO (Herbicide Orange), the entire stock of Agent Orange from both Herbicide Orange storage sites at Gulfport, Mississippi and Johnston Atoll was subsequently incinerated in four separate burns in the vicinity of Johnson Island aboard the Dutch-owned waste incineration ship *MT Vulcanus*.^[146]

As of 2004, some records of the storage and disposition of Agent Orange at Johnston Atoll have been associated with the historical records of Operation Red Hat.^[147]

3.11 Okinawa, Japan

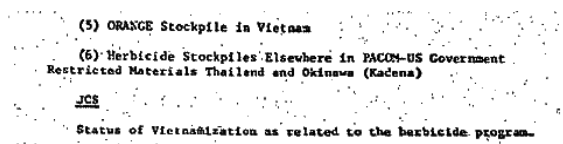
There have been dozens of reports in the press about use and/or storage of military formulated herbicides on Okinawa that are based upon statements by former U.S. service members that had been stationed on the island, pho-

tographs, government records, and unearthed storage barrels. The U.S. Department of Defense (DoD) has denied these allegations with statements by military officials and spokespersons, as well as a January 2013 report authored by Dr. Alvin Young that was released in April 2013.^{[144][148]} Dr. Young has long argued against Agent Orange harmful effects. As reported in court documents covering the Agent Orange lawsuits, in May 1985 “White House scientist Alvin L. Young, a toxicologist, recommends that no further research on dioxin should be funded, “because research has failed to show it causes cancer or birth defects in humans.”



A scientific study of the effects military contamination at Johnston Atoll included a statement confirming records of Agent Orange storage in Okinawa.^[149]

In particular, the 2013 report refuted articles written by journalist Jon Mitchell as well as a statement from “An Ecological Assessment of Johnston Atoll” a 2003 publication produced by the United States Army Chemical Materials Agency that states, “in 1972, the U.S. Air Force also brought about 25,000 55-gallon (208L) drums of the chemical, Herbicide Orange (HO) to Johnston Island that originated from Vietnam and was stored on Okinawa.”^[149] The 2013 report stated: “The authors of the [2003] report were not DoD employees, nor were they likely familiar with the issues surrounding Herbicide Orange or its actual history of transport to the Island.” and detailed the transport phases and routes of Agent Orange from Vietnam to Johnston Atoll, none of which included Okinawa.^[144]



Excerpt of U.S. Army 1971 Fort Detrick report describes Tactical Herbicide stockpiles of U.S. Government restricted materials on Okinawa at Kadena AFB, in Thailand, and Vietnam.^{[150][151]}

Further official confirmation of restricted (dioxin containing) herbicide storage on Okinawa appeared in a 1971 Fort Detrick report titled “Historical, Logistical, Political and Technical Aspects of the Herbicide/Defoliant

Program”, which mentioned that the environmental statement should consider “Herbicide stockpiles elsewhere in PACOM (Pacific Command) U.S. Government restricted materials Thailand and Okinawa (Kadena AFB).”^[150] The 2013 DoD report says that the environmental statement urged by the 1971 report was published in 1974 as “The Department of Air Force Final Environmental Statement”, and that the latter did not find Agent Orange was held in either Thailand or Okinawa.^{[144][148]}

3.12 Thailand

Agent Orange was tested by the United States in Thailand during the war in Southeast Asia. Buried drums were uncovered and confirmed to be Agent Orange in 1999.^[152] Workers who uncovered the drums fell ill while upgrading the airport near Hua Hin, 100 km south of Bangkok.^[153]

Vietnam-era Veterans whose service involved duty on or near the perimeters of military bases in Thailand anytime between February 28, 1961 and May 7, 1975 may have been exposed to herbicides and may qualify for VA benefits. A claim for direct exposure is possible if the individual can verify that they worked or lived in close proximity to the affected areas of the bases in Thailand.

A declassified Department of Defense report written in 1973, suggests that there was a significant use of herbicides on the fenced-in perimeters of military bases in Thailand to remove foliage that provided cover for enemy forces.^[154]

In 2013 VA determined that herbicides used on the Thailand base perimeters may have been tactical and procured from Vietnam, or a strong, commercial type resembling tactical herbicides.^[155]

3.13 United States

The University of Hawaii has acknowledged extensive testing of Agent Orange on behalf of the United States Department of Defense in Hawaii along with mixtures of Agent Orange on Kaua'i Island in 1967-68 and on Hawaii Island in 1966; testing and storage in other U.S. locations has been documented by the United States Department of Veterans Affairs.^{[156][157]}

In 1971, the C-123 aircraft used for spraying Agent Orange were returned to the United States and assigned various East Coast USAF Reserve squadrons, and then employed in traditional airlift missions between 1972 and 1982. In 1994, testing by the Air Force identified some former spray aircraft as “heavily contaminated” with dioxin residue. Inquiries by aircrew veterans in 2011 brought a decision by the U.S. Department of Veterans Affairs opining that not enough dioxin residue remained to injure these post-Vietnam War veterans. On 26 January 2012, the U.S. Center For Disease Control's Agency

for Toxic Substances and Disease Registry challenged this with their finding that former spray aircraft were indeed contaminated and the aircrews exposed to harmful levels of dioxin. In response to veterans' concerns, the VA in February 2014 referred the C-123 issue to the Institute of Medicine for a special study, with results released on January 9, 2015.^{[158][159]}

In 1978, the U.S. Environmental Protection Agency suspended spraying of Agent Orange in National Forests.^[160]

A December 2006 Department of Defense report listed Agent Orange testing, storage, and disposal sites at 32 locations throughout the United States, as well as in Canada, Thailand, Puerto Rico, Korea, and in the Pacific Ocean.^[161] The Veteran Administration has also acknowledged that Agent Orange was used domestically by U.S. forces in test sites throughout the United States. Eglin Air Force Base in Florida was one of the primary testing sites throughout the 1960s.^[162]

4 Cleanup programs

In February 2012, Monsanto agreed to settle a case covering Dioxin contamination around a plant in Nitro, West Virginia that had made Agent Orange. Monsanto agreed to pay up to \$9 million for cleanup of affected homes, \$84 million for medical monitoring of people affected, and the community's legal fees.^{[163][164]}

On the 9th of August 2012, the United States and Vietnam began a cooperative cleaning up of the toxic chemical on part of Danang International Airport, marking the first time Washington has been involved in cleaning up Agent Orange in Vietnam. Danang was the primary storage site of the chemical. Two other cleanup sites the United States and Vietnam are looking at is Biên Hòa, in the southern province of Đồng Nai - a 'hotspot' for dioxin - and Phù Cát airport in the central province of Bình Định, says U.S. Ambassador to Vietnam David Shear. According to the Vietnamese newspaper Nhân Dân, the U.S. government provided \$41 million to the project, which will reduce the contamination level in 73,000 m³ of soil by late 2016.^[165]

5 See also

- Effects of Agent Orange on the Vietnamese people
- Environmental impact of war
- Scorched earth
- Teratology
- U.S.-Vietnam Dialogue Group on Agent Orange/Dioxin
- Vietnam Syndrome

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7 Further reading

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7.5 Video

- *Agent Orange: The Last Battle*. Dir. Stephanie Jobe, Adam Scholl. DVD. 2005
- “HADES” Dir. Caroline Delerue, Screenplay Mauro Bellanova 2011

7.6 Photojournalism

- CNN
- Al Jazeera America

8 External links

- **Children Of Vietnam Veterans Health Alliance**
 - Agent Orange Association of Vietnam
 - Vietnamese Victims of Agent Orange web site
 - U.S. Environmental Protection Agency – Dioxin Web site
 - “Agent Orange/Dioxin Lawsuit” in “Vietnam Pictorial”, *Vietnam News Agency*
 - Agent Orange *Office of Public Health and Environmental Hazards*, U.S. Department of Veteran Affairs
 - Poisoned Lives

- The Aspen Institute Advocacy and Exchange Program on Agent Orange/Dioxin
- Make Agent Orange History
- Agent Orange Record
- Blue Water Navy Association - Advocacy Group and extensive AO Documentation Library

Media

- The short film *Agent Orange Study (June 26, 1990)* is available for free download at the Internet Archive
- The short film *Agent Orange Studies (July 11, 1989)* is available for free download at the Internet Archive
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9.1 Text

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Joyous!, Rick Burns, Epimetreus, Trevor MacInnis, ClockworkTroll, Rich Farmbrough, Cacycle, Masudr, Vsmith, YUL89YYZ, Bender235, ESKog, Brian0918, Huntster, Shanes, Spearhead, RoyBoy, Dalf, Bobo192, Chtito, Mpeg4codec, Viriditas, Malafaya, Maurreen, Valar, Sam Korn, HiS oWn, Chicago god, Dmanning, Luckyluke, Storm Rider, Alansohn, LtNOWIS, Sbeath, Bmh ca, Rd232, Plumbago, Wikidea, Ashley Pomeroy, Jnothman, Thorns among our leaves, RoySmith, Katefan0, Snowolf, Zsero, Klaser, Hunter1084, ClockworkSoul, TaintedMustard, Vuo, Osnf8, John5008, Ianblair23, Alai, Voxadam, Dan100, Brookie, Stephen, Smoth 007, Thyrdulff, Richard Arthur Norton (1958-), Firsfron, SKopp, Woohookitty, Bryan986, Camw, Kzollman, Jeff3000, Trödel, Duncan.france, MONGO, Tabletop, Srborlongan, CharlesC, Wayward, GraemeLeggett, Natrius, Mandarax, Tslocom, Graham87, DJ Silverfish, FreplySpang, Jclemens, Behemoth, Rjwilmsi, Seidenstud, Rogerd, Abhishekbh, Habap, Ligulem, Salanth, Ghepeu, 199, StephanieM, GregAsche, Ravuya, Titoxd, FlaBot, PatVanHove, RobertG, Ground Zero, GünniX, Chanting Fox, Bennie Noakes, Nimur, Jrtayloriv, Drumguy8800, Penguin, Alphachimp, Tedder, Physchim62, Bgwhite, Writer-Hound, Sus scrofa, YurikBot, Wavelength, RattusMaximus, Huw Powell, RussBot, Theredstarswl, Reo On, Vidman, Briaroru, TheDoober, Ytrottier, Chensiyuan, Stephenb, CambridgeBayWeather, Shaddack, Bullzeze, NawlinWiki, Shreshth91, Cloud109, Bachrach44, Dialectric, Crumb, Jaxl, Johann Wolfgang, Welsh, Mikecutno, Dureo, 24ip, Lexicon, Nick, Anetode, Cholmes75, Moe Epsilon, JPMcGrath, Htonl, Vlad, DeadEyeArrow, Oliverdl, Foxxe, Jverkoey, Nick123, Zerofighta, Holderca1, Reid Kirby, Spaceboy492, Allens, Kungfuadam, Hakusa, SkerHawx, Nick-D, robot, Armin76-enwiki, Heavyrain2408, DocendoDiscimus, Itub, SmackBot, Reedy, Knowledge-OfSelf, Walts0042, Jbretro, Plubus, Stephensuleeman, Cla68, Brossow, TheDoctor10, Edgar181, HalfShadow, Gilliam, Ohnoitsjamie, Hmains, Stuerta, NikJam, Chris the speller, Autarch, Steinbad, Johannjs, Cattus, Mokwella, Jprg1966, Jgera5, MalafayaBot, Dananimal, RayAYang, Deli nk, Colonies Chris, Rama's Arrow, Xeryus, Jfalkoff, Tscabot, Can't sleep, clown will eat me, Jaro.p-enwiki, Jwillbur, OrphanBot, Zazpot, Jmlk17, Friendlyliz, Invadervelcron, Dreadstar, Jonesa3, Nrcprn2026, Wisco, Gump Stump, Warphammer, DavidJ710, Jonnyapple, Swatjester, Sophia, Molerat, John, AmiDaniel, Tazmaniacs, Copeland.James.H, LWF, Lazylaces, Moabdave, This user has left wikipedia, Mgidanteus1, Nichenbach, DOOMY, Slakr, Stwalkerster, Acaryatid, Avs5221, Mr Stephen, Myrrander, Johnmc, Doczilla, Elb2000, Dodo bird, Iridescent, Spebudmak, TwistOfCain, JoeBot, Newone, Vedek Wren, Blehfu, Lareine, Wbm, Civil Engineer III, Eassin, Courcelles, Tawkerbot2, Karlchrismiller, Orangutan, Eastlaw, Stephaniez, Rustavo, Mrtobacco, PhillyPartTwo, CmdrObot, Ma-keemlighter, GHe, Colombiano21, NE Ent, MrFish, Leakeyjee, Jb17kx, Cydebot, ChristTrekker, Dominicanpapi82, Semper15, Crow-ish, Sam Staton, Anthonyhole, Flowerpotman, Shammond1, Myscrnm, Charles RB, Jameboy, DumbBOT, Chrislk02, Hontogaichiban, Gabspeck, PamD, Halfpint 73, Thijs!bot, JAF1970, Wikid77, HaPpY CaMp3r, N5iln, Mojo Hand, Headbomb, Newton2, Luigifan, Mmcknight4, Rodrigo Cornejo, Itsmejudith, X201, VaneWimsey, Nick Number, Dawnseeker2000, AntiVandalBot, Akradecki, Seaphoto, Bigtimepeace, EarthPerson, TimVickers, Smartse, Postlewaight, Jet14, ARTEST4ECHO, Pkg53, Res2216firestar, Ioeth, DagosNavy, MER-C, OhanaUnited, BenB4, .anacondabot, Fornost, Magioladitis, Bongwarrior, VoABot II, Hb2019, Sideshow Bob Roberts, Cattle-Girl, Paulpw, Bubba hotep, Cgingold, R0m23, 28421u2232nfenfcenc, A3nm, DerHexer, Media anthro, Wikiwayne, Erpbridge, Khello, Heddron, Hdt83, MartinBot, Cold December, Treyd500, BeadleB, ChemNerd, Keith D, R'n'B, CommonsDelinker, LegendGamer, Bjano, J.delaney, CFCF, Deathmoogleg666, Neolandes, Rlsheehan, Numbo3, Hera Iaphrodite, Ian.thomson, Iseaturtles, Dispenser, Shawn in Montreal, GBrown11, Mikeparris, Anomen, Naniwako, Jayden54, Nanasasa3, Floaterfluss, Thesis4Eva, Willdanieley, Toxic Ninja, Sc1089, Alyssa hoffel, Warlordwolf, Atama, DorganBot, Typometer, Gova1626, Ja 62, Billjoie, CardinalDan, Christopher Mann McKay, Signalhead, Hugo999, DOHC Holiday, Jeff G., Holme053, Johnfrog, Bsroiaadn, Philip Trueman, Af648, TXiKiBoT, Burpen, Sarky Git, Java7837, Liamodwyer13, Kreizhn, Karmos, Aymatth2, Nique'mo, JhsBot, F16TopGun, Pvt. Green, Jackfork, Mkubica, Dick Kimball, Thomaswhitmore, Triesault, Vaubin, Lamro, Fotek, Falcon8765, Daniel0524, Ammar 51, Artrush, Ronmore, Doc James, Michael Frind, Klippa, Red, Venomous-FatalIty, SieBot, Dawn Bard, Manej1, Ym2004, Smsarmad, Yintan, Trinhh, Prezen1, France3470, Keilana, Hapsysailor, Flyer22 Reborn, Editore99, Agentorange101, Also, octopus, Bagatelle, Miniapolis, Kiro1, Steven Crossin, Lightmouse, Colecobot84, IdreamofJeanie, Sunrise, Zylox, Richard David Ramsey, Angelo De La Paz, ImageRemovalBot, SallyForth123, ClueBot, NickCT, Kennvido, The Thing That Should Not Be, Hongthay, Darthveda, Mistyglouaming, CyrilThePig4, Social Assassin, Nobody 343, Kokuaguay, Boing! said Zebedee, CounterVandalismBot, Crackerjacker, Nickersonl, Blanchardb, Cirt, Puchiko, NillaGoon, Ktr101, Excirial, Gnome de plume, Jusdafax, Queefhater121, V7-sport, McSteamy, NuclearWarfare, Arjayay, 842U, LuckyThracian, Eddoad, Iohannes Animosus, Tnxman307, BarbaraEllen, Zmaddoc, SchreiberBike, MilesAgain, Thingg, Vanished User 1004, DumZiBoT, XLinkBot, Jytdog, Bilsonius, Rror, Workbytes, SilvononBot, NellieBly, Mifter, Syrosj, Wavej4, Mottramdo, Canuck84, Jkupka, Proofreader77, Basilicofresco, Bloodbath 87, Bones255, Wda, Listing Port, Blethering Scot, Ronhjones, Devopmp, MartinezMD, Leszek Jańczuk, Download, Black Science Nerd, Dfruzzetti, Ihate1234, AnnaFrance, Haimynameisawesome, Daosipc, Xzerox17, Alanscottwalker, F Notebook, Hockeyplaya19, Tide rolls, Bmonty56, Jarble, James buckley jr, Corny121, Contributor777, Legobot, Luckas-bot, Yobot, Themfromspace, Jason Recliner, Esq., Schoenespapier, QueenCake, KamikazeBot, TestEditBot, WDW Megaraptor, AnomieBOT, Shootbamboo, Angry bee, Jim1138, Sumivec, Jambobambo, Biomedengineer, Kingpin13, Ulric1313, Materialsscientist, RobertEves92, The High Fin Sperm Whale, Aff123a, Citation bot, Kevin chen2003, Nifky?, Quebec99, Arielasteif, LiiHelpa, TUFKAAP, Sionus, Apothecia, .45Colt, Mrc1028, L5TMN9, Grim23, Smurdah, Carrite, Shadowjams, Eugene-elgato, Fredy.00, Thehelpfulbot, Green Cardamom, Frescobot, Toby72, Mouse747, Amilk313, Galorr, Doremo, Kittet, Iqinn, Laptopwiki, Atlantia, Citation bot 1, Intelligensium, DriIbot, Pinethicket, PamEd-itsWiki, Gwissen, Jschnur, Impala2009, Serols, LoneRanger India, Barras, Crunk Cup, JohnTTT, Olgagraham, White Shadows, Corinne68, Nick9000, LupineMagnum, Rfwarmock, Agentoguy, Orderly Conductor, Schwede66, Missaccordionist, Minimac, Keegscee, The Only Random Person, Ace Oliveira, Andrea105, Onel5969, Mean as custard, RjwilmsiBot, Fiftytwo thirty, Phlegat, Marzipany, DASHBot, Mztourist, John of Reading, Immunize, Joshchildress, Dmtd, Dewritech, GoingBatty, Vanished user zq46pw21, Slightsmile, Dcirovic, Gagarine, Redseagoby, Ponydepression, Jsjsj1111, Nekami The Second, Spacebar overlord 12122, Suitsandboots, H3llBot, Erianna, Susanhammo, Kilcoyne, CN3777, Djapa84, Brandmeister, Donner60, Orange Suede Sofa, Dare to eat a peach, Hazard-Bot, SketchTech, VictorianMutant, Hclewt, TYelliot, DASHBotAV, Jameshoppes, Tempogain, Ebehn, JonRichfield, GregLigon, ClueBot NG, Mechanical digger, This lousy T-shirt, Bjmonty56, Mesoderm, Adwiii, Dean Turbo, Widr, Cabazap, Smssss, Ashleybene, Helpful Pixie Bot, ZHurlhee, Gob Lofa, Jphill19, WNY98, BG19bot, Xtfc7, Jennifer352, Loldong123, Seergenius, Mark Arsten, Altair, BessieDooly, Glevum,

Nhoanhko, Sn1per, MrBill3, CDN Vet Advocacy, Loriendrew, Wannabemodel, Groupsome, BattyBot, Lol123n, Beechtree2012, Jimw338, Cyberbot II, ChrisGualtieri, Jennifer37918, YFdylh-bot, Khazar2, TylerDurdan8823, Jihadcola, Kmzayeem, Johnvr4, Cerabot-enwiki, Pomegranatesmash, XXzoonamiXX, Lincecr, TwoTwoHello, ابراهيم نصار, Riverstogo, ComfyKem, Harishrawat11, F qgsd ae gg, Jim salmon eat fish, Graticus, 1289fun, Dragonnyxx, Ohyeahnow, Nikeallday97, Melonkelon, Pkanella, Earlgrey T, Tentinator, Wuerzele, Star-Wrong, Chris troutman, Maxcampbellx, Kingofaces43, Mopingpeople, Zenibus, Uniscale, NottNott, CH!L!, Interrexconsul, JoshDieter, Someone not using his real name, RhinoMind, Couyazapeter, WPGA2345, Stamptrader, Monkbob, COVVHA, Mrjohnson007, AdventurousMe, Chowdhary747, SageRad, Zash169, Genavieve102593, KH-1, Conny Fejj, Eurodyne, EoRdE6, ScrapIronIV, Karleybritt, Tenbenbrett, KasparBot, Renhoek, Jseibs5391, Equinox, Adamr.p1s, Modulus12, Vnguyen518, VaDawn, InternetArchiveBot, Soujanya, GreenC bot, SOLFERS, Kenneth lol Zhang, Derpkingsaturn and Anonymous: 1125

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Operation Pacer IVY

Operation Pacer Ivy was a 1972 operation of the U.S. Air Force that removed Agent Orange from South Vietnam and stored it on Johnston Atoll. IVY was presumably selected as an abbreviation of InVentorY.^[1] Operation Pacer HO refers to an associated program of the United States Department of Defense (DoD), dealing with the disposition of Agent Orange from Vietnam.

Purpose

On 15 April 1970, the Assistant Secretary of Defense suspended the use of Herbicide Orange (HO), a defoliant spray mixture during the Vietnam War. The suspension lasted from April 15, 1970, to September 13, 1971. On September 13, 1971, the Secretary directed the Chairman of the Joint Chiefs of Staff that “all stocks of Herbicide Orange in Vietnam will be returned to the Continental United States as quickly as practicable for disposition. A joint State Department and Defense Department message has been prepared requesting the U.S. Embassy negotiate with the Government of Republic of Vietnam for the return to U.S. control of all stocks of Herbicide Orange in Vietnam.” Based on this directive, the 7th Air Force in Vietnam initiated Operation **PACER IVY**, the removal of all Herbicide Orange in Vietnam to Johnston Island.

Public Opposition

Another problem arose with the movement and storage of Herbicide Orange from Vietnam. In 1971, Congress passed The Foreign Military Sales Act Amendment (Public Law 91-672) to prohibit the transportation of chemical weapons from the Island of Okinawa to Umatilla Chemical Depot during Operation Red Hat. In addition, the law prohibited the transfer of nerve agent, mustard agent, agent orange and other chemical munitions located in other countries into all 50 U.S. states.^[2]

Public Law 91-672 further directed the U.S. Department of Defense to destroy these chemical weapons outside the United States. As a result of Congressional and citizen interest in disposal problems, the DoD decided to move the 1.37 million gallons (25,266 55-gallon drums) to Johnston Atoll for storage to await a means of future sales, salvage, or disposal.

Operation

The cargo ship, the M/T TransPacific, arrived at Da Nang on March 10, 1972, departing on March 15 to Cam Ranh Bay to load drums from Tuy Hoa Air Base where it then sailed to Saigon to load stocks of herbicides collected there.^[3] On April 18, 1972, the M/T TransPacific, arrived at Johnston Island, Central Pacific Ocean, and off-loaded 25,200 55-gallon drums (1,386,000 gallons) of Herbicide Orange. From mid-April 1972 until mid-July when Operation PACER HO commenced, the inventory required continual maintenance because of the deteriorating condition of the drums.

When the Herbicide Orange (HO) stocks arrived at Johnston Island, the entire inventory was placed in the northwest corner of the Atoll adjacent to weapon storage area for the chemical weapons returned during Operation Red Hat and immediately fenced off. The Red Hat and inventory storage area were identified as an area “off limits” to military and civilian employees. The location of the storage area was important because it was located in an area where the prevailing winds would blow any vapors and odor) away from the Island and away from where temporary personnel and semi-permanent residents were quartered and messed.

Arrival

In April 1972, 25,266 55-gallon drums of Agent Orange were received and placed in storage on Johnston Atoll. Of the total drums received, 8,990 developed leaks. Of those leakers, 4,050 had the remaining contents transferred to new drums, 4,668 had been repaired without transfer of the contents, and 14 remained to be "reworked" which decreased the total number of stored drums of herbicide by 258. 4,804 contaminated empty drums were also stored to await disposition. These were drums that were leaking when originally received (not counted above), drums redrummed while in storage, and new drums which showed leaks during transfer. Therefore, it wasn't possible to reconcile the above numbers with the total number of contamination drums.

With the arrival of HO, there were numerous visits to the island by the USAF, the U.S. Environmental Protection Agency (EPA), and contractor personnel concerned with HO disposal operations. A total of 24,795 drums of Herbicide Orange were processed between 27 July and 23 August 1977.

References

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- [1] The History, Use, Disposition and Environmental Fate of Agent Orange By Alvin Lee Young, Springer, April 28, 2009, page 123: | ISBN 0387874852 | ISBN 978-0387874852
- [2] Suzanne Marshall PhD: "Chemical Weapons Disposal and Environmental Justice", Kentucky Environmental Foundation, November, 1996 (funded by Educational Foundation of America)
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Section I

Introduction

Areas within the Da Nang Airport (Airport) property have been referred to as dioxin "hotspots" due to investigations revealing high dioxin concentrations remaining decades after large volumes of Agent Orange and other defoliants were handled at these sites. The Government of Vietnam (GVN) has requested assistance from the United States Government (USG) to remediate dioxin-contaminated soil and sediment at the Airport.

The purpose of this Remediation Work Plan (RWP) is to provide a framework for planned remediation and to define the roles and responsibilities of all project entities and personnel. The RWP will serve as a guidance document as remediation proceeds.

1.1 Background

Da Nang City has a population of approximately 825,000 persons as of 2008, with an average population density of about 640 persons per square kilometer (km²). The Airport property is located within the urban part of Da Nang City and is surrounded by three urban districts: Hai Chau on the northeast and east; Thanh Khe on the northwest and west, and Cam Le on the southwest, south, and southeast. The three districts are densely-populated, with most of the land in these districts used for housing, industrial facilities, transportation, and other facilities. A number of people reside on the western edge of the Airport property, between the western boundary and the active runways. These are likely military personnel and their families (United States Agency for International Development [USAID] 2010a).

The Airport property is located within Da Nang City and is used by both the Vietnamese Ministry of National Defense (MND) and the Middle Airports Corporation (MAC) under the Civil Aviation Administration of Vietnam (CAAV). It has a total area of 820 hectare (ha), of which 150 ha are allocated to civil aviation, and the remaining 670 ha are under the jurisdiction of the MND. It is an international airport, with flights arriving from and departing to cities such as Bangkok, Vientiane, Hong Kong, Phnom Penh, and Taipei. MAC is currently expanding the Airport and requires dioxin removal from the northern area of the airport property to allow for extension of the runway and expanded taxiways (USAID 2010a).

Dioxin is a toxic chemical associated with a range of health effects. 2,3,7,8- tetrachlorodibenzo-p-dioxin (TCDD) is the most toxic form of dioxin, and was the main congener present in the Agent Orange mixture. In the main hotspot areas of the Airport, TCDD comprises greater than 90 percent of the toxicity equivalent (TEQ), indicating Agent Orange as the source of contamination. GVN has established a national cleanup standard for dioxin of 1,000 parts per trillion (ppt) TEQ in soil and 150 ppt TEQ in sediment (USAID 2010a).

Data from studies conducted from 1997 to 2010 by the 10-80 Division of the Ministry of Health, the Vietnam Academy of Science and Technology (VAST), the Ministry of Natural Resources and Environment (MoNRE), MND, Office of the National Steering Committee 33 (Office 33), the United States Environmental Protection Agency (USEPA), Hatfield Consultants (Hatfield), and USAID have been used to characterize the level and extent of dioxin contamination at the Airport. Dioxin hotspots

identified at the Airport are primarily located in the northern portion of the Airport property (Figure 1) and include the following areas:

- 1.1 ha former Mixing and Loading Area (MLA)
- 1.8 ha former Storage Area (SA)
- 3.3 ha Drainage Ditch
- 1.9 ha Area between Eastern Wetland and Drainage Ditch (including the Eastern Hotspot)
- 10.8 ha Sen Lake and Eastern Wetland
- 0.3 ha former Pacer Ivy Storage Area (PISA)

Using the GVN dioxin cleanup goals for soil and sediment, the remediation effort will need to address an approximate volume of 72,900 cubic meters (m³) of contaminated material in the six hotspots at the Airport. Table 1 provides the minimum estimated excavation volume (m³) and footprint (square meters [m²]) for each hotspot (not including unforeseen allowances). Table 2 provides the maximum and average dioxin concentrations for each hotspot.

Figure I: Dioxin Hotspots Identified at Da Nang Airport



LEGEND

- Airport Boundary
- District Boundary
- Storm Drain
- Approximate Catchment Boundary
- Direction of Flow
- Dioxin Hotspot

GeoEye Image, July 23, 2009

Viet Nam

Note: Catchment boundaries are approximate and based on AVDC and World Bank (1999), and Da Nang Center for Environmental Technology (2009).

0 0.25 0.5 1 km

Projection: UTM Zone 49N WGS 84

Tab Lima - Abbreviations and Acronyms:

| | |
|-------------|---|
| AAA | Anti-aircraft Artillery |
| AES | Airborne Electronic Supervisor, the senior enlisted member of the VQ-1 back end crew. |
| AMS | Airborne Mission Supervisor. Senior member of RC-135 back end crew, usually a senior enlisted NCO. |
| ARC LIGHT | B-52 missions flown over North Vietnam |
| ARVN | Army, Republic of Vietnam |
| AS | Strike/Flight Air Medal |
| ASA | Army Security Agency, the Army's equivalent to the Naval Security Group. |
| ASP | Ammo Supply Point |
| ASRP | Airborne SIGINT reconnaissance platform. |
| BARLOCK | NATO cover name for the primary North Vietnamese air search radar, supplied by the Soviets. |
| Big bird | Nickname for the EC-121M or EP-3B. |
| BIG LOOK | Cover name applied to the specially modified AN/APS-20 radar used for acquiring electronic signals. In a broader sense, the term came to be used to describe the multiengine aircraft assigned to Fleet Air Reconnaissance Squadron ONE (VQ-1). |
| BLACK TRACK | Missions flown over Laos, usually using the EA-3B, but on several occasions flown with the EP-3B. |
| BLS | Big Look Spook, any of the cryptologic personnel (officer and enlisted) who flew or ground-supported VQ-1's mission in Da Nang. |

| | |
|---------------|--|
| BRIGAND | Bistatic Radar Intelligence Generation and Analysis, New Development. A means of passively capturing the image from circular scanning radar, by displaying the target radar's return pulses. |
| BS | Bronze Star Medal |
| BuNo | Bureau Number. The six digit number assigned to every naval aircraft by the Bureau of Naval Air (BuAir). The BUNO is permanently assigned and remains with the aircraft throughout its naval service. |
| BV | Bronze Star Medal with Combat V authorized. |
| CDSE | Cryptologic Direct Support Element. A SIGINT team, usually embarked temporarily as a division on a ship, for support to the embarked commander, and for intelligence collection in a specific area. |
| Chiling | Chinese linguist |
| CO | Commanding Officer |
| COMBAT APPLE | USAF cover name for SIGINT reconnaissance missions flown from Okinawa, using RC-135 aircraft. These missions were flown in the Gulf of Tonkin, using a track similar to Big Look, but at higher altitude, and also over Laos. |
| COMEVAL | COMINT evaluator, the senior NSG officer on a VQ-1 flight crew. |
| COMINT | Communications Intelligence. Intelligence derived from exploitation of intercepted enemy voice, Morse and non-Morse communications, such as teleprinter and data communications. |
| COMNAVSECGRU | Commander, Naval Security Group. c.f. NSG |
| COMSEVENTHFLT | Commander, Seventh Fleet. Based in Japan, the Seventh Fleet controlled all Navy ships and squadrons in the western Pacific, including those supporting the Vietnam War. During the Vietnam War the flagship was the USS Oklahoma City (CLG-5). |
| CRITICOMM | The world wide system of communications between elements of the SIGINT system. Controlled by the National Security Agency. |
| Crypto | Slang for cryptographic equipment. Cryptographic equipment is used to encrypt friendly communications to deny exploitation. |

Cryptologic equipment is that used to exploit enemy communications.

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| CT | Communications Technician, later Cryptologic Technician. Enlisted Navy personnel assigned to elements of the NSG, responsible for SIGINT operations. (c.f. NSG). |
| CTE | Commander, Task Element |
| CTF | Commander, Task Force. |
| CTG | Commander, Task Group |
| CTU | Commander, Task Unit |
| DEEPSEA | Squadron callsign for VQ-1 aircraft, drawn from JANAP-119. Deepsea plus the modex number was used to create a call sign used on radio circuits, e.g. PR-31 would be Deepsea 31. On some occasions the number was a mission number, the call sign of PR-21 when shot down by the North Koreans was Deepsea 129. |
| DESOTO | Cover name for shipboard patrols conducted along the Asian periphery to collect intelligence and reaffirm free navigation through international waters. |
| Det | Detachment |
| DIRNSA | Director, National Security Agency. |
| DRV | Democratic Republic of Vietnam (North Vietnam). |
| DWEST | Deep Water Environmental Survival Training |
| ELINT | Electronic Intelligence. Information derived from the exploitation of intercepted enemy radar signals. |
| EOB | ELINT Order of Battle. An intelligence document detailing the known locations of enemy radar equipment. |
| Eval | Evaluator. Senior member of a flight crew, who directs operations not involving flying the aircraft. Normally a junior officer, but can be a warrant or senior enlisted in some cases. |
| EWOP | Electronic Warfare Operator, an enlisted air crewman responsible for operating ELINT receivers on a VQ-1 aircraft. |

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| FAGOT | NATO cover name for the MiG-15 |
| FAIRECONRON | Fleet Air Reconnaissance Squadron. Also abbreviated as VQ. There were as many as six such squadrons in the Navy. Four were associated with the SIGINT mission: One, Two, Five and Six. VQ-3 and 4 were part of a command and control project known as TACAMO (Take Charge and Move Out), associated with command and control of ballistic missile submarines. |
| FAN SONG B | NATO cover name for the fire control radar associated with the SA-2 surface to air missile. |
| FARMER | NATO cover name for the MiG-19 |
| FASU | Fleet Air Support Unit. The organization responsible for maintaining naval aviation ground facilities at Da Nang AB. Pronounced 'Fay-sue'. Their enlisted club was called the Zoo Club, with 'Zoo' being a corruption of 'Sue.' |
| FISHBED | NATO cover name for the MiG-21 series fighter aircraft. |
| FLTSUPDET | Fleet Support Detachment. |
| FREQUENT WIND | Cover name for the final evacuation of Saigon. |
| FRESCO | NATO cover name for the MiG-17 fighter aircraft. |
| FSD | Fleet Support Detachment. |
| GCA | Ground controlled approach. A technique used to land an aircraft, usually during bad weather, where the ground radar controller gives the pilot precise course and altitude adjustments on approach. |
| GCI | Ground controlled intercept. A technique whereby a ground controller vectors a fighter aircraft toward an enemy target. |
| GDRS | General Directorate of Rear Services. Element of the North Vietnamese Army responsible for moving supplies along the Ho Chi Minh trail in the mountains of Vietnam and Laos. |
| GOT | Gulf of Tonkin |
| GUIDELINE | NATO cover name for the Soviet built SA-2 Surface to Air missile system, used by the North Vietnamese. |
| Korling | Korean linguist |

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| LCPO | Leading Chief Petty Officer. The senior enlisted man assigned to the Detachment. |
| MERCURY GRASS | Cover name for the multichannel communications system used to interconnect SA-2 sites. The Soviet equipment designator was R-401 or R-401M. |
| MACV | Military Advisory Command, Vietnam. The overall command in charge of all US forces in Vietnam. NAVFORV was the subordinate naval element of MACV. |
| MiG | Abbreviation for the Soviet design bureau (Mikoyan and Gurevich) which developed the fighter aircraft used by the North Vietnamese. Models in service during the Vietnam War included the MiG-17, 19, and 21. |
| MODEX | The number on the nose of a Navy aircraft, assigned by the squadron. |
| NAF | Naval Air Facility |
| NAS | Naval Air Station |
| NAVCOMMSTA Phil | Naval Communications Station, Philippines. Often called San Miguel, due to the location of the small base at Barrio San Miguel, San Antonio, Zambales, about 15 miles north of the Subic Bay Naval Base. |
| NAVFAC | Naval Facility. NAVFAC Da Nang was a short-lived command which grew out of a merger of NCSP Det Delta, located at Camp Tien Sha, NCSP Det Alpha at Phu Bai and NCSP Det Bravo, located at Da Nang AB. |
| NAVFORV | Naval Forces, Vietnam. |
| NCSP | Naval Communications Station, Philippines. |
| NSA | 1. National Security Agency. The element of the Defense Department charged with oversight of all SIGINT operations. 2. Naval Support Activity. In Da Nang, the Navy element responsible for the administrative support to all Navy elements based at Da Nang. |

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| NSG | Naval Security Group. The Navy element responsible for conducting SIGINT operations. Officers were designated as 161X, Limited Duty Officers as 644X, Warrant Officers as 744X, and enlisted as one of six Communications Technician (CT) branches, T= technical, A= administrative, M=maintenance, O=operator, R=collection, I=interpretive. Each enlisted branch focused on a specific area. T exploited non-Morse signals, A was responsible for administration and publications control, M for equipment maintenance, O for communications between cryptologic elements, R for Morse code signals, and I for foreign language communications. |
| NVAF | North Vietnamese Air Force |
| OIC | Officer in Charge. |
| OPSCOMM | Operational Communications [teletype circuit]. An OPSCOMM circuit typically connected a remote location or single mission operation with a larger communications center. Often the OPSCOMM circuit carried informal chatter (of an official nature) in addition to formal formatted message traffic. Chatter and messages were exchanged using Model 28 Teletype gear with the data encrypted via KW-7 or KW-26. |
| OPORD | Operations Order |
| OPSEC | Operational Security. |
| PARPRO | Peacetime Aerial Reconnaissance Program |
| PAVN | Peoples' Army of Vietnam, the North Vietnamese Army |
| PCS | Permanent Change of Station |
| PPA | Paris Peace Accords. The treaty which ended the US presence in Vietnam, signed in January 1973 |
| PRC | People's Republic of China (Beijing) |
| PURPLE DRAGON | Cover name for a program which examined US Operational Security |
| Recce | Reconnaissance |
| ROCAF | Republic of China Air Force (Taiwan) |

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| ROLLING THUNDER | U.S. bombing campaign over North Vietnam. |
| RP | Republic of the Philippines |
| Ruling | Russian linguist |
| SAM | Surface to Air Missile |
| SEA BRINE | Project name for special Army missions flown by VQ-1. |
| SEAWING | EA-3B carrier based missions. |
| SERE | Survival, Evasion, Resistance, Escape. Also the name of the school, either at Warner Springs in San Diego, or Little Creek in Virginia, or later at Brunswick, Maine, which taught tactics to enable downed aircrew to evade capture if possible, and to resist exploitation if captured. It is a very intense one week course, one experience most never forget. |
| SEVAL | Senior Evaluator, the officer in charge of back end operations in a VQ-1 aircraft. |
| S/F | Strike/Flight. Refers to Air Medals. |
| SI | Special Intelligence. Special Intelligence was synonymous with Signal Intelligence. Those involved with the collection and analysis and use of SIGINT were given SI access. |
| SIGAD | SIGINT Activity Designator. A unique letter/number designator assigned by NSA to each location involved in SIGINT operations. |
| SIGINT | Signals Intelligence. Information derived from exploitation of enemy electronic signals. Components include COMINT, ELINT and TELINT. |
| Spook Mess | An unsanctioned bar, built into the top floor of the detachment barracks in Da Nang. Sometimes referred to as “The World Famous International Spook Mess.” |
| SPOONREST | NATO cover name for the target acquisition radar associated with the SA-2 missile system. |
| TACAIR | Tactical Air. In the context of this history, it refers to activity of the North Vietnamese Air Force. |
| TAD | Temporary Assignment of Duty |

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| TDY | Temporary Duty, used interchangeably with TAD. |
| TELINT | Telemetry Intelligence. Information derived from the exploitation of intercepted enemy telemetry. |
| USAFSS | United States Air Force Security Service. The Air Force equivalent to the Naval Security Group. |
| USSS | United States SIGINT system. |
| Vietling | Vietnamese linguist |
| VPAF | Vietnam Peoples' Air Force, c.f. NVAF |
| VQ | Squadron abbreviation for Navy Fleet Air Reconnaissance Squadrons. |
| WEE LOOK | Cover name for missions flown in the GOT using EA-3B aircraft. |
| WESTPAC | Western Pacific. |
| Whale | Nickname for the EA-3B Skywarrior. |
| Willy Victor | Nickname for the EC-121M aircraft used by VQ-1. Often shortened to just 'Willy'. Derived from the original Navy designator for the aircraft WV-2Q. |

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Appendix Two: Personal Recollections

Before the Beginning and After the End

CWO4 John Thomas Wise, USN

Editor's note: Throughout his career John Wise's service centered around the United States involvement in Vietnam, beginning long before the Gulf of Tonkin Incident and ending with Operation Frequent Wind, the final evacuation of the American Embassy in Saigon. He was truly there "before the beginning and after the end."

Much of the content of this short biography was provided by John during a phone interview in 2013 and a subsequent exchange of several e-mails.

Finally, a personal note. In February of 1972 while flying from Cubi CWO2 Wise took one of his crewmen to a corner of the hanger and provided some firm and needed counseling to the young Petty Officer. I was that young CT13, and thanks to John I went on to a successful Navy career. Fortunately I was able to reconnect with him in 2013, and almost the first words from me were to thank him for what he had done. He didn't remember it of course, but I did, and that made all the difference.

Born September 12, 1939 in Woodville, Texas; after graduation from high school John joined the Navy in September of 1957 at the age of 17 on what was then called a "kiddie cruise"¹. After basic training he was selected to go to Communications Technician School at Imperial Beach, California². No one had really told him anything about the CT rating, except that it involved communications³. Upon arrival at Imperial Beach, he was told that there were four branches of CT – A (Administrative), M (Maintenance), O (Operator) and R (Collector). John was designated as a CTO Seaman Apprentice.⁴ While in training to become a CTO, John along with the others in his class took the Foreign Language Aptitude Test (FLAT). Prior to that time, the FLAT had only been administered to CTRs, who were trained to intercept foreign communications (typically sent via Morse code). John and another class member (an unnamed Marine) were selected for language training. He was then told that if he would extend for an

¹ Enlistees under 18 years of age could be discharged on their 21st birthday.

² Just south of San Diego, almost in Tijuana, Mexico

³ The rating was described in the Bluejacket's Manual as 'performing duties under the cognizance of the Chief of Naval Operations'.

⁴ CTO, or Operator, operated teletype machines to send secure messages between various Naval Security Group sites.

additional year, he could attend the Army Language School⁵ at Monterey, California to study Vietnamese.

Everybody in Admin in Imperial Beach looked through the atlas and on the globe and couldn't find anyplace labeled Vietnam.⁶ Some wise guy told John that Vietnam was somewhere around India and that he probably would be stationed at an embassy in Asia wearing civilian clothing. "Whoa! Gimme some of that action!" was John's response. Upon completion of CTO "A" School in April of 1958, John was transferred to the Army Language School, still a CTSA.

After he got to Monterey, he found out where Vietnam was and heard the instructors actually speak the language, whereupon he headed straight for the Navy Liaison Office located at the Naval Postgraduate School and tried to get out of the mess he had gotten into. He quickly found out that dropping out of the school wasn't an option.

Shortly after arriving at Monterey he was promoted to CT Seaman (E-3), so six months later he was eligible to take the test for Third Class. Since the test was classified, he had to travel (with about ten to twelve others) to the nearest Naval Security Group Activity, located at Skaggs Island, north of San Francisco in the Napa Valley near Sonoma. John passed the test and was selected for promotion, but not before graduation from language school in June of 1959.

From Monterey John was transferred to the Naval Radio Facility, Philippines (often referred to as San Miguel).⁷ When he got there in the summer of 1959 the base was about two years old and almost everything was brand new. Very few buildings were air conditioned. John was assigned to the Processing and Reporting Division at the Receivers Building, located about a mile north of the base proper. Three other Vietnamese linguists were already there, and at least two were temporarily assigned to ships in the Gulf of Tonkin, typically destroyers. While at sea they monitored North Vietnamese communications and provided general translation services in support of attempts to prevent movement of supplies from the North to the South. These intelligence patrols were given the cover name DeSoto.⁸ John apparently never went to sea from San Miguel, but did get promoted to CTI2 during his tour there.

The majority of the CTs at San Miguel at that time were convertees from other rates, and many of them still wore their original rating badges and collar devices. John recalled working

⁵ Now the Defense Language Institute, still run by the Army

⁶ What we know as Vietnam today was still labeled on many maps with the names the French used – Annam, Tonkin, and Cochin China, or simply as French Indochina.

⁷ This Naval Communications Station had several names; the final iteration was Naval Communications Station Philippines, or NCSP. The station was constructed circa 1956, occupying what had been Barrio San Miguel, San Antonio, Zambales Province. Physically it was located along the coast about 20 miles north of the large US Navy base at Subic Bay. Approximate driving time between the two bases was one hour.

⁸ The USS Maddox was conducting a DeSoto patrol when it was attacked on August 2, 1964, the Gulf of Tonkin incident that marked the entry of the US into the Vietnam War.

for a crusty old Radioman Chief Warrant Officer who was a Chinese linguist, and who had been part of the Japan Occupation forces as well as serving off Korea during that conflict⁹.

After completing his tour in the Philippines in late 1960, John returned to language school, arriving at Monterey in January 1961 to study Russian. Upon completion of the year's study, he was assigned to the Naval Security Group at Kamiseya, Japan as a newly promoted CTII.¹⁰ When he reported in January of 1962 he was assigned to Division 215, which was unofficially called the "Spook's Division". Consisting of about 20-25 Russian linguists and five or so support personnel, the personnel of the division supported various fleet units. After three weeks of training and transcribing, he was put on flight status and began flying a couple of missions a week with Fleet Air Reconnaissance Squadron ONE (VQ-1) out of Atsugi, flying in the EC-121M aircraft, a modified version of the Lockheed Super Constellation. At that time few people in VQ-1 were cleared to know about communications intelligence, and so the CTs who flew were called 'Spooks' or 'Big Look Spooks'¹¹. Flight crew were issued flight jackets, boots and orange flight suits, but with typical Navy logic were told not to let anyone know (including family) that they were assigned to flight duty. Unofficially, they referred to flying as 'playing ball,' in part so that some limited discussion could occur over non-secure telephone lines. On one occasion, it became necessary to recall one of the CTs who had left Kamiseya to fly. The Division Officer at Kamiseya called the Duty Officer at VQ-1 in Atsugi and asked for the CT in question, but the VQ-1 Duty Officer, who had little interaction with the CTs, had no idea who the individual in question even was. After a confusing exchange, the Kamiseya end told the Atsugi end that the individual in question was one of those 'playing ball', and the VQ-1 duty officer replied "Sorry, Bud, the ball field just took off."

After two to three months of flying, John was asked to volunteer for submarine duty, but his wife was expecting so he postponed that until after the baby was born in early June of 1962. Submarine duty was different, since John until this point in his career had never been to sea on any sort of ship. After the six week well baby checkup, John agreed to go, and during his three year tour in Kamiseya he made six trips.

John's first trip was on the USS Tunny (SSG-282) (24 August – 29 October 62). The team on board consisted of an Officer in Charge, two CTR operators, and one linguist (John). John made three of his six patrols on the Tunny, and in 1964 was able to qualify in submarines, earning his enlisted submarine pin, or 'dolphins'. His patrols on the Tunny qualified him for membership in the unofficial 'North Pacific Yacht Club,' reserved for those who made patrols on

⁹ Possibly Gordon Bower, who served as an RM1 at the Leyte DF site in 1945, and was assigned to San Miguel April 1959 to April 1961 as a CWO. Bower retired as a Lieutenant.

¹⁰ Located southwest of Tokyo in Kanagawa Prefecture, about 15 minutes drive from Atsugi Naval Air Station. Throughout most of the 1950s and 1960s it was the major Naval Security Group Activity in Japan, targeted primarily against the Soviet Union.

¹¹ BIG LOOK was a Navy cover name which referred to a radar aboard the plane, but in common use referred to the entire mission flown by the EC-121M and later the EP-3.

the SSGs.¹² As an additional testament to his skill John was presented with his first Navy Commendation Medal for this service.

1965 found John back on flight duty with VQ-1, and during this stint he was able to qualify as a Naval Aircrewman, probably the first CT to do so¹³. After being instructed on safety and emergency procedures for the EC-121M, John attended sea survival school in May 1965 at the Air Force training school in Numazu, Japan, and was awarded his wings shortly thereafter.

After John's tour in Kamiseya he was reassigned to Naval Communications Station Philippines as a CT11, arriving in mid-January of 1966. Almost immediately he was sent to Da Nang for flight duty with VQ-1, and by the 4th of March had flown enough to qualify for his first Air Medal. He continued to fly for another month and then returned to San Miguel, and about this time was promoted to Chief Petty Officer. As a newly promoted Chief he took charge of the in-house training division for newly reported linguists. Several of his students remember him as a serious professional, well equipped to educate them on the specifics they would need to know later on.

In November of 1967 John was selected for Warrant Officer (W-1) and assigned as Assistant Officer-in Charge of the Naval Technical Training Center Detachment at Goodfellow AFB, San Angelo, TX, responsible for the technical training of all Cryptologic Technicians (Interpretive) in the Navy.

Two years later (October 1969) John was promoted to Chief Warrant Officer (W-2), and was reassigned to the Philippines for a third tour, again at San Miguel. After several months to settle his family, he returned to flight duty; flying for nearly four months as an airborne evaluator from Da Nang. For this service he received two additional Air Medals. Afterwards he returned to San Miguel and served as the Naval Security Group Department's Technical Support Officer. Again in early 1972 John returned to Da Nang for another stint as an evaluator. While on this deployment to Da Nang, he returned to Cubi Point Naval Air Station in the Philippines for about two weeks in February when VQ-1 aircraft were repositioned due to a perceived Tet Offensive and Nixon's visit to China. Nothing happened and the crews returned to Da Nang.

As the Vietnam War concluded, John left San Miguel in December 1972 for duty as the Naval Security Group liaison officer to VQ-1, then based at Agana Naval Air Station in Guam. During this tour he spent time in California helping to develop a new electronic system for installation in the Navy's EP-3E aircraft, the successor to the venerable EC-121M. The system, called the AN/ALR-60 and given the cover name DEEPWELL, was officially accepted and installed on ten EP-3E aircraft assigned to both Navy VQ squadrons.

¹² Much later, long after he retired, the crew of the Tunny was retroactively authorized to wear the SSBN Deterrent Patrol pin based on those patrols.

¹³ John was one of a small group of Communications/Cryptologic Technicians who became "dual-qualified", earning both submarine dolphins and aircrew wings.

America's involvement in Vietnam ended in April 1975 with Operation Frequent Wind, the evacuation of the remaining presence in Vietnam, mostly personnel assigned to the American Embassy in Saigon. For several days during this operation Fleet Air Reconnaissance Squadron ONE flew missions in support, staging from NAS Cubi point. Vietnamese linguists were supplied by the Naval Security Group Activity located at Clark AB, and the communications evaluator was John Wise. For this final involvement with Vietnam he was awarded the Humanitarian Service Medal.

In August of 1976 John, now a Chief Warrant Officer (W-4), was reassigned to the Naval Security Group Activity at Fort George G. Meade, Maryland, collocated with the National Security Agency. This was his final tour, and he retired September 30, 1979 with 22 years of service.

As a postscript, nearly eighteen months after he had retired, John was called by Washington and offered the opportunity to return to active duty to head a Naval Security Group Detachment in Turkey, but by this time his life had taken other paths, so he declined.

John left us March 4, 2015 and was buried at sea. Rest in Peace.

Awards and decorations:

Strike/Flight Air Medal (3)
Navy Commendation Medal (3)
Good Conduct Medal (2)
Navy Unit Commendation
Meritorious Unit Commendation (7)
Armed Forces Expeditionary Medal
Navy Expeditionary Medal
National Defense Service Medal
Republic of Vietnam Campaign Medal
Humanitarian Service Medal
Philippine Presidential Unit Citation
RVN Meritorious Unit Citations (Gallantry Cross¹⁴ and Civil Actions)
Republic of Vietnam Service Medal

Naval Aircrewman
Submarine Breast Insignia (enlisted)
SSBN Deterrent Patrol Pin¹⁵

¹⁴ Awarded after retirement

¹⁵ Awarded after retirement

LT Airell B. Jenks, USN

Editor's note: The first part of this reflection was extracted from an article written by Airell Jenks and published in the NCVA Cryptolog, Spring 2006. Additional information was added via e-mail exchange. Airell has been an invaluable source about the early days of the det and those who played a role in setting things up.

“During June through August 1966, I flew 47 Big Look missions to the north out of Da Nang. Much of that time, I was AOIC of the NSG detachment aboard an EC-121M, and Talley Malloy, (Charles, later CAPT) and his crew flew in the other. Twice we had an engine fire. The procedure was to feather the sick engine after the fire was doused and to head for Da Nang. I asked the pilot what would happen if we lost another engine, and he said no problem, as long as the second engine was on the other side. I said, “What if it’s on the same side?” His response was, “Don’t ask.” The aircraft were old and kept running by a hard working maintenance crew. One pilot had painted on the side of his plane, “REUSABLE CONTAINER – DO NOT DESTROY.” A couple of years later, a VQ1 EC-121M flying from Atsugi to Da Nang crashed landed at Da Nang with a feathered, burned out engine, resulting in numerous killed and injured crewmen.”

“In July of 1966, I was on a VQ1 Big Look mission at the northern end of our dogleg track in the Tonkin Gulf when two NVNAF MiGs streaked on an intercept course with us. We aborted the mission immediately, diving to sea level, while two of our escorting Navy F4B Phantoms flew to intercept, followed by the other two which had been refueling. The MiGs went home, no easy prey that day.”

After his tour in the Philippines (part of which was spent in Da Nang as a Spook), Airell, by then promoted to Lieutenant, was assigned to Commander in Chief, Pacific Fleet in Hawaii. In 1969 he returned to Da Nang for a short period, TAD from CincPacFlt, and supplied this recollection of that trip.

“In ’69, I returned to the NSG Det at VQ-1 Da Nang as a Lieutenant, [assigned] duties as cognizant officer for airborne operations at CincPacFlt, Pearl Harbor.

Upon arrival, I requested to be issued a .45 for the period I was there. They said they didn’t issue them; they were kept in the armory. I insisted, saying I was qualified, a Navy Expert Pistol Shot, and authorized to carry a pistol. They issued it to me, muttering that I must be some

kind of cowboy. I was going across the airfield to visit the Marine Support Battalion to see an officer I worked with. When the visit was over, after dinner, I asked the Marine CDO¹, a captain, for a ride back to my barracks at VQ-1. He said, NFW², I could go if I wanted, but he wouldn't endanger a Marine driver, there were snipers all along the route at night. So I said, I guess I'll have to stay, and called VQ-1 and told them. I asked where I could sleep. The captain said there's only one bunk available and that was his. But he said, he had the duty, would be up all night, so I could have it. Gratefully, I accepted. I noticed the Marines had a different SOP³ than we Navy. Throughout their quarters, on every flat space there was a firearm of some type, a Swedish K submachine gun, .45s, Tommy guns, shotguns and of course many M16s.

The next morning, I rode over with a squad of Marines, all armed. When they dropped me off, I went to the det quarters. They said where the hell have you been, we've been on the deck on our bellies for 2 hours. I inquired why. They said a Marine went berserk and started shooting and kept it up 'till he ran out of ammo. I told them that was why I wanted to be armed, we'd had a similar experience 3 years before when a drunken sailor opened up and was killed by a Marine sentry. The enemy isn't the only danger in a war zone.

Later, having a cup of coffee, a cocky [Lieutenant] jg who thought he was now a combat veteran, wanted to impress me, a visitor from Hawaii. He pulled out a Big Look Spooks Zippo and showed it to me, saying, bet you haven't seen one of these. I pulled out mine, worn with no fresh enamel paint, inscribed on the back: 'AB Jenks, AOIC, Danang Vietnam, 1966'. There was quiet in the room.

¹ Command Duty Officer

² No f—king way

³ Standard Operating Procedure

LT Charles J. “Talley” Malloy, Jr., USN

Charles Joseph Malloy, Junior was born August 3, 1938 in Wilkes-Barre, Pennsylvania, the eldest child of Charles J. and Helen A. Malloy. Soon after his birth the family moved to Bethlehem, Pennsylvania¹, residing at 820 Hawthorne Road. After completing secondary school, Charles graduated from St. Vincent College, Latrobe, PA. in 1960. He joined the Navy in February 1962 and attended Officer Candidate School in Newport, Rhode Island, graduating in June 1962. Initially he was assigned to Mine Division 113 and Mine Squadron 11 at Long Beach, California.

In 1964 he began a one year long course in Russian language at the Defense Language Institute in Monterey, California. Upon graduation he was assigned to the Naval Security Group Activity at Kamiseya, Japan for three years of duty. During this tour, Lieutenant Malloy made several deployments to the Gulf of Tonkin while serving as the Naval Security Group Division Officer onboard the USS Kitty Hawk (CV-63) and the USS Chicago (CG-11). He was among the initial Naval Security Group cadre assigned to support Fleet Air Reconnaissance Squadron ONE (VQ-1) at Da Nang, Republic of Vietnam; and logged over 1800 flight hours with VQ-1, earning four Strike/Flight Air Medals.



Lt. Malloy

His next assignment was to Norfolk, Virginia, where he served on the staff of the Commander in Chief Atlantic Fleet (N8 Directorate/Director Naval Security Group Atlantic) as Fleet Cryptologic Direct Support Officer.

In 1970 he was reassigned to the Commander of the Sixth Fleet staff, serving two years as the Operational Security/Signals Security Officer. This assignment was followed in September 1972 by his first command, the Naval Security Group Activity at Terceira in the Azores. While in the Azores he completed a Master of Science in Personnel Management from Central Michigan University.

His next assignment put those newly earned skills to good use. From September 1974 to September 1976 he was assigned to the Bureau of Naval Personnel as the Junior Cryptologic Officer Detailer, responsible for determining the assignments of junior cryptologic officers for the entire Naval Security Group.

¹ The 1940 Census shows the Malloy household at 820 Hawthorne Road, Bethlehem, PA. Household members included Charles J. (Sr.), 27; Helen A. (24), and Charles J. Junior (1).

Rota, Spain called next, where he served as the Officer-in-Charge of the Sixth Fleet Current Support Group (CSG), collocated with the Fleet Ocean Surveillance Information Facility (FOSIF), arriving in October 1976. Malloy remained here until August of 1980.

Upon his transfer from Rota, Malloy, now a Commander, assumed duties as the Electronic Warfare/Cryptologic training coordinator on the staff of the Chief of Naval Education and Training (CNET). He continued in this capacity until June of 1983, when he was notified of his selection to the rank of Captain.

With his promotion came new orders, this time to the National Security Agency in Fort Meade, Maryland, where he was assigned as the Chief of the Naval Forces Division (A24), responsible for monitoring and analyzing Soviet Navy activities worldwide.

In June of 1985 he received orders back to Norfolk, this time as the head of the Cryptologic Directorate on the staff of Commander Atlantic Fleet (CINCLANTFLT N8). Concurrently he was assigned as Director Naval Security Group Atlantic. In this latter capacity he oversaw Security Group operations from Winter Harbor, Maine to Homestead, Florida; and several overseas operations including Iceland and his former command in the Azores.

Captain Malloy's final tour was with Naval Security Group Headquarters at 3801 Nebraska Avenue in Washington DC (now operated by the Department of Homeland Security). Captain Malloy's extensive experience was first put to good use as Director for Plans and Budget (GD) and later as Inspector General for the Security Group (GK). In the latter capacity he was responsible for ensuring proper operation of Security Group stations worldwide.

Captain Malloy was authorized to wear the Defense Superior Service Medal, the Meritorious Service Medal, Air Medal (with Strike/Flight Numeral 4), the Navy Commendation Medal, Navy Achievement Medal, and various unit citations and campaign medals, including those earned in Vietnam while flying as a Big Look Spook.

Captain Malloy was married to the former Margaret Casey of Libertyville, Illinois. Together they had four sons. After retirement the family moved to Bradenton, Florida. Captain Malloy passed on December 16, 2004 and is interred at Arlington National Cemetery in Arlington, Virginia.

CTO3 William B. Leppert, USN

Editor's note: Bill originally published this recollection as an article in the Spring 2009 issue of Cryptolog, the publication of the Navy Cryptologic Veterans Association, with the title "Crypto Duty at Rocket City." This version has been slightly edited from the original.

When one hears the name 'Rocket City' places like Titusville, Florida or Houston, Texas may come to mind due to their association with the NASA space program. 'Rocket City', however, had nothing to do with America's space program. It was the name given to the U.S. Airbase at Da Nang during the Vietnam War, one of the largest U.S. bases in South Vietnam. During the years of 1965-1973 there were 87 rocket attacks with a total of 996 rockets fired against the Da Nang airbase by enemy forces.¹ These 996 rockets inflicted injuries to 586 Americans and killed an additional 45 more. In addition to the number of casualties inflicted on U.S. personnel, a total of 256 aircraft were damaged and an additional 30 more were totally destroyed.

In February 1967, I was assigned to Naval Communications Station Philippines (NCSP), Detachment Bravo at Da Nang for six months of temporary assigned duty (TAD). NCSP, located at San Miguel, Zambales, Philippines², was one of the largest and busiest naval communications stations in the world during the Vietnam War.

My duties as an "O-brancher"³ would include flying missions, as one of 30 crewmembers, with VQ-1 that was headquartered in Atsugi, Japan. VQ-1 was a naval air reconnaissance squadron that flew in support of Operation Rolling Thunder, the bombing campaign against North Vietnam from March 2, 1965 to October 31, 1968. Rolling Thunder was the longest bombing campaign ever implemented by the U.S. Air Force and Navy during the Vietnam War. The aircraft used by VQ-1 during Operation Rolling Thunder was the EC-121M, a converted Lockheed Super Constellation passenger plane that was commonly used in the 1940's and 50's. We referred to this aircraft as the 'Connie'. It consisted of a crew of 18 to 30 personnel depending on the electronic tasks involved in our missions. During the time that I served with Det Bravo, I flew 38 missions with VQ-1. Our flights were usually eight or more

¹ The actual number of attacks and rockets fired probably exceeded these totals. Numerous 'rocket attacks on Da Nang' databases exist, most of which don't agree with each other. It is safe to say that Da Nang took a hell of a lot of rockets during the war, and certainly deserved the name 'Rocket City'!

² Actual location was Barrio San Miguel, San Antonio, Zambales; about one hour drive north of the large USN base at Subic Bay.

³ Communications Technician Operator, or CTO. CTOs operated secure teletype circuits. After the Vietnam War the rating name was changed to Cryptologic Technician.

hours in length flying over the Gulf of Tonkin near and around the North Vietnamese port city of Haiphong. In addition to Avionics Technicians, our crews consisted of specialists in Morse code intercept along with Russian, Chinese and Vietnamese linguists who monitored voice intercept from the surface-to-air missile (SAM) sites in North Vietnam. There was one 'O-brancher' assigned to each flight who operated the KW-7 crypto equipment along with a teletype to forward messages to the Seventh Fleet operating below. Our missions played a critical role in Operation Rolling Thunder because we had the means to detect the locations of SAMs and the locations of our downed pilots. Our flight operations were known as BIG LOOK and the CT personnel were known as Big Look Spooks.

During the six months that I served at Da Nang, there were three rocket attacks made against the airbase by enemy forces. The most severe rocket attack at Da Nang during the Vietnam War occurred on July 15, 1967 when the enemy forces fired 83 rounds of 122mm and 140mm Russian manufactured rockets onto the airbase. There were 175 casualties during that attack and 44 of them were personnel of Det Bravo and VQ-1. Our barracks happened to be located about 50 yards from a bomb storage area that was ignited by one of the rockets that had exploded there. The bunkers that we had constructed did not have roofs on them at the time, so the shrapnel from the exploding bombs rained down into our bunkers. Fortunately no one was killed but our barracks was totally destroyed. After the attack, the personnel of Det Bravo were transferred to another area located near Da Nang harbor called Camp Tien Sha. It was near the R&R area at China Beach. China Beach was a favorite place for many G.I.s, especially when the pretty American nurses were there. We referred to them as 'round eyes.'

I made many good friends when I was with Det Bravo, including Ron Virgin. Ron and I happened to be the two CTs on duty the night of the rocket attack on July 15, 1967. I was only in Da Nang for six months of my life but it was six months that I will never forget. Compared to the Vietnam combat veterans, I had easy duty while I was in Vietnam but I served with honor and felt that both Det Bravo and VQ-1 had performed their assignments with exemplary dedication in support of the U.S. war effort. I am proud that I served four years in the Navy and I am especially grateful that I was fortunate enough to have served my time as a CT with the Naval Security Group.

In conclusion, I would like to pay a special tribute to all of the Vietnam veterans and also to the VQ-1 crew that was shot down by North Korea over the Sea of Japan on April 15, 1969. I had flown with some of that same crew while I was in Da Nang, including the plane commander, Lieutenant Commander James Overstreet. One of the crewmembers was a close friend and fellow CT, Stephen J. Tesmer. I would also like to pay a special tribute to the VQ-1 crew that crashed at Da Nang on March 16, 1970 with the loss of 23 crewmen.

LCDR Carl Strobel, USN

Editor's note: Lieutenant Commander Strobel was one of the many 'temporary' officers-in-charge (OIC) during the middle years of the detachment. Typically these officers would deploy to Da Nang for one to three months and then rotate back to San Miguel. Carl did several stints as OIC during his tour at San Miguel. After San Miguel and Vietnam Carl completed his Navy career, retiring as a Commander. Carl provided the following recollections.

I was transferred to the NavSecGru Department, Naval Communications Station Philippines, San Miguel, in September 1966 when all SecGru direct support operations for the war in Vietnam were concentrated there. Prior to that I was the OIC of the SecGru detachments on board seven different carriers operating in the Gulf of Tonkin for a total of 17 months in 1965 and 1966. My home base (which I obviously saw little of) was NavSecGru Activity Okinawa.

When I arrived at San Miguel, Big Look was just getting started, as I remember, but I don't recall many of the officers or men involved. I was first given responsibility for all direct support operations out of San Miguel, then got my chance to go to Danang as OIC of the SecGru detachment of Big Look. The unit was officially Detachment Bravo of the NavCommSta. I do remember one of the first OICs, if not the first, was Dave Patterson, a very bright young officer, either a Lieutenant or Lieutenant (jg) at the time. Another OIC, well after my time, was then LCDR Karl Bernet.

Our airplanes, Willie Victors (EC-121s) and EA-3s, were flown by Fleet Air Reconnaissance Squadron One (VQ-1), home base NAS Atsugi, Japan. The airplanes were housed at the First Marine Air Wing area of Danang Air Base. Post mission reports and classified discussions were conducted at a secure compound that housed portable trailers and was operated by an Air Force Security Service squadron.

I remember most vividly our old, tired Willies. According to lore, they were all well over gross maximum weight at takeoff, filled with CT operators, a SecGru officer, the VQ-1 operators and their officer evaluator, the VQ-1 flight crew and fuel for many hours of flight. Missions were perhaps an hour to get to our station, typically eight hours on station off the coast of North Vietnam (exact location depending on where the air strikes were planned) and another hour to come home – if the plane kept operating properly. I remember at least one fire and numerous engine failures. I claim I hold the Guinness Book of Records mark for three engine landings in a four-engine aircraft. Also two-and-a-half engine landings. Many times on return to Danang we were welcomed by red lights and fire engines – the crash trucks. We used to claim that as soon

as the pilot contacted the Danang tower on the return leg using the squadron call “Peter Rabbit”, the crash trucks would roll.

If we had mechanical problems before we crossed the 17th parallel, the pilot would turn back. North of that parallel we had reached North Vietnam and the desire was to complete the mission if the problems weren't too serious.

Each time we landed safely at Danang Air Base one of my sailors would rush down the gangway, bend down, kiss the earth and shout “Cheated death again!”

I was not expected to fly missions as the officer in charge of Det Bravo, but I felt I had to at times so I could better appreciate what my men were doing. Also I believed that I couldn't ask my men to do anything that I wouldn't do.

Because I seemed to attract mechanical problems, especially engine failures, I think the CTs were of two minds about taking a flight with me. They figured the chances of having a serious mechanical problem were greater than usual. But on the other hand the plane carrying me always made it back to Danang safely and they didn't have to endure a 10-hour flight.

In that vein, I once had five consecutive flights aborted. After about the third time, someone commented on my string of bad luck. I did a little counting and realized I was trying to make my 13th flight north. After two more aborted flights, I did make my 13th.

Too often takeoff was delayed while mechanics fixed a problem on the aircraft. We were always happy when we took off to the north, especially at times like that. The runway at Danang ran pretty much north and south. Taking off to the north, seconds after we were airborne and cleared the rocks along the coast, we were over Danang Bay and then the South China Sea. Engine failure would mean a wet but survivable landing. At the south end of the runway was an old minefield. Not a good place to come down. Actually a B-52, damaged by enemy fire over North Vietnam, made an emergency landing at Danang, and ran off the end of the runway into the minefield. The crew, who survived with no problems, were told to stay put. Helicopters were used to lift them out of the minefield – even that was a bit scary because the pressure of the strong downward blast of air as the helicopter hovered just above the ground could have set off a mine. But it didn't happen, all were recovered safely and as far as I know the B-52 is still there.

Nearly 40 years later my luck still dogged me. My wife and I had finished a delightful 12-day tour of Vietnam and were heading home, taking a commercial flight out of Saigon/HoChiMinh City. After less than an hour, I noticed Vietnam was off the starboard side of the aircraft – we were headed south back to the airfield. The announcement soon came over the loudspeaker. We were returning to the airport because of engine problems.

Incidentally, the Vietnam we saw in that trip was a vibrant country, full of energy and economic growth with lots of new construction. Danang AB had become an international

airport. White Beach was a luxurious resort area. The old pontoon bridge erected by the Seabees over the Sun River had been replaced by a gleaming modern bridge. Modern buildings reflecting economic activity were everywhere. There were even some beautiful golf courses. The Communist Vietnamese government, after making a number of mistakes, realized that a free economy was the answer to growth and prosperity and the government stopped trying to run everything.

Part Two

I was relieved as OIC at Big Look in the fall of 1967. I believe it was Dave Wentz who took over and it was he whom I relieved in the first days of February 1968. I had a most interesting return to Danang.

I made a little side trip on my way to Danang, catching a Space A flight to Taiwan to visit some friends. Then I flew, also Space A, to Okinawa where I knew I could get a ride to Danang out of Marine Corps Air Station Futenma with its daily flights to my final destination.

I showed up confident of getting on the next flight. Instead a great number of Marine enlisted troops boarded the plane and I was told to wait. After this happened a second time, I was getting a bit peeved. Here I was a Lieutenant Commander going to an important mission in Vietnam and all these Marine grunts were getting on the plane ahead of me. I realized why when I finally arrived in Danang. The Tet Offensive was in full force and Marines with weapons were needed, not a deskbound Naval officer. Dave Wentz, with suitcase in hand, met me as soon as my plane's cabin door opened at Danang and he took the return flight out.

We had to endure a few days and nights of rocket attacks before the powers that be decided we better get those valuable intelligence collection planes off the line at Danang and to a safe place. The whole outfit, planes and people, moved to Udorn Air Base in northern-most Thailand.

Udorn during off-duty hours was a delight, far different from Danang. There were local sights to see and many bars with charming little bar girls to entertain us. We also got a full night's sleep uninterrupted by the sounds of rockets or gunfire.

The only drawback was that the Big Look flight took off at some ungodly hour in the middle of the night. The mission had to fly from Thailand, across Laos and then over South Vietnam to get to the coast and fly up over the water to its station off the North.

I took one of those early morning flights. As we crossed over Communist-controlled Laos I looked down to see a little village with its lights blinking in the darkness. "Isn't that pretty, those blinking lights" I said to the pilot.

He looked at me incredulously. “That’s anti-aircraft fire. They’re shooting at us.” I never felt so stupid in my life.

We were at about 12,000 feet and the shells exploded well below us. I remembered earlier flights off North Vietnam. We would be at about 10,000 feet and my operators said they needed a little more altitude to get the signal. The answer was always “That’s the maximum the plane can go.” I think the Willie knew it better get a little higher when it was getting shot at. Eventually the Viet Cong were brought under control and we returned to Danang and our routine flights north.

One of the most satisfying moments of my Naval career came after a long and very busy flight north. We finally finished the post mission report working at the Air Force compound and I decided I needed a beer to relax. I drove over to the Air Force Officers’ Club and walked in the door in my Navy flight suit. An Air Force fighter pilot came up to me and said “Are you with Big Look?” I answered that I was. “You people saved my life today. Let me buy you a beer.” It was the finest beer I ever had.

I have talked a great deal about the Willies which most of our team flew in. However the EA-3s, the electronic warfare version of the A-3 Skywarrior, also flew North with a handful of people, mostly linguists. Pressurized, they could fly at high altitudes, 30,000 feet or so, and give our CTs a better look into North Vietnam.

Incidentally, we always referred to the EC-121 as the Willie, short for Willie Victor (WV)¹ which was the Navy’s designation until all military aircraft were given the Air Force designations. The big question we all asked ourselves – what was the official name for the Willie. Eventually we learned. Lockheed aircraft were named after celestial objects, the Shooting Star (P-80), Lightning (P-38) and for the commercial transport on which the Willie was based, the Constellation. Turns out the Willie was the Warning Star.

One interesting fact about the Air Force compound where we worked while on the ground. The people had to walk all the way around the end of the runway to get to the side of the base where the clubs and the movie theater was. Sometimes they took sniper fire while walking the route.

Major Ben Ardisana was in charge of the Air Force detachment and thought the situation should be fixed. He applied for funds to build a movie theater at the compound. The Air Force said there was no money available to build a movie theater. Major Ardisana then asked for money to build a chapel. He got the funds and had the chapel built. Then he found out there were no chaplains with security clearances to get inside the compound. Might as well use it as a movie theater, he said. Ben was eventually promoted all the way to General which greatly raised my opinion of the Air Force.

¹ The full designation under the Navy system was WV-2Q (the Q signified a special electronics capability).

I have one very tragic memory of some of the wonderful people at Danang. VQ-1 flew missions not only in Vietnam, but also along the Russian, Chinese and North Korean coasts. After my return to the U.S., on my way to work at Fort Meade one morning, I heard the news that North Korean MIGs had flown in the darkness of early morning under radio silence and attacked my favorite Willie, PR-21. It crashed into the sea killing all on board. At least three of the CTs on board had flown in Big Look. One I remembered was John Potts, CTI1, a tremendous person and superb operator. The VQ-1 officer evaluator was LT John Singer, a dedicated and brilliant person. Whenever I decided to fly, I always scheduled to fly with John. He was not only great to be with, but we worked well together combining our own crews' sources of information.

I have the greatest respect and admiration for the officers and men I knew and worked with in Big Look.

CTI2 Wayne T. Care, USN

Editor's note: The following was taken from a letter from Marc Heddy to Wayne's sister upon learning of Wayne's death (February 24, 2014). A much better chronicle of Wayne's experience in the Navy is contained in his book Vietnam Spook Show, a thinly disguised work of fiction about Da Nang and flying with VQ-1. The book is still available on Amazon and is a good read, especially for those of us who were there. I was fortunate to have interviewed Wayne via phone while researching this history, and I can echo Marc's comments below – Wayne was a gentleman and was gracious enough to share details of his Navy experience with me. Rest in Peace.

I was very sad when our friend Keith Olson let me know that your dear brother Wayne is no longer with us.

You don't know me but I'd like to introduce myself. I met Wayne in 1966 at language school in Monterey California. I was in the same class with Wayne and Keith. Actually, Keith was in a different classroom but Wayne and I were together in the same classroom and developed a close friendship over those long months studying Vietnamese. After Monterey we both went to the National Cryptologic School at NSA in Fort Meade, Maryland.

At the end of our course at the National Cryptologic School our paths diverged. I had applied for Officer Candidate School and was accepted to that program. I left for Newport, Rhode Island and Wayne went off to the Philippines.

Wayne wrote to me several times while I was in Newport and told me what it was like at his new duty station. I was delighted and surprised one day to receive a package from Wayne. He sent me my first set of gold bars. He wrote that he had heard that it was bad luck for a newly commissioned officer to buy his own gold bars so he had gone to the Navy Exchange store and purchased gold bars for me. Needless to say I was then, and still am today, very touched by that gesture!

Months later after I had arrived in San Miguel, Philippines, I was sent over to Da Nang, Vietnam. I flew over with a more senior officer who was taking over as the Officer in Charge of our group there in Da Nang. Picture, if you can, myself as the lowest ranking officer, a newly-minted Ensign, arriving with a Navy Lieutenant Commander (3 grades above me!). Our detachment in Da Nang sent a driver out to the airfield to pick us up. I was dumbfounded to see Wayne walk into the arrival area. Now, Wayne was never the most "military" person I ever knew in the military, but he strode up to where my boss and I were sitting and, totally ignoring my boss, gave me the sharpest salute you could imagine and said "Welcome to Vietnam Mr. Heddy". I don't know who was more shocked: I or my boss! Wayne proceeded to pick up my suitcase and show us to the vehicle. My poor boss was left to drag his own bag along behind us!

Wayne, Keith and all the enlisted guys who were working in our group went out of their way to make it easy for me. It was an awkward situation for me making the transition from being a fellow enlisted sailor and drinking buddy to being an actual officer (supposedly) in charge of them! They all fully realized the situation I was in and did everything possible to make me look good even if I didn't have a clue! The only unfortunate aspect was that Navy protocol and circumstances prevented me from “hanging out” with them as much as I would have liked.

Nevertheless, after that first assignment to Vietnam, Wayne and I both returned to San Miguel and managed to orchestrate a few days down in Manila to raise hell and party. We had a great time. As time went on I went back to Vietnam and continued to work with most of my old buddies.

Back in San Miguel I lived in the BOQ (Bachelor Officer's Quarters) but I was able to sneak Wayne into the BOQ where we could share good conversation and drinks. Actually, that reminds me of an incident in Vietnam that you might find amusing. One night I managed to get my hands on the one vehicle that was assigned to our group. I picked up Wayne and we drove out to a Naval Base that was a little bit away from our base. I think that it was called Camp Tien Sha (or something like that).

Anyway, when I picked Wayne up I gave him a set of gold bars so that he could pretend he was an officer and we could go into the Officer's Club for drinks and dinner. We had a tough time putting the bars on his shirt collar in the dark and I'm sure that they were not at all properly placed. We convinced ourselves that he could pass for an officer and strode into the Camp Tien Sha officer's club as if we belonged there! I turned to look at Wayne, who was following behind me, and was horrified to see that, although the gold bars looked ok, his shirt had enlisted stripes on the sleeve! We immediately tried to roll up his sleeves to hide the enlisted stripes and probably cut off all circulation to his arm in the process. Both of us were laughing, scared that we would be court martialed and afraid that we would poop our pants before we managed to extricate ourselves from the situation.

After our time in the Far East we both came back to NSA at Fort Meade. Wayne was discharged before I was but he stayed in the DC area for a bit. I had an apartment in Maryland and I think that he had one in Virginia. We continued to see and visit each other often.

As the years went on I remember visiting Wayne in the Albany, NY, area. In fact we spent a great visit at Keith's family home. I remember playing (and losing) ping pong with Keith.

I also was on a business trip to the San Francisco area when Wayne was living in Oakland. He cooked a great meal for us at his apartment there.

Over all those years we managed to keep in touch. As I'm sure you will agree, Wayne was a “talker”! He would call me and we would chat on the phone for hours!

I last spoke with him a month or so ago and he updated me on his medical problems and described the fantastic visit he had with Keith.

I hope that my reminiscing about my friendship with Wayne brings a smile to your face. My writing this letter is partly a catharsis for myself and partly an effort to let you know how much I valued my friendship with your brother. I truly loved Wayne and I will miss him.

Marc Heddy

CTI3 Michael R. Honan, USN

Editor's note: CTI3 Mike Honan was assigned to the Det from December 3, 1969 to February 25, 1970.

On my first night in the barracks, Gary Lynch and I were in our cubicle, sitting on our bunks, drinking beer and talking about Da Nang – who was who, what was what, how things were done, etc. I had barely asked him how to tell the difference between incoming and outgoing when we both froze, fell silent, and locked eyes as a high-pitched whistling rapidly increased in volume – just like in the movies when the bombs come down. The whistling reached a peak, suddenly there was an abrupt and absolute silence for a second or two, immediately followed by a loud crunching sound. Gary was up and out the door in an instant. Like a dummy, too indoctrinated to the Navy having rules about everything, I sat there a moment longer wondering if it was okay to bring a beer into the bunker. I mentally slapped myself, dropped the beer can, and ran.

I had never seen a Willie Victor before I arrived in Da Nang, although several guys who had been at the Det tried to describe them to me. When I first got to the flight line, my initial impression was, “This is the strangest, most ungainly airplane I have ever seen. It can’t possibly fly. In fact, it shouldn’t be allowed to try.” Nothing about them ever changed my mind, but I have recently found some information that helps explain its odd appearance. When Lockheed built the first Constellation in the 1940s, they looked for the most powerful engine available. That engine came with longer props than the other planes of the time. To provide ground clearance for the props, the landing gear had to be longer. The nose gear in particular seemed so fragile. This raised the height of the whole airplane to such an extent that a single tail-fin would have been too tall to fit into the hangers of the day. Thus, Lockheed decided on the triple tail, providing a similar surface area. But making the tail wide extended it beyond the centerline of the plane, leaving it prone to prop wash from the engines that might affect stability. So they gave the whole tail assembly a slight upsweep. When it came to creating the Super Constellation, some 18 feet longer than the original, the nose was deemed to be too high for the pilot to see well on the ground. So they gave that lengthened and narrowed nose a slight down turn. Extending the tail end made the tapering more pronounced, making it seem that the triple fins were attached more delicately. Incongruous as it may seem, if you compare the profile of a Super Constellation with a dolphin, you’ll see some distinct similarities: a pointed, down-turned nose, the body thickest through the ‘shoulders’ (where the flippers meet the body and the wings meet the fuselage), and a distinct tapering back to a broad horizontal tail. It may have been the Super Constellation’s increased ground clearance that made it a good candidate for mounting the large radome on the belly, but the generally sleek aerodynamic appearance of a gracefully arched

body ready to lift into the air is defeated by the large protrusions top and bottom that seem only to weigh it all down.

After only three weeks at the Det, and with just six flights in Willies under my belt, I was given a spot on the A-3 crew. I had the station next to the belly hatch and was told that should there be an emergency, I would be the first one out. Frank Azevedo piped up, “Yeah, you’ll clear the antennas for the rest of us.” As we neared our track on that first flight, Bill Dillon called me up to the cockpit and pointed out Vinh, hazy on the western horizon. It was the only time I had a fair sense of where we were.

I flew two BLACK TRACK missions in the A-3, both at night. On the first flight, I was using the piss tube (that ingeniously simple device that allowed one to literally piss on the war) and I peeked out the window. The moon was just past full, widely scattered thin clouds dimly silver. Below that, the land was completely dark as far as I could see. Suddenly I glimpsed a small, distinct orange glow off to the side and slightly behind us. Briefly, I wondered if it was a forest fire. But then I noticed that it was narrow and seemed to be moving in a line. A B-52 strike. It might be pure hell down there, but from high above it seemed so miniscule, so ineffectual, a momentary blip in a vast sea of black.

The following night, the second BLACK TRACK mission seemed to be going smoothly, but after less than two hours the pilot reported that he had lost several systems, including radio and navigation. He broke off the mission, turned east and followed the coast down to Da Nang. We had an uneventful flight back, landed routinely, and gathered our gear. But when we walked into the spaces, two hours ahead of schedule, we were met with shock and disbelief. Someone called out, “They had a SAM locked in on you! When you didn’t answer radio calls, we thought you’d been shot down.” This was only a week after Brown and Blyth’s encounter with SAMs¹, so the possibility wasn’t too far-fetched.

The east side of the field at Da Nang was primarily designated for Air Force use, while the west side was for Marine and Navy aircraft. All Marine and Navy aircraft that could possibly be landed on a carrier were fitted with tailhooks whether they were currently carrier-based or not; this included the A-3. Because of this capability, an emergency arresting cable was installed on the west runway.² It was so rarely used I doubt many people even knew it was there. Returning one night in the A-3, we were told that the base was under attack and that when the aircraft stopped we were to exit quickly and run for the nearest bunker. Never having experienced an arrested landing, the sudden deceleration upon hitting the cable was a complete surprise. I was pressed so rapidly and forcefully into my seat that I couldn’t move. I thought the plane must surely come apart. We quickly came to a stop, the sudden release of pressure bouncing us back in our seats, taxied a short distance, and were amazed to find that we were already parked at the VQ-1 revetments.

¹ Cf. Appendix 4 for a more detailed account of that mission.

² Da Nang AB had two parallel runways, orientated 350/170.

After five consecutive A-3 flights, I spent much of the first week of January 1970 on guard duty of the spaces, midnight to 4 A.M. It felt like a demotion, maybe it was. At this time, the bunker was a pile of sandbags not even four feet high, off to the right of the spaces, with room inside for two. I was given a helmet, flak jacket, M16, a .45 caliber pistol (not a grenade launcher!), and probably a flashlight. There was no spotlight on the roof, no emergency phone. There was an upturned empty five-gallon floor wax can in front to sit on. It rained a lot. To get out of the rain, I'd go in the bunker, but the mosquitoes came in droves. To smoke out the mosquitoes, I once lit a small fire inside, but quickly realized that merely lit up the gun port on the backside of the bunker as a beacon. I put out the fire and went back out into the rain, sweating under my poncho. The bunker was built right next to the drainage ditch and I would hear all sorts of rustling and scratching noises; probably rats, but of course I imagined sappers. One night, I felt something touch my calf from behind. I kicked, but it was a dog; he yelped and whimpered, then scurried off towards the hanger, looking back over his shoulder at me. I spent my time learning to identify planes on the runways by the sound of their engines. If there was an early flight scheduled, when I came off duty I had to go wake up the crew.

One of our COMEVALs was CWO2 John Wise, who was very popular with the crew. Many of us had worked with him or had him as an instructor somewhere along the way. Nobody knew he was coming back to the Det, so when we walked into the spaces one morning to get our gear together and saw him standing in the middle of the floor with a mug of coffee, everyone was surprised and a bit elated. There was a great deal of chatter and questions and catching up until John looked at the clock and said, "We're going to be late for the flight." Sure enough, when we got out to the apron the Willie was already rolling out of the revetment. Purely out of habit, we began running for the aft door not even realizing we were headed straight into the spinning props. The pilot braked the plane and the VQ-1 crew chief began screaming at us from the forward door. Sheepishly we climbed up the forward ladder and John took responsibility for it all.

LCDR Aiau was the pilot for my final flight. He had been limping around for the preceding few days with an injury to his foot or ankle. He was wearing one of those flat, wooden medical shoes and I wondered if it would affect his ability to use the foot pedals. It was an uneventful flight and we came in from the north for our landing on a bright sunny afternoon. Lower and slower, I was thinking, "Ah, my last landing." Then only one wheel hit the ground. We bounced back into the air like we'd hit a trampoline, maybe ten feet but it seemed like much more, flew a little further, and came down on the other wheel. Bounced back into the air again, flew a little further, only to once again come down on the other wheel. Back and forth, perhaps half a dozen times or more, each bounce a little shorter than the previous one, each jolt a little less severe, before both wheels were finally on the ground at the same time and the nose came down. Two days later I was on a C-130 headed for Cubi Point and only too glad to leave.

Three weeks after I left Da Nang, I was home on leave, sitting in my parents' living room. I picked up the newspaper and saw the headline: "Navy Plane Crash Kills 23 Crewman."

No one was named in the article, so I wrote to the A-brancher (can't recall his name, but I figured he would be the last person to be on a flight) and had to wait a couple of weeks for a response. When I saw that LCDR Aiau had been the pilot, I thought of that final, wild landing and wondered if his injured foot had anything to do with the crash.

I spent my final six months of active duty at Fort Meade. Returning from lunch one day, I got off the elevator and headed towards the door for my section. I was a few steps away when the door opened and a three-star admiral came through. I was about to step back to let him pass when he glanced at me, saw the A/C wings, smiled and held the door open for me. "It's the least I can do for our boys from Da Nang," he said.

Đặng Thị Hương (Hương Butler)

Editor's Note: There are many groups of Vietnam War vets, but the Big Look Spooks are unique in that we have as a member one of the Vietnamese civilians who supported us. Hương was one of a number of ladies who supported the Detachment, serving for several years as our daytime bartender in the Spook Mess. The short biography that follows is based on notes from a conversation with Hương at our 2015 reunion.

Đặng Thị Hương was born and raised near Hue, a city to the north of Da Nang. When she was eighteen she left her home in Hue looking for her sister, whom the family thought might be in Da Nang.

Soon after she arrived in Da Nang she met one of the Spooks and was offered a job working at the Spook Mess. Her application was reviewed by someone senior at the Det (probably the Leading Chief) and Hương joined the Detachment sometime in 1970.

Because she lived off base, Hương became the daytime bartender for the Spook Mess. Base employees who lived off base entered and left through a personnel gate, where they had to exchange their off-base identification for a Vietnamese Air Force on-base ID. This allowed the base security personnel to track who was on base, but also meant that Hương could only be on the base during the day and had to leave by 1700 (5:00 PM).

Hương continued to work as the daytime bartender of the Spook Mess until it closed, and afterwards married a member of the Det, Patrick Butler. In 1973 Hương left Vietnam and came to the United States, settling in Kansas and raising a family along with managing a restaurant. When asked if her restaurant featured phở, the Vietnamese soup now popular in the U.S., she replied that her restaurant served hamburgers – true American fare!

Hương attended both the 2013 and 2015 reunions, and joined her fellow Spooks in several group photos. She's easy to spot – she's the one who still looks eighteen.

CTI3 Robert E. Morrison, USN

Editor's note: This is my own personal recollection of the short time I spent at Da Nang. After leaving the detachment as detailed below, I returned to San Miguel and was almost immediately ordered to the USS Chicago (CG-11) for temporary duty. Enroute to the Chicago I flew from Cubi to Da Nang and was able to spend one last night at the Spook Mess before flying out to the USS Coral Sea (CVA-43) the following day. Like many of those who served at Da Nang, I stayed in the Navy and completed a career, retiring as a Lieutenant Commander in 1992 with over 22 years service.

After four months of training at San Miguel (including a week in Guam for A-3 Familiarization training with VQ-1), I was finally on my way to Da Nang. This would be my first operational job, heretofore everything had been training. This was for real.

I departed San Miguel 1515 hours, 30 December 1971, traveling to Clark AB to catch a 31 December flight on an Air Force C-141 to Saigon/Tan San Nhut AB. After a short layover I boarded an Air Force C-130 to Da Nang, arriving at the 15th Aerial Port, where I was picked up by someone from the detachment. My reporting endorsement, signed by LCDR Dan Currie, acting OIC, shows I reported aboard at 0930. Shortly thereafter I was introduced to CTO1 Richard "Sarge" Bayne, who set about getting me checked into the barracks, where I bunked with Herb Shippey¹. Sarge also collected a 50 cent "linen deposit." I, of course, not knowing any better, believed his story about losing too much linen to transient aircrew, and so I paid willingly. He laughingly returned it several hours later.

I soon found out that what I really needed was a mosquito net. The first night there I didn't have one. After tucking my sheets in all the way around my rack, I climbed in and wrapped the sheet as tight as I could around my neck. When I went to shave the next morning, my face looked like it had a case of measles. Getting a mosquito net was the first order of business, quickly taken care of by one of the ladies who worked cleaning the barracks.

¹ Herb was a great roommate. He had a good collection of books and good taste in music.

Despite arriving on New Year's Eve, I don't remember staying up late to ring in the New Year. I remember being eager to start flying, but before that happened I was assigned duty as the midnight fire watch in the barracks. When I asked what I had to do in that capacity, I was told if there was a fire (not likely) or a rocket attack (very likely), my job was to ring the alarm, and I was shown a switch on the wall to activate it. Then I was told the real job of the fire watch – midwatch bartender in the Spook Mess. This was an education for me in more ways than one. First, I wasn't much of a drinker and didn't know how to mix many drinks. Second, the Spook Mess took as payment any currency that was legal tender anywhere in Asia. Payment could be made in Military Payment Certificates (MPC – supposedly the only currency used by US Forces)², Vietnamese Dong, Philippine Pesos, Thai Baht, New Taiwan Dollars, and even US green (dollars), which no one was supposed to use in country. The bartender had to be an expert on foreign currency exchange. I quickly became educated on both counts.

My first rocket attack came several nights later, on January 3.³ Never having experienced one before, I had no idea what was going on. Everyone in the Spook Mess ran out onto the porch to see where the rockets were hitting. I was supposed to ring the alarm, but by the time I figured out what was going on, everybody had come back off the porch, almost running me over. Someone else hit the switch, and somebody grabbed some beer off the bar, and we spent the next half hour or so in the bunker. Things soon returned to normal and we retired to the Spook Mess for the remainder of the night.

After a couple more nights of fire watch, I was shifted to days and assigned as duty driver. Again, this job was a whole new experience. About the second or third day as duty driver, I was told to fill the detachment truck with gas. Naturally, I asked where the gas station was. Someone told me, but added, "You can't go there." When I asked why, I was told the truck we had was "stolen," or more properly, abandoned, by another Navy unit which had left country. We had the truck, but not the corresponding fuel "credit card," so the gas station run by the AF was not available to us. I was told to drive around and find some gas somewhere. So I set out, not having a clue as to where to go. After driving completely around the base, and not seeing any gas pumps other than the base station, I drove back to the det. One hour wasted, and the lack of gas problem worsened. One of the more experienced guys took pity and took me in tow. After

² By regulation, upon arrival in Vietnam all personnel were required to convert any US Dollars (aka "green") to Military Payment Certificates (MPC). I was advised not to convert all my currency, since we were likely to deploy somewhere else (Thailand/PI) on short notice, and MPC were worthless outside Vietnam. Accordingly, I didn't "declare" about half of the green I had when I arrived in Saigon.

³ I didn't record the exact date, but found it recently in the CNFV quarterly history for that period. Five 122mm rockets were reported.

turning into an unmarked road we drove into a small tank farm, and there in the middle, was a farm style gas tank with a hand pump. We filled up – problem solved, at least for a while.

All this while, I spent as much time as I could in the spaces, getting ready for my first chance to fly. My first flight came on the 9th of January, on PR-24. I remember two things about this flight. During the flight, the off duty Flight Engineer (FE), who doubled as cook, came by and asked me how I'd like my steak. I thought I was being scammed and responded somewhat indifferently, whereupon he remarked, "If you don't want it, I'll give it to someone else." When I had a chance, I went forward to get the proffered steak, and found the Willy had a kitchen, complete with a grill. I was suitably impressed. The other thing I remember was the landing. After 10.1 hours of flight we returned to Da Nang, bouncing down the runway in true Willy fashion. As we turned off the active, the grizzled VQ-1 veteran ditching across from me unbuckled, stood up, and remarked "Cheated death again." Such was my first flight.

I flew again the following day, this time on PR-31, one of the two EP-3Bs. At some point during the mission someone detected something considered a threat, because the plane suddenly dove for the deck. Nothing happened, however, and the plane resumed altitude and station and completed the mission, 9.6 total hours flight time.



After a couple of days break I was back on the flight schedule 13 January, flying PR-24. Rather uneventful, except the radar caught on fire. Again, we finished the flight, 9.4 hours. I flew again on the 16th, again on PR-24. On the 19th, flying PR-31, we extended on track for an extra half hour, landing with a 10.1 flight. My next flight, on PR-24, went along fine until one of the starboard engines caught on fire during landing. The next few flights were routine, and then, on the 30th of January (my 10th flight), we had one of those days.

The Willy (PR-24) finally took off, one hour late, after aborting twice on the ground. Then we got extended one hour on track. As we came off track to recover at Da Nang, we were told to divert to Cam Ranh Bay because an Air Force F-4 had dropped a dud cluster bomb somewhere near the runway, and it couldn't be found. Halfway to Cam Ranh Bay the bomb was found and we were told to return to Da Nang. We got waved off on our first approach at Da Nang and finally recovered at 2300H (local time), with 10.1 total hours.

The above incident is one of the reasons why we usually wore civilian clothes under our flight suit (instead of a uniform). Often a flight could be diverted on short notice, and the crew would be forced to remain overnight (RON) at a distant airfield. Wearing civvies made it possible to go on liberty if the chance arose.

This mission was also my 10th mission, which completed my aircrewman qualifications.⁴

Life wasn't just flying at Da Nang. Although we were not given liberty, we did on occasion go to China Beach (another Navy compound across Da Nang City) and the Army PX at Freedom Hill (aka Hill 327). The latter was the source of one of my favorite sea stories, although I wasn't actually there. The protagonist was CTI3 Rich Brophy, who on that day was dressed the way most of us were when not flying – unstarched green utilities, unshined boots, and no cover! Brophy, driving an official Navy truck, approached the gate to Freedom Hill, where he encountered a nattily dressed Army MP gate guard, complete with a polished helmet liner and an MP brassard. The MP, upon seeing Brophy, asked “Where's your cover, sailor?” Rich responded indifferently, “In my pocket.” “Why isn't it on your head?” demanded the MP. Rich, with an “are you really that stupid” look, replied “Because my head won't fit in my pocket!” At that point, the MP gave up and let him through the gate.

In general, we didn't go off base too much, because driving in Da Nang was dangerous, not only because traffic was heavy, but because we were afraid of a pedestrian

⁴ The requirements for aircrew wings were: Be on flight orders, have attended SERE, DWEST, LP and Night Vision schools, passed flight physical/aircrew swim, one successful ditching and one bailout drill, and 10 flights.

accident. There were stories of desperate Vietnamese pushing their children in front of US vehicles in hopes of getting a settlement from the injuries that incurred. Traffic off base, like many places in Asia, was a hodge-podge of vehicles, everything from big trucks to motorcycles, bicycles and ox-carts. Our primary vehicle was a one ton stake truck. On the bed our Mat man, CTM1 Cliff Webb, had constructed a large cover, in effect making it somewhat like an open ended U-Haul truck. On the forward part of the bed, immediately behind the cab, he built a large wooden “tool box”. This was big enough to smuggle a girl or two into the base, should the opportunity arise. Cliff spent a lot of time while I was there trying to design and build a false bottom into a box so he could ship several AK-47’s home via ARFCOS⁵. Don’t know if he was ever successful.

Since we weren’t able to get to town, the Spook Mess naturally was the center of off duty life. Each of us assigned to the detachment was entitled to a monthly ration of beer, wine, booze and tobacco. At the beginning of the month we would be issued our new ration cards. We all signed them, and then turned them back in so they could be used to purchase supplies for the Spook Mess. We then bought our supplies there, along with such canned food delicacies as Van Camp’s Beanee Weenees or Vienna Sausage. This system worked well for all concerned, ensuring no rations were wasted (I didn’t smoke, for example, and therefore someone who did could use my ration. This wasn’t the way the ration system was supposed to work, but like nearly everything in Da Nang, no one seemed to question it). The Spook Mess was on the top floor of our barracks, and took up about half of the floor. The bar was to the left as you entered, and in the far right corner was a small stage. On one of the walls was a black light poster⁶ titled “The Last Great Act of Defiance”, which showed a mouse giving the finger to an eagle swooping in for the kill. During the afternoon and evening hours we had hired bartenders, young Vietnamese ladies. They worked strictly behind the bar.⁷ As mentioned before, the midwatch bartender was one of us.

⁵ Armed Forces Courier Service – a special freight service used to move classified material

⁶ Black light posters were a popular item in California “head shops”, which catered to stoners and hippies. When illuminated with a black light, they glowed.

⁷ The afternoon bartender, Huong, came to the U.S. afterward, and is part of our group. The two evening bartenders were married to VNAF airmen and lived somewhere on base in Da Nang.

The next few missions were routine, except for a small multicoupler⁸ fire on PR-24. Then on the 6th of February, I got assigned to a “scramble” mission when the P-3 aborted on track. An hour after we were notified the Willy launched, but the mission came off station early due to lack of activity.

I experienced my second rocket attack on the 9th of February.⁹ Two FASU people were injured in this attack, but none of the VQ-1 or Spook gang. If I remember right, the offending rocket hit across from the mess hall in a vacant lot, and the two injured were hit by some small pieces of shrapnel. I went out to look at the crater the next day, and found a piece of shrapnel which I kept for a while. Somewhere over the last 40 years I lost it. I remember one other rocket attack while I was there, but can't find any record of the date.

Somewhere about this time another memorable incident occurred. Our barracks had no running water, and the bathroom and showers were in a separate building a short walk away. One afternoon I was coming out of the barracks to go shower when someone said “Don't go out there!” Since I was only half dressed, I figured maybe one of the ladies was out there and they didn't want me to be embarrassed. Since we didn't usually worry about such, I didn't pay attention and proceeded to walk into a cloud of tear gas. Some drunken ARVN¹⁰ had thrown a canister into the compound. Tear gas does what it is advertised to do!¹¹

Several days later, on the 12th of February, my TAD orders were endorsed with another set of orders sending me to NAS Cubi Point in the Philippines. VQ-1 deployed both EP-3Bs there during Tet and Nixon's visit to China. For the next two weeks I flew every other day from Cubi, returning to Da Nang on the first of March.

⁸ An electronic box used to connect multiple receivers to a single antenna.

⁹ Again, I didn't record the date; I found this in the CNFV Quarterly history.

¹⁰ ARVN was the abbreviation for Army, Republic of Vietnam. The abbreviation, pronounced 'R-Vin', was used as slang to denote a Vietnamese Army soldier.

¹¹ That was the only experience I had with gas, since I didn't go through the gas chamber in boot camp. The class at Great Lakes was cancelled because of cold weather, along with firefighting class.

At this point it was clear to everyone that I could use some additional training back at San Miguel, so I was told to expect to be sent back at the end of March. Naturally I was a bit disappointed, but took it in stride, figuring I would be back soon. Several days later, I happened to review my flight hour record kept by the detachment A-branchers, and noticed I had over 240 hours of flight time since my arrival in January. Since I was within one flight of earning my Air Medal, I asked Denny Culbertson if I could be scheduled for one last flight in order to get the necessary hours. He agreed and asked CTIC Chuck DeCourley, who also concurred, and so I was scheduled for one final flight on the 20th of March.

One week later, on the 27th of March, I left Da Nang on a VQ-1 “navigational training flight,” i.e. a beer run, to Clark AB. It was all done on rather short notice. I had been living out of my seabag for several days, waiting for the word to go. I was probably hanging around the Spook Mess when someone showed up with the duty truck, told me I was on the flight, and to get my seabag. Two of us returned on the flight, CTR3 “Wild Bill” Holden and me. After getting suited up for the Whale (PR-06), Bill and I took pictures of each other, climbed in, and we were off. After about a 3 hour flight we landed at Clark and taxied to the service ramp (not the passenger terminal), where we were met by an AF step van



loaded with 100 cases of San Miguel. All hands proceeded to help transfer the beer, and after it was loaded, the VQ-1 crew climbed aboard, started up and took off. Bill and I looked at each other, picked up our seabags, and headed for the passenger terminal to look for a special services car going to San Miguel. The interesting thing about all this is we never went through customs or any baggage inspection on either end. Several hours later we were back in San Miguel. We checked in at 2110 that night. My TAD to Da Nang was over, and I only briefly returned to Da Nang several weeks later enroute to the USS Chicago.

Despite only being there a short time, Da Nang was significant to me in a number of ways. First, it was my first real experience as an operator. Second, I earned my aircrew wings, and thanks to Denny and Chuck, my Air Medal. These two awards were important several times later in my career, and probably had a lot to do with my selection

for a commission. Most important, though, was the chance to meet and be part of a select group, the kind of people who 40 years later still call each other brother. Best wishes to you all.

At the Beginning and at the End

CTIC Charles D. Decourley, USN

Editor's note: Chuck provided the following write up covering his year in Da Nang as the Detachment's final leading Chief. He served in this capacity from March 6, 1972 until February 12, 1973. Although this narrative covers the final year of the detachment (1972), Chuck's involvement with Vietnam began at the very beginning – the Gulf of Tonkin incident of August 2, 1964. The U.S. Navy ship attacked during that incident, the USS Maddox, carried a cryptologic direct support team. One of the members of that team was CTI2 Charles DeCourley. His final tour in Vietnam ended concurrent with the closing and withdrawal of the Fleet Support Detachment in Da Nang in February of 1973. So Chuck was truly there 'at the beginning and at the end'.

Here then, is Chuck's story.

My tale started when I was stationed at Goodfellow AFB. I was one of two instructors for a course for Chinese linguists. One day I was called to the Personnel Office and asked to volunteer for a year's tour in Da Nang. I did not want to go and said so. For one thing, I had been at Goodfellow for about thirteen months out of what was supposed to be a 36-month tour. Also, I had already done my time in Vietnam and had been under fire in what came to be known as the Gulf of Tonkin incident.

Apparently they were having a hard time finding a Chief to volunteer for the Leading Chief Petty Officer (LCPO) slot at the Fleet Support Detachment, Da Nang. During this discussion it was indicated that I could be ordered to go; but, they preferred that I volunteer. I finally consented to volunteer on the condition that I would receive orders back to Goodfellow after my tour in Vietnam. I was assured that I would receive orders back to Goodfellow, so I volunteered.

Now for the rest of the story concerning my orders. As I was nearing the end of my tour in Da Nang, I received a telephone call from BUPERS¹ informing me that I would be receiving orders to the NSA. That was the last place I wanted to be as I had already had a tour there and did not like it.

¹ BUPERS = Bureau of Personnel, the Washington DC Navy office responsible for the assignment of officers and enlisted personnel.

Well, I lost my cool. I vehemently reminded the person on the other end that I had been promised that I would get orders back to Goodfellow. As one might guess, the discussion was heated. Bob Foley (A-brancher) was desperately signaling me to calm down. I was finally assured that I would be receiving orders to Goodfellow.

After the phone conversation, Foley said that I could not talk to them the way I did. My reply to Foley was, "Hell, I was given a promise that I would be returning to Goodfellow and I was going to hold them to that promise."

I got my orders to Goodfellow and spent three years there. I was put in charge of the office that ran the Air Force basic course for all linguists. I received the Air Force Commendation Medal for my efforts in that shop. As the saying goes "all's well that ends well."

When I got to Da Nang [early March 1972] it was serene. It did not feel like we were in a war zone. I began to think that maybe this tour would be quiet, that my fears were unfounded.

In April 1972, the Democratic Republic of Vietnam (DRV)² started their spring offensive, and with it came the rocket attacks which occurred off and on through most of the rest of my tour. The two northernmost provinces of the Republic of Vietnam (RVN)³ fell quickly. There were rumors that the RVN soldiers did not stand and fight; but that they mingled with the refugees who were fleeing southward. I was expecting the DRV forces would drive further southward; however, the offensive was stopped.

I felt helpless as we did not have weapons or combat training. I had no faith in the RVN army defending Da Nang airfield. The constant fear of the DRV resuming or continuing their offensive stayed with me for the rest of my tour. Also, the frequent rocket attacks kept my fear constant.

Shortly after my arrival, Cliff Webb (M-brancher) took me on a tour of the base and to the top of Monkey Mountain. There I ran into an Air Force sergeant who was in my language class at the NSA.

During the quiet time before the DRV spring offensive, I went with a group of the guys to China Beach for a little R&R. When we got to the beach, I stayed with the duty truck to make sure it was not stolen. I could have gone to the beach instead of standing guard duty at the truck. I had decided it was best for morale to let the guys have some fun while they could.

² North Vietnam

³ South Vietnam

The trips to Monkey Mountain and to the beach were the last time I got off the base except by plane. As the Recreation Officer, I went to Saigon twice to try to get some recreational items; but, I came back empty handed as there was nothing to be had. I got to fly to Hawaii for R&R where I met my wife and daughter. The two weeks of R&R was a welcome respite. Then there was the flight home at the end of my tour. That last flight out of Vietnam was the best flight I have ever been on.

I did manage to wrangle a trip, through VQ-1, to Udorn, Thailand. There was only one seat open on that flight and I got it. Flights to Udorn were few and far between. It was dubious if I could be able to get on another flight. In Udorn I bought my wife an emerald ring as emeralds were one of her favorite stones.

Lieutenant Commander Gamrath did not want me to go to Udorn because he was expecting an important visitor and wanted me to be present. When I explained the difficulty in getting a seat on that plane and that I needed to get out of Da Nang, he relented and let me go. That was the only time in my Navy career that I came close to disobeying an order.

I managed to fly once a month in order to get flight pay. It was only for a few hours each month. One day that I was flying it took the third plane to get airborne and on station. Engine failure on the first two aircraft caused the pilot to abort the mission. I was ribbed for jinxing the mission. As one might deduce, I took any opportunity to get off the base and still do my job on the ground.

Upon my arrival in Da Nang, I noticed that some of the men were not in uniform (except when they were flying and were in flight suits), some needed haircuts, and there appeared to be a need to disseminate information to a group rather than one-on-one. Therefore, I decided to hold muster once a week.

This turned out to be a bad decision. When I held the first muster, I found out that I had a group of unhappy campers. When I had the men fall out after the second muster, they fell out haphazardly. I had them fall back in, told them how to fall out properly, and dismissed them. I realized that I had some very, very unhappy campers and that holding muster was a bad idea. I decided then and there not to hold muster again unless it was necessary. The need to hold muster did not arise for the remainder of my tour.

I never called a man down for being out of uniform or needing a haircut. I fell into my *modus operandi*. Tell a subordinate what needed to be done and get the hell out of the way and let him do his job. Every man knew his job and did it well; therefore, supervising them was an easy task.

The main job that I had to do was to assign men to the flight crews. Spooks flew on 1030-1040 missions in 1972. I got a bottle of champagne and took a group of men and met the crew who were on the 1000th mission. To the best of my recollection, none of the men had realized they had flown that many missions. Other than assigning men to flight crews, I felt that my job was to look after the welfare of the men to the best of my ability.

John Shipman told me about the time I assigned him bunker watch five nights in a row for some infraction.⁴ It seems that I took a beer to him on the second or third night when there was a rocket attack and we both took cover inside the bottom part of the bunker. I vaguely remember the incident and one would have to talk to Shipman to get the details of the incident. Other than this incident, I do not recall having any disciplinary problem save one other time, which I will cover later, when there could have been a disciplinary problem.

I remember one rocket attack in particular. Three rockets hit inside the FASU compound in the barracks area. I was awakened in the middle of the night by the sound of rockets exploding and rocks pelting the side of the FASU Chiefs' barracks where my room was located. I managed to roll out of my bunk and pull it over me in case there was falling debris. The rocket that landed close to the FASU Chiefs' barracks buried into the sand and under a sidewalk. The only damage was a buckled sidewalk.

The second rocket landed in front of and close to the Spooks' barracks. It created a crater at least 15-20 feet wide and 10 plus feet deep. It was close enough to the back end of the Spooks' duty truck that the truck bed was blown to who knows where. The back end of the frame was bent so that it looked like two J's lying on their backs.

The third rocket landed close to the VQ-1 barracks and dug a crater almost as large as the one in front of the Spooks' barracks. There were no personnel injuries or damage to the barracks.

Once drug sniffing dogs were brought in to search the barracks. When I was notified of this, I got close enough to observe what was happening yet far enough away so that I would not be considered as interfering with the search. The Spooks' barracks was clean for which I was greatly relieved. Other than alcohol, I never did see any signs of anyone using drugs.

A number of us, including myself, partook of the sauce more than we should have. Beer and hard liquor were readily available. VQ-1 flew to the Philippines frequently and came back

⁴ According to John, the reason was failure to completely burn classified material.

loaded with San Miguel⁵ and some hard stuff. Rarely did the Spook Mess run out of San Miguel. The FASU Chief Mess had their own supply line for San Miguel and they, also, did not run out of San Miguel very often. I usually got my San Miguel from the Chief Mess. I kept a bottle of whiskey in my footlocker and would have a couple of stiff drinks every night so that I could get to sleep.

Alcohol played a role in two incidents in which I was involved. In the first incident, which was the one that could have resulted in disciplinary action but did not; I was in the Spook Mess partaking of a new batch of mojo (I think that was what it was called).⁶ Anyway, it tasted good and went down too easily, resulting in my drinking too much. I had been admiring their new bar, which Webb had built, when someone spilt a drink on the bar. I made a comment to the effect that the bar was new and very nice, and that they should take care of it. Webb tossed a drink in my face and said that it was their bar and that they could do what they wanted to do to it. Webb and I exchanged a few words, then I pulled him aside and we chatted. Or, I should say that I talked and he listened. I told him that I could have put him on report but that I would not. It would not have helped anybody and we were both drunk. I let the matter drop and forgot about it.

The second incident was in the EM Club. I was having a few drinks, listening to a good band from the Philippines, and eating peanuts. Suddenly, I got the mischievous urge to flip a peanut at the stage. I did so and the peanut landed at the feet of the girl singer. She was the only one that noticed it, but continued as if nothing had happened. Then I got to thinking about what if it had disrupted the band's performance. Also, I thought about what if the peanut had landed among some of the guys. I could have started a fight or, even worse, created a melee. It was a stupid move on my part and I was thankful that nothing serious came of it.

On three occasions during my tour, my ego got a boost. The first one was when one of the men came to my room in the middle of the night, woke me, and said he had a personal problem that he wanted my advice on. We talked for some time. Our talk must have done some good as, when he left, he was feeling much better. I do not remember the man's name or what the problem was. What impressed me was that he felt he could confide in me.

The second occasion was when one of the men came and got me saying that there was a prowler in the Spook's barracks and that they were afraid the prowler might be high on drugs. When I got to the barracks, I was shown where the prowler was hiding. I told the prowler to come out which he did after some coaxing. I immediately stuck my finger in his back and told him I had a gun and that he should not do anything stupid. I had him put his hands on his head

⁵ San Miguel beer

⁶ Mojo was an alcoholic punch, with no specific recipe. It was usually made from whatever hard liquor was available, combined with various fruit juices.

and marched him to the Provost Office and that was the last I saw of the prowler. I will have to admit that I was nervous as I had dealt with a man high on drugs once before. This incident made me feel good that the men could come to me for help when needed.

The third occasion was when the FASU Chief Bos'n⁷ Mate gave me a FASU plaque and said "Thanks for being a good Chief." That was one of the highest compliments I have ever been paid.

Some of the men had hung a "Happy Birthday Ho Chi Minh" banner on the end of the barracks. When I asked if anyone had given them grief, they told me that the girls who worked in the barracks wanted the banner taken down as Ho Chi Minh was 'Number 10'⁸. No one else said anything about it. I told them that as far as I was concerned the banner could stay.

The ammo dump at Freedom Hill caught fire one night. One of the men came into the spaces and told us about it. I went outside to see what I could. The sky had a greenish yellow aura and was very bright. I went to the second floor balcony of the Spook's barracks to get a better look. By the time I got there most of the heavy ordnance had already exploded. The sky was not as bright. The small arms ammo was exploding which was a sight to behold. I stayed and watched for a while, then went about my business.

I was supposed to have been berthed in the Spook's barracks; however, there was no room available. So, I was assigned a room in the FASU Chiefs' barracks. I got the impression that some of the FASU Chiefs resented my having a room in their barracks. After I had been there three or four months, I had a run-in with FASU's leading Chief about my having a room in the FASU barracks. He told me that I would have to move out, go to the Spook's barracks as I did not belong in the FASU barracks, and that they needed the room. I replied that there was no room for me in the Spook's barracks and that I was not going to move. He proceeded to tell me that he had taken the matter up with his Officer-in-Charge (OIC) and that I would have to move. Since he told me that he had gone to his OIC, I felt that the matter was out of my hands. I went to LCDR Gamrath and told him what was happening. LCDR Gamrath spoke to the FASU OIC that night and called me to his office the next day. LCDR Gamrath told me that the FASU OIC knew nothing of the matter and that we Chiefs should settle our differences between ourselves. The following day the FASU leading Chief confronted me saying that I had got him into trouble with his OIC. I quickly reminded him that it was he who told me that he had gone to his OIC

⁷ Boatswain

⁸ Slang used in Vietnam to signify 'the worst', 'Number One' being the best.

forcing me into going to my OIC. I made it clear that it was his actions, not mine, which got him into trouble. I never had any more trouble from that Chief.

In December 1972 there was a major operation –Linebacker II. This was a series of bombing missions against targets around Hanoi and Haiphong which previously had been off limits. VQ-1 had aircraft continuously in the air for periods as long as 48 hours. This put a strain on our manpower resources. I could see the fatigue in the men’s faces.

I stayed up during the operation only getting catnaps in the knee hole of my desk in case of rocket attack. First, I had to assign men to the flight crews keeping the work load as balanced as I could. This became a difficult task. Second, I felt like I had to be available to the men in case I was needed.

For the first time I felt like a hawk and wanted to bomb the hell out of the DRV. I wanted the stalemate at the Paris peace talks broken and a peace treaty signed so we could get completely out of Vietnam. The peace treaty was signed at the end of December ’72 or the first part of January ’73.⁹ This was quite a relief for me.

I was very happy when I got on the plane out of Da Nang for the last time on February 12, 1973. I felt relaxed for the first time in months. As the plane became airborne, I remember thinking that the RVN government would fall within five years. As it turned out, the DRV subdued the RVN in a little over two years later.

Afterwards:

Reflecting on my tour in Da Nang would not be complete without considering how these experiences have affected my life since then. Because of my experiences of being subjected to rocket attacks in Da Nang coupled with being aboard the USS Maddox when she was attacked by the DRV navy on August 2, 1964 in the Gulf of Tonkin, I have PTSD.¹⁰

The VA gave me disability rating of 50 percent for PTSD. I was out of the Navy for three or four years when I began to realize that I had PTSD. I did not do anything about it for many years. I finally filed a disability claim with the VA for PTSD and other service-connected disabilities in January 2012. That was one of my smarter moves. I went to the National Center for PTSD web site (<http://www.ptsd.va.gov>) and the Wikipedia web site for PTSD to learn more about PTSD.

⁹ Actually the Paris Peace Accord was signed January 27, 1973, and called for an immediate ceasefire.

¹⁰ Post Traumatic Stress Disorder

When I seriously considered harming myself in early 2013, I finally got the courage to call the Crisis Hot Line (1-800-273-8255 and pressed 1 for veterans). I got to see a VA therapist the next day. With therapy and medications, I have been able to live a fairly normal life. I learned that there was help from the VA.

Because I had 'boots on the ground' in Vietnam, the VA presumed that I was exposed to Agent Orange. Consequently, I am receiving disability benefits for heart failure (60%) and prostate cancer (20%).

Writing about my experiences in Da Nang has been arduous. It has taken me five to six weeks to remember these events. There are other events which I may write about as they come to mind. As I have not talked much about life in the Navy, this is a legacy I can leave for my daughter and two grandchildren.

Appendix Three: Roster

Those who served with Naval Communications Station Philippines Detachment Bravo, the Naval Facility Da Nang Fleet Support Detachment, or Naval Communications Station Philippines Fleet Support Detachment are listed below. Rank shown is that while serving at Da Nang. Year shown is the year the individual first reported aboard. Plus (+) indicates a deceased brother.

| | | | | | |
|----------------------------|------|---|---------------------------|------|---|
| CTR3 Harrison L. Abernathy | 1968 | | LCDR Karl R. Bernet | 1969 | |
| CTI3 Robert T. Adams, Jr. | 1970 | | ENS William E. Best | 1967 | |
| CT2 Jerome L. Adducie, Jr. | 1968 | | CTI3 Neil J. Bickerton | 1967 | + |
| CT3 William R. Albert | 1967 | | CTR3 Steven E. Bickford | 1967 | |
| CTI2 Robert E. Allen | 1966 | | CTR3 William B. Bigham II | 1966 | |
| CTR1 Andrew E. Altes | 1967 | | CTOSN Richard J. Biro | 1966 | |
| CTI3 Jeffery M. Anderson | 1972 | | CT1 Harry R. Bivens | 1967 | |
| CTIC Patrick L. Anthony | 1967 | | CTI3 Brian N. Bixler | 1970 | |
| CTRC Jack W. Archebelle | 1967 | + | ENS Raymond J. Biziorek | 1969 | + |
| CTI2 Ivan A. Archuleta | 1967 | + | SGT Charles Blackmore | 1967 | |
| CT2 Gary E. Arnold | 1966 | | CTR3 Roger A. Blecha | 1969 | + |
| CT3 Richard R. Arnold, Jr. | 1967 | + | CTR3 Wayne A. Bley | 1969 | |
| CTO2 Martin W. Asbury | 1968 | + | CTI2 Daniel P. Blyth | 1968 | |
| CTR2 William R. Ayers | 1966 | | CT3 Bodine | 1966 | |
| CTI3 Frank A. Azevedo, Jr. | 1968 | | CTI3 Bruce "J" Boehringer | 1969 | |
| | | | CTI1 Donald G. Boggs | 1965 | |
| CT2 Morton J. Bacon | 1967 | | LTJG Richard E. Boner | 1970 | |
| CTR1 John M. Badenhop | 1970 | | CTI3 Casimir R. Bonkowski | 1969 | |
| CTR3 Dan L. Bailey | 1967 | | CTO3 William D. Bonsell | 1970 | |
| CTR2 Danny P. Bales | 1968 | | CTT2 Max J. Booe | 1967 | |
| CTI3 Al Ball | 1970 | | CTO1 Colin "B" Bowden | 1968 | + |
| CTI3 William D. Bangham | 1970 | | CTI3 Charles E. Bowman | 1966 | |
| CTRSN David M. Barbato | 1968 | | CTOSN Timothy L. Bowman | 1972 | |
| CDR William H. Barber | 1969 | + | SSGT Leroy W. Bowren | 1967 | |
| CTI2 Timothy M. Barczak | 1970 | | SSGT John Boyuka, Jr. | 1968 | |
| LT John F. Barg | 1968 | | CTI3 Robert P. Brad | 1973 | |
| CTI3 Michael J. Barnowski | 1972 | | CTR2 George A. Bradley | 1967 | |
| CPL James V. Bartelt | 1968 | | CPL S. J. Brandsma | 1965 | |
| CTRC Franklin W. Batchelor | 1967 | + | CTI3 Martin M. Brady, Jr. | 1970 | |
| CTI2 Thomas P. Baxter | 1970 | | CTI2 Bobbie C. Brand | 1967 | |
| CTO1 Richard D. Bayne | 1971 | + | CTOSN Malcolm J. Breaux | 1970 | |
| CTA2 David M. Beckwith | 1968 | | CT3 Craig P. Brennan | 1968 | |
| CPL Leon Bedrosian | 1968 | | LCPL Michael A. Brewer | 1971 | |
| CTI2 George M. Bell | 1970 | | CT3 Thomas W. Brichacek | 1967 | + |
| CTISN Mark A. Bell | 1972 | | CTSN James Brignolo | 1967 | |
| CTI1 Thomas J. Bell | 1967 | | CTI3 Richard E. Brophy | 1971 | |
| LCDR Duncan W.J. Bell, Jr. | 1967 | | CTR2 Robert J. Broussard | 1967 | + |
| LT Nathaniel R. Benchley | 1970 | | LCDR Donald L. Brown | 1968 | |
| CTI3 Donald E. Bergeson | 1970 | | CTI2 Robert F. Brown | 1968 | |
| CT2 George W. Bergquist | 1967 | | CTI2 David W. Browne | 1969 | |

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|-----------------------------|------|---|-------------------------------|------|---|
| CTR3 Danny R. Browning | 1970 | | LTJG Ronald M. Cogswell | 1971 | |
| CTI2 Douglas J. Brueske | 1972 | | LTJG Isaiah C. Cole | 1967 | |
| CTI3 Lee H. Brunell | 1970 | | CTI3 Rudy R. Cole | 1971 | |
| CTO3 David T. Bryfogle | 1968 | | CTI2 Richard S. Collins | 1967 | |
| CT3 Dale A. Buchinger | 1965 | | LCPL Ronald D. Collins | 1965 | |
| CTI2 Jeffery W. Buckingham | 1970 | | CTO1 Clark G. Combs | 1967 | |
| CTIC Harvey E. Buckley, Sr. | 1969 | | CTM3 James B. Connolly | 1969 | |
| CT3 John A. Bueche | 1966 | | CT3 Robert D. Cook | 1968 | |
| CTRSN Joseph L. Buff | 1968 | | CPL William J. Cook | 1970 | |
| CT3 John M. Burch, Jr. | 1972 | | CTA3 Aron E. Cook, Jr. | 1967 | |
| LTJG Joseph D. Burns | 1970 | | CTTC Gary L. Cooper | 1966 | |
| CTI3 Patrick R. Butler | 1972 | | CT3 Coppola | 1966 | |
| LTJG Shaun M. Byrnes | 1967 | | LTJG Robert A. Cornett, Jr. | 1971 | |
| | | | CTR3 Robert L. Covert, Jr. | 1967 | |
| LCPL Arthur D. Caffee | 1969 | | CTI2 Marion D. Cox | 1966 | |
| CT3 Richard M. Callahan | 1969 | | CT3 Richard L. Cramer | 1968 | |
| CTI2 Richard T. Camp | 1967 | | CTR3 Stephen T. Crane | 1971 | |
| CT3 Roger J. Canfield | 1969 | + | CTTC James A. Crawford | 1967 | |
| CTRSN Charles J. Capes, Jr. | 1971 | + | CTI3 Jack A. Crider | 1971 | |
| CT3 Robert J. Cardinal | 1968 | | WO1 Edwin N. Crim | 1967 | + |
| CTI2 Wayne T. Care | 1967 | + | CTI2 Gregory P. Crites | 1967 | |
| LT Daniel S. Carlin | 1969 | | CT3 Gerald T. Cross | 1967 | |
| CTR3 Billy R. Carpenter | 1966 | | CT3 Curtis J. Crowe | 1966 | |
| LCPL J.D. Carpenter, III | 1971 | | CTI3 Steven J. Croyle | 1972 | |
| CTI3 Byron D. Carstens | 1972 | | CTIC Dennis R. Culbertson | 1972 | |
| LCPL Larry E. Carter | 1970 | | CT3 M. J. Cullivan | 1966 | |
| SGT Rodney D. Carter | 1969 | + | CTI2 Steven L. Culpepper, Jr. | 1967 | |
| LTJG Jerry B. Caseman | 1967 | | LCDR Daniel L. Currie, Jr. | 1971 | |
| SGT R. E. Cashner | 1969 | | CTRSN James E. Currier | 1967 | |
| LTJG Robert A. Cavaluchi | 1967 | | | | |
| CTI1 Alfonso J. Cerone | 1970 | + | CTR1 Edgar L. Dameron II | 1972 | |
| CT3 Theodore J. Cerrachio | 1966 | + | CTO2 Randolph F. Damm | 1972 | |
| CTI3 Edwin T. Chandler | 1972 | | CTR2 David C. Danbom | 1967 | |
| CTR3 Charles R. Chaplar | 1971 | | CIV Đặng Thị Hương | 1970 | |
| CT3 Michael A. Charlton | 1969 | | CTISN Dean W. Datre | 1973 | |
| CTISN Peter L. Chelikas | 1972 | | CTSN Steven R. Davis | 1967 | |
| CTSN Gerald A. Chellew | 1968 | | CTSN Bruce L. Dawson | 1966 | |
| CTM2 Anthony Chitea | 1968 | | CTI2 William J. D'Camp | 1968 | |
| CTISN Robert E. Churchward | 1972 | | CTO3 John K. Dean | 1970 | |
| CTOSN Anthony J. Ciccone | 1972 | | CTI2 David R. Decker | 1970 | |
| CTI2 Dean E. Clark | 1970 | | CTIC Charles D. DeCourley | 1972 | |
| CTRSN Thomas J. Clements | 1968 | | CTI2 Wayne G. Defranco | 1968 | |
| CTR3 Millard E. Clendennen | 1966 | | CPL Warren W. Dehart | 1968 | + |
| CPL Robert W. Close | 1968 | | CT3 John J. Delcamp, Jr. | 1967 | |
| CTISN John P. Coakley, Jr. | 1969 | | CTC James Devers | 1969 | |
| CTO2 Theodore J. Cochran | 1967 | | CTI3 Dean F. Devitt | 1969 | |

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|------------------------------|------|---|-------------------------------|------|---|
| CTI2 Charles D. Dibble | 1966 | | CWO3 Gary L. Fitzhugh | 1970 | |
| CT3 Timothy O. Dickerson | 1968 | | CT3 John J. Flanagan | 1966 | |
| CT3 Leonard L. Dickinson | 1969 | | CTI1 William C. Floberg | 1967 | |
| LTJG Donald E. Dickson, Jr. | 1968 | | CTA2 Michael G. Flynn | 1970 | |
| CTR1 William B. Dillon, II | 1969 | | CTA1 Robert M. Foley | 1971 | + |
| CTI3 Edward G. Dobarro | 1968 | + | CTO2 Stephen E. Foley | 1969 | |
| CT3 Paul W. Donnelly | 1969 | | CTI2 Joseph F. Foley | 1969 | |
| LCPL Howard A. Doyle | 1965 | | CTOSN Louis J. Fontenot | 1972 | |
| CTI3 Henry W. Doyle, III | 1970 | | CTO3 Alfred J. Fonzi, II | 1970 | |
| SGT Louis F. Drawdy | 1967 | | CT2 R. C. Ford | 1967 | |
| SGT William M. Driscoll | 1967 | | CTI3 William C. Francis | 1970 | |
| CTO1 Ronald J. DuBois | 1972 | | CTSN Terry W. Freeman | 1968 | |
| CTR1 Roger F. Dufault | 1966 | + | CTI3 Francis H. Friel | 1970 | |
| CT3 Thomas E. Duke | 1969 | | CTR3 Tommy A. Fuente | 1966 | + |
| CT3 Louis J. Dupilka | 1966 | | | | |
| SSGT Jerome M. Duran | 1969 | | CT2 Douglas R. Gallant | 1969 | |
| CT3 Leonard L. Durcholtz | 1970 | | SGT Charles H. Gallina | 1966 | |
| LCPL Michael J. Dwyer | 1970 | | CTI2 Harold W. Gamble, III | 1970 | |
| | | | LCDR James C. Gamrath | 1972 | + |
| CTI3 Howard E. Eagleson, Jr. | 1968 | + | CTO3 David A. Gardelius | 1970 | |
| CTRCS Ralph E. Edwards | 1967 | | CPL Dennis R. Gardisser | 1971 | |
| CPL Dennis B. Eggers | 1968 | | SSGT Lemuel E. Gatewood | 1968 | |
| CTR2 Douglas C. Elander | 1969 | | GYSGT R. E. Gaughey | 1968 | |
| CTR2 Alan M. Eldridge, Jr. | 1966 | | CTR2 Benjamin A. Gearo | 1968 | + |
| CTR2 Rich P. Ellis | 1966 | | LTJG John B. Geasland, Jr. | 1970 | |
| CTR3 Thomas R. Emerick | 1968 | | CT2 William P. Gempel | 1968 | |
| CTI3 William R. Emerson | 1970 | | CTR3 Paul T. Gieder | 1972 | |
| CTSN Robert J. Enloe | 1970 | | CPT Urban L. Giff | 1966 | |
| CTR2 William F. Erhardt | 1967 | | CTI3 David E. Gilbert | 1972 | |
| CTR3 Gary D. Essary | 1967 | | CTR2 John T. Gilbert, Jr. | 1966 | |
| CTRSN Gene O. Estep | 1967 | | LT Terry B. Ginsberg | 1967 | |
| CTR3 Larry A. Estes | 1966 | + | CTSN Clyde L. Gladden | 1968 | |
| CTOSN Kenneth J. Ethier | 1969 | | SGT John M. Gnagey, III | 1969 | |
| CTM2 Thomas L. Evans | 1965 | | CTI1 Damon L. Godfrey | 1965 | |
| CTI3 William J. Ewbank | 1970 | | SGT L. B. Golden | 1966 | |
| | | | CTA3 Nicolas D. Goodpaster | 1970 | |
| CTI2 Anthony F. Falese | 1967 | | CT3 Lloyd S. Goodrum, Jr. | 1967 | |
| CTRSN John W. Fallat | 1972 | | CTI2 William S. Gora | 1968 | |
| CTO3 George O. Falor | 1970 | | ENS Robert P. Gordon | 1971 | |
| CTI2 Michael A. Farmer | 1970 | | CTO2 Franklin H. Gossler, Jr. | 1971 | |
| CTR3 Michael T. Farris | 1966 | | CTO2 James M. Gould | 1971 | |
| CTR2 James D. Felts | 1971 | | ENS James E. Gourley, II | 1970 | |
| CTI2 Charles W. Ferrell | 1970 | + | CTSN P. E. Grace | 1967 | |
| CTR3 George L. Fesler | 1966 | | CT3 Gerald L. Graddon | 1970 | |
| CTR3 Theodore A. Finch, Jr. | 1973 | | CT1 Richard F. Graul | 1969 | |
| CTR3 Ronald D. Fisher | 1966 | + | CTM2 Jerry D. Greenwalt | 1969 | |

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|------------------------------|------|---|------------------------------|------|---|
| CT3 Dennis J. Greig | 1966 | | CT3 William C. Howd | 1967 | |
| CT3 D. H. Griffin | 1968 | | CT3 Jack A. Huber | 1967 | + |
| CTRSN Scott D. Griffith | 1971 | | CT2 David M. Huddleston | 1967 | |
| CT2 Paul J. Gruesser, Jr. | 1968 | | CTR2 Gary A. Hudson | 1966 | + |
| CTI1 Louis K. Gulman | 1966 | | CTICS William G. Huff | 1967 | |
| LCPL Robert P. Gump | 1968 | | CTR3 Roger L. Hufford | 1968 | |
| CPL Nicholas J. Gutierrez | 1971 | | CTR3 Gary L. Hughes | 1965 | |
| CTI2 Raymond Guy | 1970 | | CTR2 Alvin L. Hundley | 1966 | |
| | | | LTJG Daniel C. Hurley, Jr. | 1969 | + |
| CTI2 David A. Haddon, III | 1968 | | CTSN Thomas P. Hyde | 1968 | |
| CDR Thomas F. Hahn | 1965 | + | | | |
| CT2 Robert E. Halen | 1969 | + | CT2 Gerald R. Ingley | 1966 | |
| CT3 Dennis J. Hall | 1969 | | CTI3 James R. Inks | 1972 | |
| CT3 Edward L. Hall, Jr. | 1967 | | | | |
| CTI1 Floyd N. Hand, Jr. | 1969 | | CDR George L. Jackson | 1969 | + |
| CTC Robert E. Hanks | 1968 | | 2LT Jerald W. Jackson | 1966 | + |
| CTI1 Phillip E. Hardy | 1970 | + | LCDR Selby W. Jacobs | 1968 | |
| CTI3 Barry W. Harris | 1969 | | CT3 G. P. Jansen | 1967 | |
| SGT Chester V. Harris | 1965 | | LT Airell B. Jenks | 1966 | |
| CPL H. C. Harrison | 1966 | | CTSN Johnson | 1966 | |
| CTI2 Wade C. Harrison, II | 1970 | + | CTI3 David J. Johnson | 1970 | |
| CT3 Russell A. Hartman | 1967 | + | CTR2 James L. Johnson | 1968 | |
| CTOSN William E. Hatfield | 1972 | + | CTI1 Robert G. Johnson | 1965 | + |
| CTA3 John R. Hatler | 1972 | | ENS Myron T. Johnson, Jr. | 1965 | |
| CTSN James L. Hawes | 1966 | | CTI2 James H. Johnston | 1969 | |
| SSGT Michael D. Haynes | 1968 | | CTO2 Rudolph R. Jojola | 1971 | |
| CTI3 Dan D. Hays | 1971 | | CT3 Donald R. Jones | 1967 | |
| LTJG Marc P. Heddy | 1968 | | CT2 William R. Jones | 1969 | |
| CTI3 Steven M. Heim | 1971 | | CTRSN William M. Jones | 1972 | |
| LT Thomas V. Heimsoth | 1972 | | LTJG Thomas A. Jones | 1969 | |
| CT3 Michael P. Hein | 1966 | | CPL Thomas J. Jones | 1968 | |
| CT3 Clayton C. Hence | 1968 | | CT2 Joseph L. Jordan | 1967 | |
| CTI3 William J. Henry | 1967 | | CTR3 Jackie P. Judice | 1966 | |
| CTI2 Edwin B. Herring | 1968 | | | | |
| CTM2 Wayne E. Hertel | 1967 | | CT1 Thomas W. Kaspala | 1968 | |
| CPL Michael D. Herzberger | 1972 | | CT2 William M. Kassulke | 1968 | + |
| SGT Delmar G. Hiatt | 1968 | | LT David F. Keffer, Jr. | 1966 | |
| CTRSN Michael J. Hoar | 1970 | | CT1 James L. Keith | 1969 | |
| CTR2 William J. Holden | 1972 | | CTO1 James A. Kerr | 1968 | + |
| CT3 Edwin C. Hollenbeck, Jr. | 1968 | | CTSN Charles H. Kessel, Jr. | 1969 | |
| CT2 G. P. Holm | 1967 | | CTR3 George E. Kessel, Jr. | 1971 | + |
| CTI3 Michael R. Honan | 1969 | | CTRSN Murray A. King | 1970 | |
| CTSN Thomas J. Hoogestraat | 1967 | | CTI2 Gerald U. Kish | 1970 | |
| CTSN Virgil L. Houle | 1966 | | CTA1 John P. Klages | 1969 | + |
| SGT Gary F. Housel | 1968 | | CTRC Dwayne M. Klaus | 1970 | |
| CTI3 Edwin W. Howard, Jr. | 1970 | | CT2 William H. Klespies, Jr. | 1969 | |

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|-----------------------------|------|---|----------------------------|------|---|
| CTSN William C. Kline | 1968 | | CTI2 James G. Lynch | 1969 | |
| CTR3 Orren E. Knofloch | 1970 | | SSGT Hugh Lynch | 1967 | + |
| LT Kenneth R. Knudsen | 1969 | | CTSN William M. Lyons | 1969 | |
| LTJG Michael J. Korba | 1969 | | | | |
| CTOSN William E. Kosperski | 1967 | | CTI2 John F. Mahoney, III | 1968 | |
| CTI1 Russell A. Krause | 1966 | + | LT Charles J. Malloy, Jr. | 1966 | + |
| CT3 M.J. Kryger | 1966 | | CTR3 Duane V. Mann, II | 1972 | |
| ENS Kenneth W. Kuehne | 1972 | | CTI1 Neil F. Mantle | 1966 | |
| CTR2 Stephen R. Kull | 1967 | | CT3 Manz | 1966 | |
| | | | CTOSN Gary P. Marco | 1971 | |
| CTOSN Carl A.R. LaBahn | 1971 | | CTI2 Emory Marcus | 1966 | |
| CTR3 Larry J. Lage | 1972 | | CT3 Joseph R. Marek | 1965 | |
| CTSN Richard V. La Lanne | 1967 | | CTO2 Paul L. Maresca | 1967 | |
| CTOSN Richard S. Lange | 1966 | | CTA1 Charles M. Marshall | 1972 | |
| CTA2 Harry L. Lange | 1971 | | LTJG David B. Marshall | 1971 | |
| CTSN Lanny D. Langford | 1969 | | CT2 Donald E. Marshall | 1966 | |
| CTI3 Dale L. Langley | 1969 | | CT3 Kenneth Marshall | 1966 | |
| CTI2 James P. Lanigan | 1965 | | CPL Keith C. Martin | 1968 | |
| LCDR Donald R. Larson | 1967 | | LT Phillip T. Masar | 1966 | |
| CTR3 Richard L. Lauderbaugh | 1965 | | CTRC Henry M. Mashburne | 1968 | + |
| CT3 John R. Leahy | 1966 | | CTR2 Larry K. Mason | 1965 | |
| CPL E. P. Lee | 1966 | | CTR3 Michael P. Matta | 1972 | |
| CTI2 Robert A. Lehning | 1966 | | CT3 John K. Matthewson | 1969 | |
| CT3 Kevin J. Lenaghan | 1968 | | CTI3 Laron L. Matthies | 1971 | + |
| CTO3 William B. Leppert | 1967 | | CTR3 Donald L. Mauck | 1969 | |
| CT2 F. C. Lester | 1967 | | CTR2 William C. Maurer | 1967 | |
| CT2 Gary H. Lewis | 1968 | | CTOSN David G. Mayo | 1971 | |
| CTI2 Steven W. Lewis | 1966 | | CTOSN Paul D. McCafferty | 1972 | |
| CPT Terrence D. Lewis | 1971 | | CTI2 Samuel G. McClelland | 1970 | |
| CDR Joseph C. Lewis, Jr. | 1970 | | CT3 Robert R. McCulley | 1967 | + |
| LTJG Richard W. Ley | 1972 | | CTI3 Robert J. McDonald | 1972 | |
| CTM2 Steve J. Limkemann | 1967 | | SGT John W. McFee | 1971 | |
| CTR3 Rodney C. Lindberg | 1972 | | CTC Arthur L. McGee | 1968 | |
| LT Lorel L. Lindstrom | 1968 | | CTI2 Stanley P. McGee, III | 1968 | |
| CTI2 John G. Lippke | 1967 | | SSGT H.S. McGilliary | 1966 | |
| CTISN Tommy G. Lisenby | 1968 | + | CT3 John T. McGinty | 1968 | |
| CTI2 "J" Dennis Livecchi | 1969 | | CTR3 Dennis R. McGowan | 1967 | |
| CTI3 Wayne E. Logue, III | 1968 | | CTOSN Robert E. McGuire | 1973 | |
| CTR3 Robert E. Lord | 1970 | + | CT3 Malcolm K. McKay, Jr. | 1969 | |
| CTR3 Patrick M. Lorenz | 1971 | | CT3 Robert L. McKee | 1966 | |
| LTJG James S. Love | 1971 | | LCDR Donald C. McKenne | 1969 | |
| CPL Joseph M. Lovett | 1968 | | CTOSN Stephen R. McKinney | 1972 | |
| CTIC Harry M. Lowe, Jr. | 1967 | | CT2 Robert T. McNalley | 1966 | |
| ENS James R. Lucas | 1967 | | CTR2 Stephen R. McRoberts | 1967 | |
| CTI1 Michael D. Luepkas | 1970 | | CT3 Richard W. Mead | 1968 | |
| CT3 M. L. Lyeth | 1967 | | LCPL Warren C. Mehrtens | 1969 | |

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| CTSN Randy L. Meier | 1967 | | CT2 R. L. Oliverio | 1967 | |
| SSGT Edward W. Meissner | 1968 | | LCDR Lionel H. Olmer | 1967 | |
| CTR3 Rocky D. Melton | 1972 | + | CTSN Arden L. Olson | 1968 | |
| CTI3 Max D. Mercer | 1971 | | LCDR David E. Olson | 1966 | |
| CT2 R. C. Mersmann | 1967 | | CTI2 Keith R. Olson | 1967 | |
| CTT2 Marvin D. Metheny, II | 1964 | | LTJG Eugene J. O'Neil | 1968 | |
| CTR1 Sam P. Miciotto, Jr. | 1967 | + | CTRSN Michael T. O'Rourke | 1972 | |
| CTI2 Darrell L. Miller | 1969 | | CTI3 James G. Osterrieder | 1972 | |
| CTO1 Jeffery B. Miller | 1971 | | CT2 Richard J. Ott | 1966 | |
| LTJG Joseph S. Miller | 1970 | | MSGT Forrest T. Overall | 1968 | + |
| CTI2 Lawrence B. Miller | 1972 | + | | | |
| CTIC Richard G. Miller | 1969 | | CTI2 Albert F. Pabst | 1967 | |
| CTR2 Jerry C. Mills | 1967 | | CTR3 John S. Pagan | 1970 | |
| CT2 Bruce A. Minor | 1967 | | SGT D. O. Parker | 1966 | |
| CTR3 Basil S. Mitchell | 1967 | | CTR3 Terry C. Parker | 1966 | |
| LTJG Gregg F. Mitchell | 1972 | | CT3 Louis C. Parsons, Jr. | 1967 | |
| CTR1 Drayton D. Modisett | 1968 | + | CTR1 Joe F. Pasour | 1966 | |
| LT John W. Moffat | 1967 | | LT David R. Patterson | 1965 | + |
| SSGT Kenneth L. Molle | 1967 | | CTI2 David R. Payne | 1972 | |
| CTR3 Stephen R. Mooney | 1972 | + | CTO3 Wayne V. Pelley | 1967 | |
| CPL Anthony J. Moore | 1969 | | LCDR Kent B. Pelot | 1970 | |
| CTR3 Barrett L. Moore | 1966 | | CPL David J. Penyak | 1968 | |
| CTR2 Steve A. Morris | 1966 | | ENS Grover S. Perkins, Jr. | 1966 | |
| CTI3 Robert E. Morrison | 1972 | | CT3 Herbert S. Philbrook, III | 1970 | |
| 2LT Paul H. Mounter | 1966 | + | SGT Dennis M. Phillips | 1969 | |
| CTSN Martin C. Mueller | 1968 | | CT3 Gary A. Phillips | 1968 | |
| CTI2 John H. Mulford | 1970 | | CTSN George A. Phillips | 1967 | |
| CTO3 David E. Mullis | 1971 | | CPL James F. Phillips | 1968 | |
| CPL Rodney L. Murchison | 1970 | | CTISN John V. Phipps | 1972 | |
| CTR3 Gary D. Murray | 1970 | | CTI2 Donald D. Pidd | 1969 | |
| | | | CTI3 Kenneth R. Piotrowski | 1971 | + |
| CTI3 Richard L. Nalley, Jr. | 1970 | | CTI3 Robert J. Pitto | 1966 | |
| CT2 Major T. Naylor | 1969 | | CT2 Jon P. Plunkett | 1968 | |
| CTI2 Gary C. Nelson | 1972 | | CTI2 Vincent P. Plunkett | 1967 | + |
| CTSN Dennis L. Niblack | 1967 | + | CTI3 William P. Poirier | 1967 | |
| CTISN Robert G. Nichols | 1972 | | CTOCS Stephen D. Pond | 1968 | |
| CTI2 Charles R. Nielsen | 1970 | | CTSN Roger W. Poppy | 1967 | |
| SGT Dennis D. Noble | 1968 | | GYSGT Martin M. Postma, Jr. | 1968 | |
| CTR3 Fred D. Noel | 1966 | | CTI1 John H. Potts | 1967 | + |
| CTRC Edward L. Norris | 1968 | | CTI2 Don F. Pountain | 1966 | |
| SGT David G. Nowell | 1969 | | LT Richard A. Pratt | 1970 | |
| CTRSN Wayne S. Nowell | 1968 | | LCDR George A. Purring, Jr. | 1971 | |
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| CTR2 Thomas G. O'Brien | 1971 | | CTR3 Michael B. Radell | 1970 | + |
| CTI2 Michael P. O'Feild | 1971 | | CTR3 Ronald A. Radish | 1970 | |
| CTR3 Jon A. O'Hara | 1966 | + | CTI2 Joseph G. Ranalli | 1966 | |

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| CTI3 William W. Randall | 1969 | | CTI3 Bradford E. Shedd | 1973 | |
| CTI2 Robert E. Rau, Jr. | 1967 | + | CT2 Marvin V. Shepherd | 1967 | |
| CTSN Dennis F. Reece | 1967 | | LCDR William B. Shermer | 1972 | + |
| CTI2 James N. Reed | 1968 | | CTI3 Gary C. Shiomichi | 1970 | |
| CT3 S. P. Renken | 1968 | | CTI3 John R. Shipman | 1971 | |
| CTR3 Leftwich R. Reynolds | 1971 | | CTI3 Herbert P. Shippey | 1971 | |
| CT2 Lloyd A. Rhoades | 1967 | | CTI3 Allen G. Shogren | 1971 | |
| CTO2 Calvin R. Richardson | 1967 | + | CT3 Donald R. Shore | 1968 | |
| GYSGT R. D. Richardson | 1966 | | CTR2 Larry D. Shriver | 1966 | |
| CTSN Randall "L" Ricley | 1970 | | CTI3 Stuart B. Siegel | 1967 | |
| CTI3 Rex "M" Riley | 1970 | | CT3 Richard W. Simon | 1967 | |
| CTR2 Howard J. Rivers | 1966 | | CTI3 Donald E. Singleton | 1972 | |
| CTI2 Phillip C. Roach | 1970 | | ENS William E. Skinner | 1972 | |
| CTSN Michael F. Roberts | 1967 | | CT2 Kerry C. Slattery | 1967 | |
| CTR3 Patrick J. Robinson | 1972 | | CTI3 Barry W. Sliwinski | 1971 | |
| CT3 Norman H. Rockwood | 1966 | | CT3 Charles V. Slomka | 1966 | |
| CTR2 Daniel R. Rogers | 1967 | | CTR3 David E. Slusher | 1970 | |
| CPL Rickie R. Roller | 1968 | | CTI2 Robert S. Sluter, Jr. | 1971 | + |
| CTI3 Joe R. Romero | 1967 | | LT James L. Small | 1966 | |
| CTI2 Howard E. Rood, Jr. | 1969 | | CTR3 Darrel D. Smedstad | 1966 | |
| CTI3 James M. Rose | 1973 | | CTSN Raymond F. Smith | 1966 | |
| LT James H. Roser, Jr. | 1969 | | GYSGT Alvie E. Smith | 1966 | |
| CT3 William H. Rupp | 1969 | | SSGT Bruce R. Smith | 1968 | + |
| CTR3 Darwin J. Rutland | 1967 | | CTI3 Christopher G.W. Smith | 1968 | |
| | | | CTA3 David A. Smith | 1969 | |
| CTI3 Charles E. Saberton | 1971 | | SGT David D. Smith | 1971 | |
| CTI3 Robert P. Saftenberg | 1968 | | CTR2 Thomas R. Snider | 1966 | |
| CTI3 David Salcido | 1969 | | CTR2 Robert L. Snow | 1968 | |
| CT3 Terrance J. Samar | 1967 | + | CTI3 John N. Spahr | 1969 | |
| CT3 Keith A. Sandberg | 1967 | | CTRSN Dale E. Sperling | 1971 | |
| CT3 John F. Sanson | 1966 | | CTO3 Kenneth W. Spranza | 1970 | |
| CTI3 Robert B. Sawicki | 1970 | | SGT Billy C. St. Clair | 1969 | |
| CTSN Michael F. Scadura | 1968 | + | CTO1 Donald P. St. Germaine | 1969 | |
| CT1 William A. Scheibe | 1968 | | CTR3 Douglas W. Stamm | 1968 | |
| CPL Patrick W. Schlager | 1968 | | CTRSN Richard D. Stark | 1972 | |
| CTI2 Walter A. Schminky, Jr. | 1968 | | CTR1 Frank R. Starr | 1970 | + |
| CTR3 Robert J. Schnell | 1965 | + | CTSN Garry L. Steffe | 1969 | |
| CTI2 Noel E. Schoenwetter | 1966 | + | CTR2 Douglas L. Stenzel | 1964 | |
| CPL Bruce W. Schoonover | 1968 | | CTI1 Kenneth P. Stetson, Jr. | 1968 | |
| PVT Archie L. Schrottenboer | 1965 | + | CT3 Gregory W. Stevens | 1970 | |
| CTR3 William L. Schultz | 1965 | | ENS Thomas F. Stevens | 1966 | |
| CTI2 Harold M. Schwartz | 1971 | | CT3 David M. Stewart | 1968 | |
| CTI2 James D. Scoggins | 1971 | | CTISN Terry C. Stiebel | 1972 | |
| CTI3 Robert L. Scott | 1973 | | CPL Richard D. Stonebraker | 1965 | |
| CTR3 Garry W. Seals | 1966 | | CTSN James F. Straffon | 1968 | |
| CTR3 Robert T. Sharp | 1971 | | CTI1 Thomas N. Strahan | 1970 | |

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|--------------------------------|------|---|-----------------------------|------|---|
| LCDR Carl W. Strobel | 1967 | | CT3 Kenneth Trissell | 1966 | |
| CTR3 Robert G. Stroh | 1965 | + | CTI2 Dennis R. Truckenbrod | 1971 | |
| CTR3 Kristopher M. Struck | 1971 | | CTRC Joseph A. Truelove | 1966 | |
| CT3 Dwight D. Stuckey | 1966 | | CTOSN Billy W. Truitt | 1968 | |
| CTI2 Harvin E. Suggs | 1970 | | CTRSN Gary D. Tucker | 1967 | + |
| CTO1 James R. Sundwall | 1970 | | CTI2 Robert J. Tucker | 1971 | |
| CTR2 Patrick J. Surrena | 1970 | | CT2 Lloyd D. Tuggle | 1967 | |
| GYSGT Frank S. Sutherland, Jr. | 1964 | + | | | |
| LCDR Leonard B. Swanson, Jr. | 1968 | + | CTI3 Thomas R. Unkefer | 1972 | |
| CTOC William J. Swartout | 1970 | + | | | |
| CT2 Francis W. Sweeney | 1968 | | LTJG John T. Valentine | 1970 | + |
| CPL J. W. Swift | 1966 | | CT3 Peter S. Van Dyne | 1970 | |
| CT3 Stephan Sylvester | 1966 | | LTJG Paul A. Vanderlippe | 1967 | |
| CTI1 George T. Syvrud | 1970 | | CTM2 Patrick W. Vandervort | 1969 | |
| CTI1 Phillip M. Szpiech | 1965 | | CTI2 Lawrence A. Venne | 1966 | |
| | | | CTI1 Leonard J. Veraldi | 1969 | |
| CTR3 Robert R. Taggart | 1970 | | CPL Randall M. Verret | 1970 | |
| CTO3 James M. Taitt | 1970 | | CTR3 Ronald D. Virgin | 1967 | |
| SGT Victor M. Talbot | 1968 | + | CTI3 John P. Vogt | 1971 | |
| LT Robert F. Taylor | 1968 | + | CTI3 Clifford L. Voigt | 1971 | |
| LCPL Randolph Taylor | 1968 | | | | |
| LTJG Ronald M. Taylor | 1972 | | CTT2 Lawrence H. Wade | 1966 | |
| CTR2 William J. Taylor | 1967 | | CTI2 Frederick J. Wagner | 1966 | + |
| CTI2 Joseph A. Tebben, Jr. | 1969 | + | CTT3 Bruce N. Walling | 1969 | |
| CTO2 Steven J. Tesmer | 1967 | + | CT3 P. F. Walton | 1967 | |
| CTRC William L. Thaxton | 1972 | | CTO3 Earl E. Ward | 1967 | |
| CT3 John B. Thayer | 1968 | | CT3 Johnny A. Ward | 1967 | |
| SGT A. R. Thomas | 1966 | | CTI3 Ralph H. Webb | 1973 | |
| CTI3 Gregory A. Thomas | 1972 | | CTM1 Clifford O. Webb, Jr. | 1971 | |
| CTO3 David M. Thomas, Sr. | 1972 | | CT3 Gregory A. Wedig | 1970 | |
| CTSN P.A. Thompson | 1967 | | LTJG George L. Welsh | 1969 | |
| CTO2 Richard M. Thompson | 1968 | | CT2 Jeffrey R. Welsh | 1967 | |
| CT3 Richard T. Thorne | 1968 | | LCDR David R. Wentz | 1967 | |
| CTRSN Arthur C. Thrasher | 1972 | | CT3 Stephan C. Weseman | 1969 | |
| CTI1 Howard I. Throngard, Jr. | 1972 | | CTM1 John W. Westenhover | 1972 | + |
| CTIC Curtis W. Thurman | 1971 | | CTI2 Thomas M. Weston | 1968 | |
| CT3 John D. Tilley | 1968 | | LT James T. Westwood | 1969 | |
| CT1 J. F. Tincher | 1967 | | CTSN Thomas B. Wheeler, Jr. | 1970 | |
| CTI3 Robert A. Todd | 1970 | | CTRSN R. F. White | 1971 | |
| CTI2 Martin E. Todorovich | 1968 | | CTIC Richard L. White | 1970 | |
| CTM2 William Tokarsky, Jr. | 1967 | | CTI2 Stephen H. White | 1970 | |
| CT3 Charles G. Tommelleo | 1969 | | ENS Oliver W. Whitehead | 1972 | |
| CTA2 Michael P. Trautman | 1971 | | CTASN Hoyt S. Whitley | 1967 | |
| CTT3 Roger L. Treece | 1968 | + | CTR3 David J. Wightman | 1968 | |
| CTI3 Donald R. Tremain | 1971 | | CT1 Darrell J. Wilkey | 1968 | |
| CT3 Kenneth L. Tremper | 1968 | | CTR2 Lowell E. Wilks | 1967 | |

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| CTI3 Michael L. Will | 1971 | + |
| CT3 Joseph A. Willenbacher | 1968 | |
| CTR2 Arnold A. Williams | 1966 | |
| CTI2 Charles E. Williams | 1972 | |
| CTI1 Richard A. Williams | 1966 | |
| CTO1 John E. Williams, III | 1968 | |
| CTR3 Robert C. Willis | 1966 | + |
| CTC Lee L. Willoughby | 1967 | |
| CTR3 John F. Winkleman | 1968 | |
| CWO2 John T. Wise | 1966 | + |
| CPL N. C. Wolfe | 1965 | |
| CT2 Robert C. Wood | 1969 | |
| LCDR James E. Woodhouse | 1966 | + |
| CTI3 Philip M. Worley | 1970 | |
| CTR3 George C. Worrell, Jr. | 1968 | |
| CTO3 Francis E. Worsnick | 1966 | |
| SGT G. R. Wright | 1967 | |
| CPL Gerald J. Wright | 1965 | |
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| CTR2 Thomas A. Yachechko | 1968 | |
| CTI2 Charles L. Yates | 1968 | |
| CTI3 Timothy D. Yerdon | 1971 | |
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| CTI3 Edward R. Zabecki | 1972 | |
| CTR3 Michael R. Zeese | 1972 | |

Appendix Four: A Day in the Life

Stories of Operational Missions

During the nearly ten year span of VQ-1 operations from Da Nang thousands of missions were flown, usually at least two per day. Details of most of these missions remain only in our memories. The official records, if they still exist, remain sequestered in some vault in an unidentified basement in DC. Occasionally some records are released however, and the following stories are based on such records. A bit of embellishment has been added to make each story read better, but the core facts are essentially true. These stories are representative of what we did, and hopefully more will be added as additional facts come to light. Here, then are some examples of a day in the life of a Big Look Spook.

A Day in the Life....

...of a Whale Spook

December 19, 1969 probably started out much the same as many others for Big Look Spooks Bob “Skip” Brown and Dan Blyth. The daily flight bill had them scheduled for the early morning EA-3B mission over Laos and parts of North Vietnam, escorting and providing ESM support to a B-52 ARC LIGHT cell¹ in support of Operation ROLLING THUNDER. The flight bill provided additional details as well, designating the mission aircraft as PR-3 (BuNo 144849) and the planned launch time as 0600 local.

After a short stop at the Spook spaces, and maybe a quick cup of coffee to wake up, the Spooks proceeded to the flight line to join up with the remainder of the crew. The VQ crew members were seasoned vets themselves, with CDR JD Meyer at the helm, LT Thomas “TJ” Williams as the Navigator, and LTjg Lewis Stoddard and ATCS John Jones at the ESM positions. LT Bruce Townsend was assigned as the Senior Evaluator (SEVAL).

Few detailed records of what followed have survived, but the mission likely launched on schedule, and 22 minutes later they arrived at a rendezvous point over the Gulf of Tonkin where they joined up with the B-52 cell² and proceeded in company to the target area, probably the Mu Gia pass, a vital link along the Ho Chi Minh trail. “TJ” Williams described the mission this way:

“We rendezvoused with them and flew as protective escort. It was a clear day with good visibility all the way to the ground. We flew outboard of the B-52 cell; they were in formation fairly close together. JD Meyer and I were up front. In the back, the EW crew was scanning for acquisition and SAM-related radars and associated communications. Frankly, we were rather relaxed since this part of Laos and NVN were not known to have SAM sites. We weren’t jinking, but maintained a constant and vigilant scan outside the cockpit. At some point, and before the bomb release point, one of the men in the back yelled up to me via intercom, “SAM” and gave me a bearing, probably about 045 degrees true. He clearly had picked up the SA-2 guidance signal which was a clear indicator that a launch had occurred. I called out over the UHF radio on our mission frequency: “SAM SAM SAM at 2 o’clock!” We intensified our scan in that direction as calls continued from the back. I picked up the first missile and pointed it to JD – shortly thereafter we saw missile two and three³. All were clearly being guided in the direction of our flight. We kept the missiles in sight and began severe evasive maneuvering of the A-3. I’m almost certain that our violent maneuvering of the Skywarrior exceeded the NATOPS limit of 3 G’s and attained many unusual attitudes. For their part, the B-52s did mild jinking as you might expect of that very large airframe. It seemed like the missiles were favoring us in their guidance, but I imagine the B-52 crews felt the same way. Whatever we did was successful since one at a time the missiles flew by, missing all the planes, and detonated behind us. This whole event from first alert to missed intercepts by the missiles didn’t last very long. Afterwards, I’m not even sure we were very flustered and simply continued on our

¹ The term “cell” typically referred to a flight of three B-52s. ARC LIGHT was the cover term used for these flights, and ROLLING THUNDER referred to the overall bombing campaign against North Vietnam.

² Given a rendezvous point over the Gulf of Tonkin, the cell probably launched from Andersen AFB in Guam.

³ A three missile salvo was not uncommon by the North Vietnamese.

mission. When all three B-52s dropped their massive ordnance load (240 500lb bombs in total) you could feel the concussions all the way up to our altitude, which was about 25,000 feet. It was a spectacular show of force.”

With the ordnance delivered, the aircraft returned to base, the B-52s to either Andersen or U-Tapao in Thailand, and the Whale to Da Nang. Four point one hours after takeoff PR-3 was parked and the Spooks were in the spaces, writing their portion of the post-mission report and telling their brother Spooks about how they had just cheated death.

The story doesn’t really end here, though. Again, “TJ” Williams recalls what happened afterwards:

“Somehow, the B-52 crews gave debriefs that credited the Navy crew in the A-3 for selflessly maneuvering and offering themselves to the missiles in order to protect the B-52s. Frankly, that was not true. But the three-star Commander of 7th Air Force in Saigon wanted to meet and personally debrief the A-3 crew, so we flew to Saigon. I don’t recall our meeting very well – he was very interested in the new SAM site located in that area, as showed us radar scope photography from the B-52s that clearly showed three missiles closing on the formation. Those pictures looked as scary as the real thing. He also decided we should get individual Air Medals – for ‘heroic actions’ – and so we did.”

All seven members of the crew that flew that day received individual Air Medals⁴, including Robert F. Brown and Daniel P. Blyth, the only two Spooks to receive individual Air Medals during Vietnam.

⁴ Not to be confused with Strike/Flight Air Medals, which were awarded based on number of missions or hours flying time.

A Day in the Life.... ...of a Big Bird Spook

The following story is based on information released by the National Security Agency and other related information from the National Archives and various websites. What follows is conjecture based on this information.

January 28, 1970 started out rather routinely for the Spook crew scheduled to fly on the big bird. The day's flight bill listed PR-32¹ as the mission aircraft; one of two EP-3B aircraft assigned to the squadron less than a year before. Launch time for the mission was scheduled for 0900 local, thus avoiding a crack-of-dawn show time. So as far as the Spooks were concerned, things were starting out good – time for breakfast and a plane with better altitude on track (and therefore better signals). The only negative was the weather, a low layer of clouds over Da Nang and areas to the northwest.

Without any fanfare Lieutenant Commander John Cavanaugh launched PR-32 on schedule, and approximately a half hour later reached the bottom entry point of the standard track, some 60 nautical miles due north of Da Nang. For the first couple of hours things were rather routine, but the Spooks were vigilant none the less, paying particular attention to Vinh airfield. Nearly a month before two MiG-21 aircraft assigned to the North Vietnamese Air Force's 921st Fighter Regiment had deployed south from Phuc Yen airfield to Vinh. Little activity had been noted from the forward-deployed MiGs since, but the potential was there, a potential that was soon to turn into reality.

Elsewhere in the air war over North Vietnam things were not so routine, and for the crew of SEABIRD 02, an Air Force F-104 G flying a 'WILD WEASEL' mission, things quickly went from bad to worse. WILD WEASEL missions, flown against North Vietnamese SA-2 SAM sites, were by definition dangerous. The Weasels baited the SAM site into turning on radars, and then in-turn fired an anti-radiation missile (ARM) back at the just-activated radar. If things worked right, the Weasel's missile would home in on the SAM site radar, destroying it (and hopefully the SAM site as well). The trick, of course, was to fire the ARM before the SA-2 site launched missiles aimed at the Weasel aircraft. In this particular instance, the section of Weasel aircraft (SEA BIRD 01 and 02) were flying suppression for an accompanying RF-4C photo reconnaissance bird.

Shortly after 1300 local, while flying together in an area about 30 nautical miles due north of the Mu Gia pass, the Air Force flight came under attack from a SAM site. The aircraft successfully evaded the launched missiles, but shortly afterward, while attacking a SAM second site, SEABIRD 02 was shot down the old fashioned way, by anti-aircraft artillery (AAA). SEABIRD 01 reported that both crew (pilot and weapons system officer [WSO]) had successfully ejected, and a search and rescue effort was launched from Thailand.

¹ BuNo 149669

On board PR-32 things had suddenly become busy for the Spooks. While the SAM operators were copying a post-launch report (PLR), the TACAIR operators and the R-branchers were tracking a flight of two MiG-21 PFM aircraft that had taken off from Phuc Yen headed south. These MiGs landed at Bai Thuong airfield around 1440 local, but the day wasn't over yet. Twenty minutes later both Bai Thuong and Vinh MiGs were put on 'Condition One' strip alert. Condition One was the highest posture of strip alert, normally terminated with the launch of aircraft.

While all this was going on, the SAR force from Udorn, Thailand had been launched. In addition to an HC-130 command aircraft (c/s KING 03) and at least five HH-53B Jolly Green Giant helicopters (c/s JOLLY 19, 70, 71, 72, and 77), six A-1E Skyraiders (c/s SANDY 01-06) were part of the SAR force as well, there for suppression of ground fire. The propeller-driven A-1E was ideal for this role, able to operate slow and at low altitudes. When the SAR force reached the Laotian/North Vietnamese border, they entered a holding pattern waiting for further word on the fate of the crew of SEABIRD 02.

At 1525 local the Vinh controller ended his Condition One strip alert by ordering the two MiGs to launch. The lead MiG was piloted by Vũ Ngọc Đình, an experienced MiG-21 pilot, with four kills and a partial on a fifth, in essence making him an ace. Five minutes later the MiGs were airborne.

Things now began to move at mach speed, both in the air and in the tube (back-end) of PR-32. In quick succession CTI2 Bob Wood detected the MiGs airborne, heard the Vinh ground-controlled intercept (GCI) controller issue vectors directing the MiG flight toward a target, and fifteen minutes after the initial reflection, heard the lead MiG report seeing a target. About this time one of the electronic warfare operators detected the MiG's air intercept radar. VQ-1's Senior Evaluator, Lieutenant Roy O. Campbell, monitored all this activity and simultaneously began reporting MiG activity in the clear on the "guard channel"², using CRAB (Vinh)³ as a reference point. As fast as he could type the O-brancher was sending out the tactical reports (TACREPs) that were given to him by CWO2 John T. Wise (the Spook evaluator) via the BIG LOOK net; and as soon as one was gone, something else was ready to send.

Other information was trickling in to LT Campbell via NAVY RED and SPRAC, two secure voice nets⁴ connecting PR-32 with the USS Sterett (DLG-31), stationed below in the Gulf of Tonkin on the Southern SAR station. As the MiGs gained altitude the Sterett's air search radars detected the MiGs, confirming the tracking data being supplied by the R-branchers onboard PR-32. What the crew of PR-32 did not know was the intended target of the MiGs, since somehow they had not been informed of the SAR effort ongoing over North Vietnam.

To the west, at the scene of the SAR, things were going from bad to worse. Air Force Captain Jim "Jink" Bender, pilot of SANDY 04, was receiving the MiG calls, but was unfamiliar with CRAB as a reference point. By the time they realized that the MiGs were close at hand, it was too late. About that time Vũ Ngọc Đình fired one missile, destroying JOLLY 71. At that point everyone got the hell out of

² The guard channel, or UHF guard (243.0 MHz) was a clear channel monitored by all aircraft. Warnings were passed on this channel, and survival radios were equipped with this channel as well.

³ Normally reports of MiG activity (MiG calls) were passed using BULLSEYE (Hanoi) as a reference point, since most MiG flights launched from airfields nearby. In this case use of CRAB was correct, but caused some confusion.

⁴ Navy RED connected the CICs of ships in the Gulf of Tonkin with each other and various aircraft, including VQ-1. Information at the Secret level could be passed. The Special Purpose Reporting and Coordination (SPRAC) net connected the cryptologic direct support elements in the GOT with each other and airborne platforms appropriately cleared (VQ-1, COMBAT APPLE). Information could be passed at the Top Secret/SI level.

there -- KING 03, the remaining JOLLYs, and the SANDYs toward Laos and the west; and the MiG flight to the north toward Vinh. At the same time PR-32, still thinking they might be the intended target, was rapidly descending from mission altitude to 500 feet above the water. No transmissions from the original objective of the SAR (SEABIRD 02) had been detected, and it was clear from the report of JOLLY 72, who had been in loose trail of 71; that no one on 71 had survived.

As he streaked north toward the safety of Vinh, Vũ Ngọc Đĩnh's elation over his sixth victory soon turned bittersweet when he heard the Vinh controller unsuccessfully attempting to contact his wingman. It soon became evident that something had happened to the second MiG, most likely a crash caused by pilot miscalculation given the rugged terrain, low altitude of the targets, and the low cloud deck. Any way Đĩnh looked at it, it wasn't good. He'd lost a good friend, and the North Vietnamese Air Force had lost a valuable aircraft.

On board PR-32 the COMEVAL quickly scribbled out the text of a CRITIC reporting the shootdown and within seconds the O-brancher transmitted it via the BIG LOOK net to Naval Communications Station Philippines, where it was sent to its ultimate destination in Washington DC. This initial report was short, only reporting that the shootdown of a 'manned recce' southwest of Vinh by MiG-21s had occurred. Below on the USS Sterett, the Spooks of the embarked direct support element prepared and sent a similar CRITIC, and then both teams began to piece together the details.

Sterett's CIC identified that the US aircraft shot down was a SAR helo, and on board PR-32 the Spooks and EW operators were able to piece together a detailed sequence of events which they reported in a follow-up report issued a half hour after the shootdown. Reconstruction of the shootdown, however, did not have the Spooks' undivided attention. Now aware that they were not the target of the MiGs, PR-32 had resumed normal altitude. The mission was still ongoing, and MiGs were still on strip alert at Bai Thuong; MiGs which had to be watched. Finally around 1700 local things started to slow down when the strip alert at Bai Thuong was cancelled.

Thirty minutes later the EA-3B mission reported on station, but PR-32 remained on station for a while longer, finally recovering at Da Nang around 2000 that evening, a total mission time of nearly eleven hours. A long and exciting day for the Spooks, but like Vũ Ngọc Đĩnh, their day was bittersweet as well, for they knew seven American airmen had lost in the mountains of North Vietnam.

Editor's postscript:

The bodies of the seven USAF airmen⁵ were not recovered at the time and were carried on Defense Department rolls as KIA-BNR⁶. In December 1988 the Vietnamese government returned some material found at the site, including bone fragments and the ID card of one of the helo crew. The Joint Casualty Resolution Center in Hawaii determined the bone fragments to be those of the helo's pilot, Major Holly G. Bell, USAF.

⁵ Two on the Wild Weasel and five on the Jolly Green SAR helo.

⁶ Killed in action – body not recovered

Vũ Ngọc Đỉnh survived the war and retired as a Colonel, but never had another aerial victory. He finished the war in fourth place on the list of Vietnamese aces with five and a half kills to his credit. The fate of his wingman remains unknown.

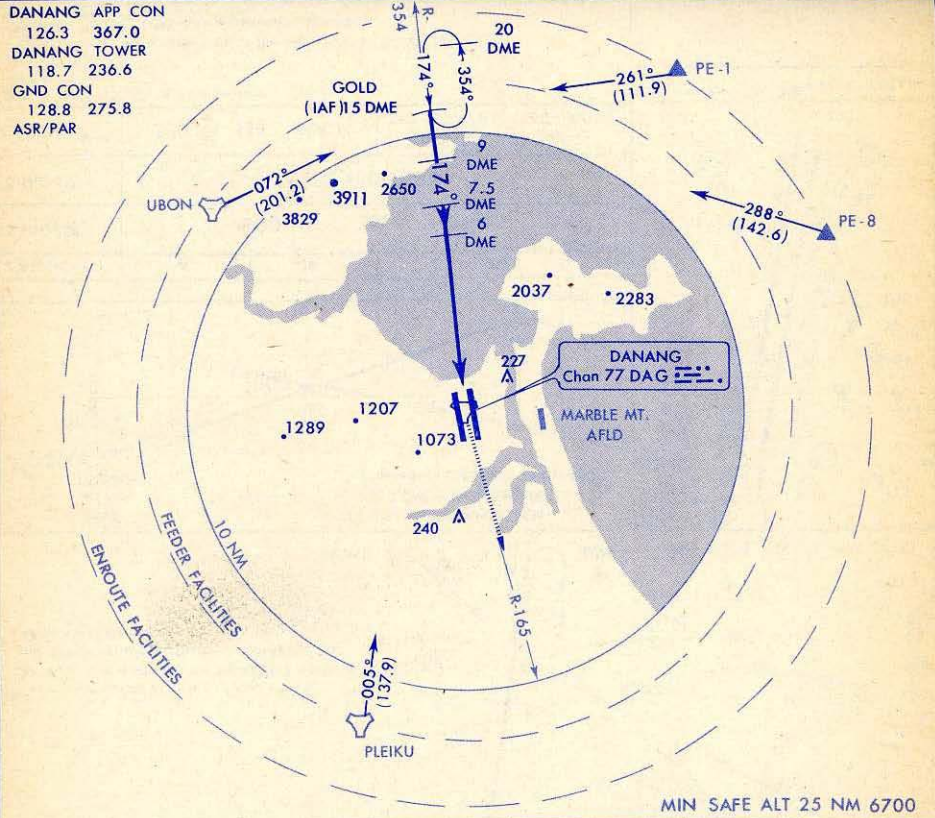
Appendix Five: Maps and Charts



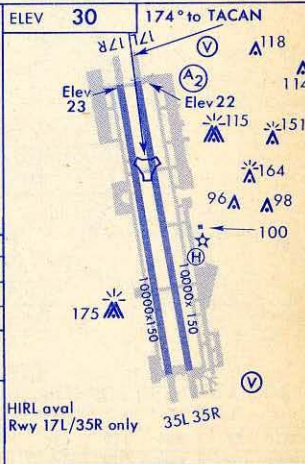
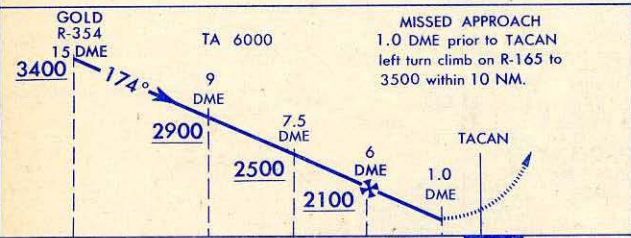
TACAN RWY 17L/R

DANANG (VYSD)
DANANG, VIETNAM

DANANG APP CON
126.3 367.0
DANANG TOWER
118.7 236.6
GND CON
128.8 275.8
ASR/PAR



MIN SAFE ALT 25 NM 6700



| CATEGORY | A | B | C | D |
|-----------|-------|-------------|------------------------|----------------------|
| S-17R | 320-1 | 297 | (300-1) | |
| S-17L | 320-1 | 298 | (300-1) | |
| CIRCLING* | 480-1 | 450 (500-1) | 480-1½ 450 (500-1½) | 580-2 550 (600-2) |

*Circling not authorized West of Rwy 17-35. All aircraft restricted to circling within 2.5 NM due to high terrain Northeast, and MARBLE MT. AFLD 3 NM Southeast.
 WARNING: Do not operate West of the 350 radial of DANANG TACAN between 9 and 15 DME during instrument approach.

TACAN RWY 17L/R

16°03'N-108°12'E

DANANG, VIETNAM
DANANG (VYSD)

TACAN/VOR/DME RWY 35L/R

JAL-1538 (VNAF)

DANANG (VVSD)
DANANG, VIETNAM

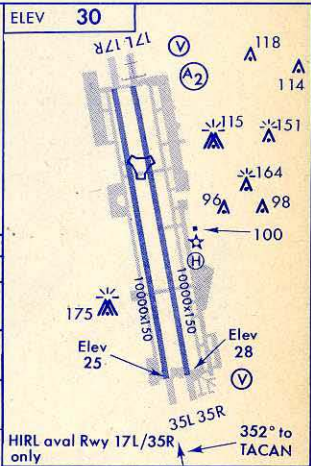
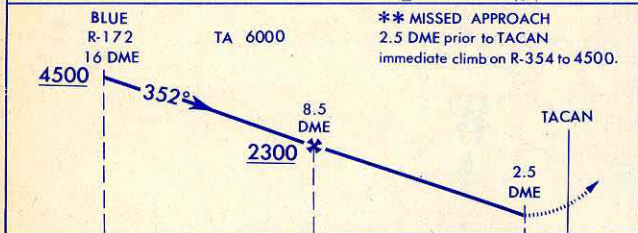
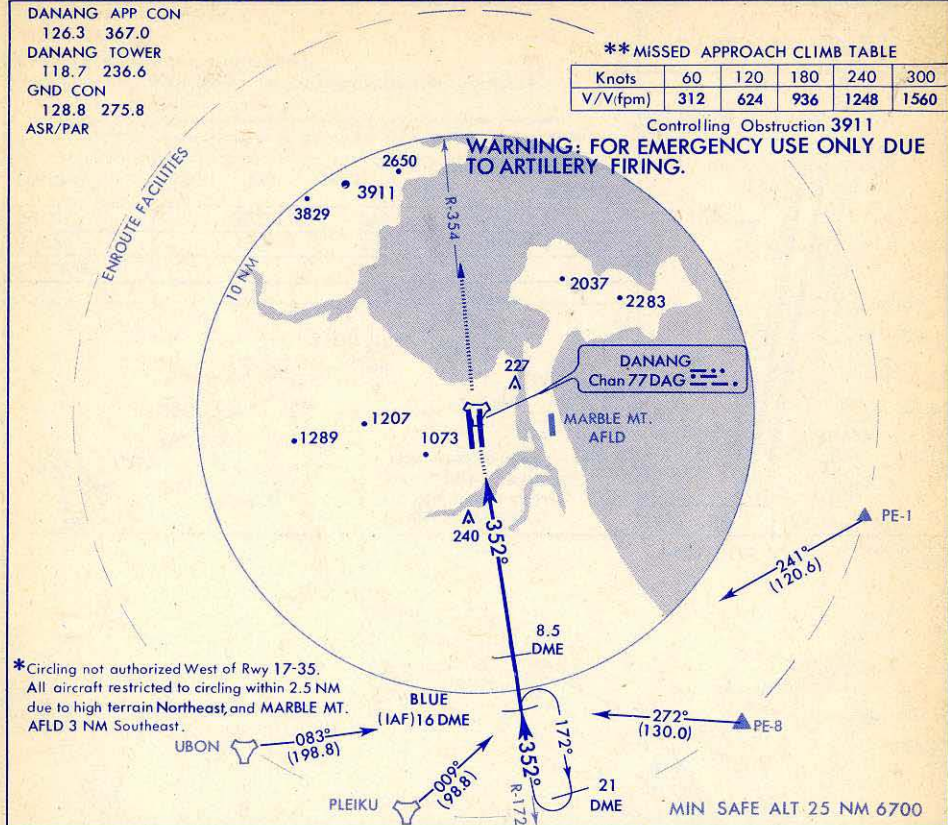
DANANG APP CON
126.3 367.0
DANANG TOWER
118.7 236.6
GND CON
128.8 275.8
ASR/PAR

**** MISSED APPROACH CLIMB TABLE**

| | | | | | |
|----------|-----|-----|-----|------|------|
| Knots | 60 | 120 | 180 | 240 | 300 |
| V/V(fpm) | 312 | 624 | 936 | 1248 | 1560 |

Controlling Obstruction 3911

WARNING: FOR EMERGENCY USE ONLY DUE TO ARTILLERY FIRING.



| CATEGORY | A | B | C | D |
|------------------|-----------------|--------------|------------------------|----------------------|
| S-TAC-35R | 580-1½ | | 552 | (600-1½) |
| S-TAC-35L | NOT AUTHORIZED | | | |
| CIRCLING * | 580-1½ | 550 (600-1½) | 580-1½ 550 (600-1½) | 580-2 550 (600-2) |
| S-VOR/DME 35 L/R | not authorized. | | | |

WARNING: Do not operate West of the 350 radial of DANANG TACAN between 9 and 15 DME during instrument approach.

16°03'N-108°12'E

TACAN/VOR/DME RWY 35L/R

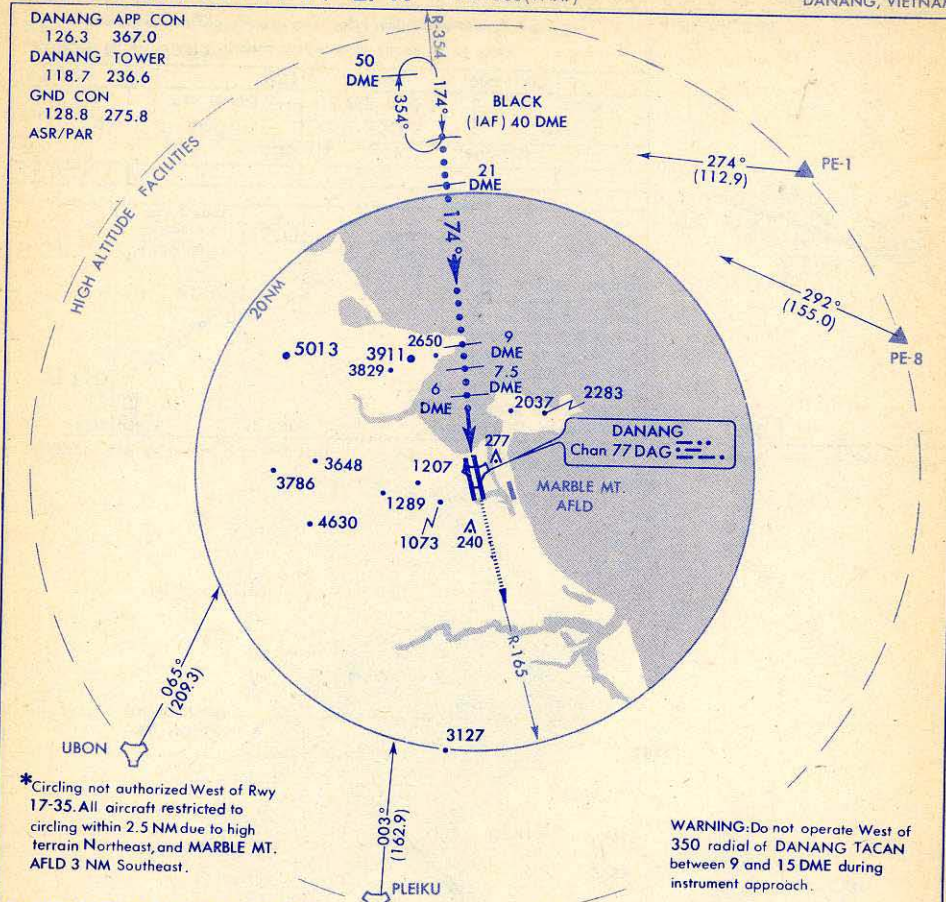
DANANG, VIETNAM
DANANG (VVSD)

HI-TACAN RWY17L/R

40

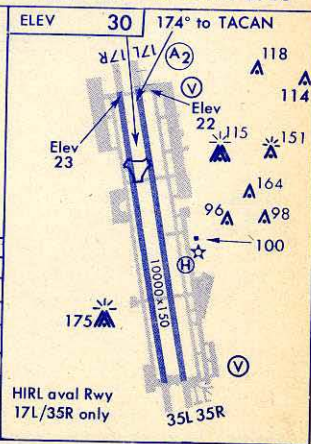
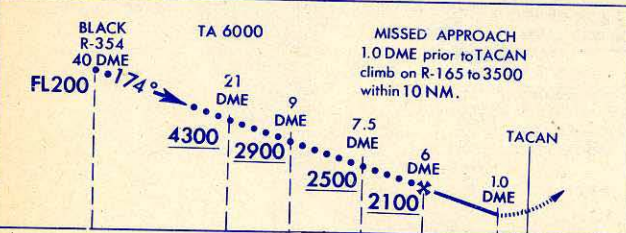
JAL-1538 (VNAF)

DANANG (VYSD)
DANANG, VIETNAM



EMERG SAFE ALT 100 NM 10,600

MIN SAFE ALT 25 NM 6700



| CATEGORY | C | D | E |
|------------|-----------------------|-------|---------------|
| S-17R | 320-1 | 297 | (300-1) |
| S-17L | 320-1 | 298 | (300-1) |
| CIRCLING * | 480-1½ 450(500-1½) | 580-2 | 550 (600-2) |
| S-PAR-17L | 222-½ | 200 | (200-½) GS 3° |
| S-PAR-17R | 223-½ | 200 | (200-½) GS 3° |

HI-TACAN RWY17L/R

16°03'N-108°12'E

DANANG, VIETNAM
DANANG (VYSD)

HI-TACAN/VOR/DME RWY 35 L/R

DANANG (VVSD)
DANANG, VIETNAM

DANANG APP CON
126.3 367.0
DANANG TOWER
118.7 236.6
GND CON
128.8 275.8
ASR/PAR

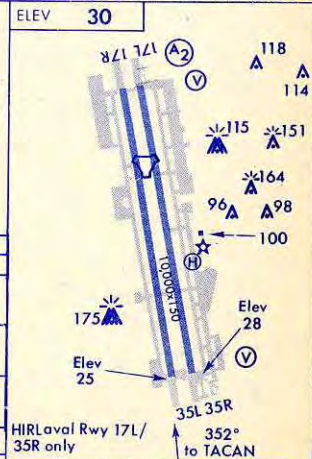
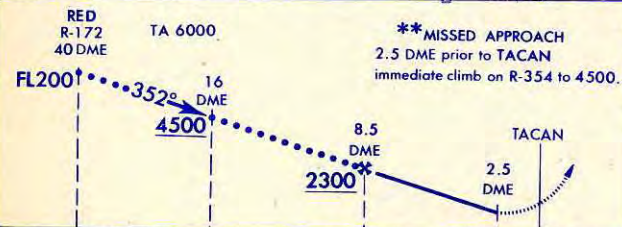
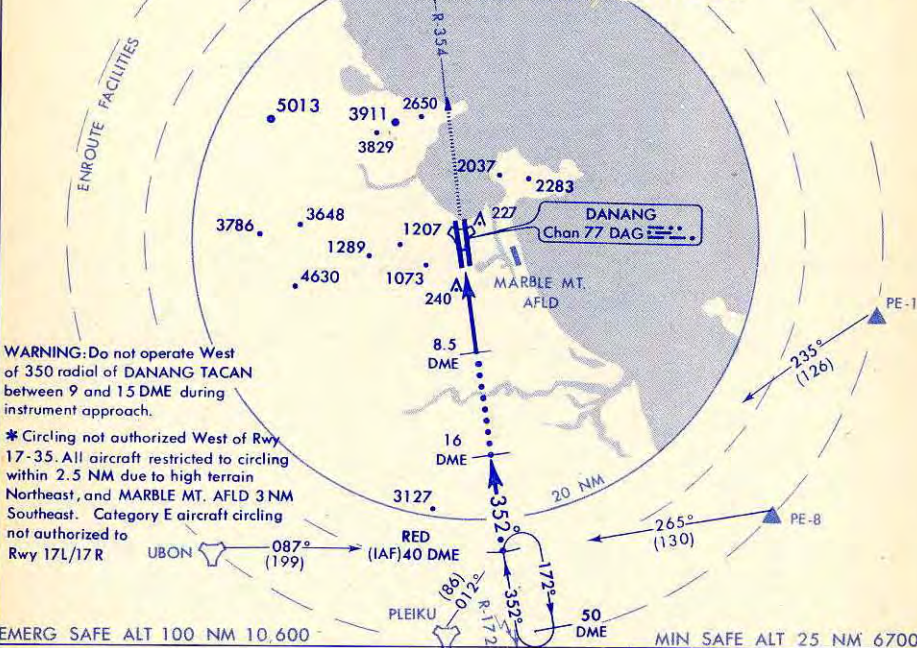
AL-1538(VNAF)

**MISSED APPROACH CLIMB TABLE

| | | | | | |
|----------|-----|-----|-----|------|------|
| Knots | 60 | 120 | 180 | 240 | 300 |
| V/V(fpm) | 312 | 624 | 936 | 1248 | 1560 |

Controlling Obstruction **3911**

**WARNING: FOR EMERGENCY USE ONLY
DUE TO ARTILLERY FIRING.**



| CATEGORY | C | D | E |
|-------------------------------------|--------------------------|--------------|-------------|
| S-TAC-35R | 580-1½ | 552 (600-1½) | |
| S-TAC-35L | NOT AUTHORIZED | | |
| CIRCLING* | 580-1½ 550 (600-1½) | 580-2 | 550 (600-2) |
| S-PAR-35R | 228-1½ 200 (200-½) GS 3° | | |
| S-VOR/DME RWY 35 L/R not authorized | | | |

HI-TACAN/VOR/DME RWY 35 L/R

16°03'N-108°12'E

DANANG, VIETNAM
DANANG (VVSD)

