HERBICIDE USE IN THAILAND -

THE RELATIONSHIP TO THE RULES OF ENGAGEMENT (ROE)

AND USE IN VIETNAM AND LAOS

By

Kurt Priessman, MSgt, USAF (Ret)
B.A., M.B.A.

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The Vietnam Center and Archives

Texas Tech University

Lubbock, Texas 79409-1045

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FOREWORD

This research paper was compiled during work on my claim to the Veterans Administration for Diabetes-Mellitus Type II, with peripheral neuropathy and nephropathy, hypertension, and hyperlipidemia, and polycythemia vera due to exposure to dioxins in herbicides, malathion, and petroleum distillates while serving in Thailand, Okinawa, Korea, and the Philippines and transiting Vietnam, Guam, Midway and Wake Island, and Hawaii. Additionally, I have had other diseases related directly to those with D-M such as Dupuytren's contracture, Peyronies disease, and some Vitreo-retinal degeneration to name a few. I also have a damaged anterior cruciate and lateral collateral ligament with rotary instability of the right knee with degenerative joint disease from a service-connected injury. The accident also caused a back injury, which has aggravated from lumbar spinal pain and back spasms over the years, to degenerative joint disease and degenerative disk disease of the lumbar spine, and degenerative ankylosis of the left sacroiliac joint with mild osteoarthritis of both hips.

In my effort to prove beyond reasonable doubt, that I flew through Vietnam twice, and that even were that not the case, I was exposed to herbicides in Thailand. I undertook Freedom of Information Act inquiries to the Department of Defense, the Department of State, the Department of the Air Force, the National Security Agency, the Air Force Historical Research Agency, the Air Force Office of Special Investigations, and the National Archives at College Park. I have researched on-line histories at the USDA, the Johnson, Nixon, and Ford Presidential Libraries, and the Vietnam Virtual Archives at Texas Tech University. I also visited numerous websites of Veterans. What I obtained is herein.

The conclusion at which I arrive is that Veterans of all wars who are still living, are at war with the Department of Veterans Affairs and the U.S. Government. The government must continue to deny and hide evidence that would show the world that those who ran our government are not what the people of this country believe. To that end, I have much of the evidence needed to prove that the United States pursued the use of methods that had been proven not to work, and exposed millions of veterans and citizens of this country and many others to toxins which they used.

I also realized immediately that the information I was obtaining would help other veterans and may be used to actually broaden the Agent Orange Act of 1991. I have not finished my research yet, it may take many years of effort. My hope is that it is sufficient for me to secure income sufficient to continue my research, to actually visit archives, and to continue to assist other Vietnam-era Veterans.

"To me, there are three things we all should do every day. Number one is laugh. You should laugh every day. Number two is think. You should spend some time in thought. Number three is, you should have your emotions moved to tears, could be happiness or joy. But think about it. If you laugh, you think, and you cry, that's a full day. That's a heck of a day. You do that seven days a week; you're going to have something special.

... Don't give up, don't ever give up. That's what I'm going to try to do every minute that I have left. I will thank God for the day and the moment I have. If you see me, smile and give me a hug. That's important to me too...

...But try if you can to support...so that someone else might survive, might prosper and might actually be cured...

...It cannot touch my mind, it cannot touch my heart and it cannot touch my soul. And those three things are going to carry on forever.

I thank you and God bless you all."

James T.A. Valvano, 4 March 1993

THE CHRONOLOGY OF HERBICIDES IN THAILAND

The United States Government began to consider a plan for the use of herbicides in Vietnam on April 12, 1961, a plan that culminated on November 30, 1961, when then President John F. Kennedy gave general authority for their use to Secretary of Defense Robert S. McNamara.

This authority was limited to clearing roadsides, power lines, railroads, and other lines of communications, and the areas adjacent to depots, airfields, and other field installations and actual permission for such use was still subject to Presidential approval. Thus began the inception of Ranch Hand whose aircrews had already begun their journey to Vietnam from Pope AFB, North Carolina on November 28, 1961.[1] [KP1]

Almost 10 years to the day, on November 26, 1971, President Richard M. Nixon granted the American forces limited authorization to continue to use herbicides without a future expiration date around bases where mines, booby traps, or wire ruled out other methods.[2] [KP2]

Not Orange

INTRODUCTION

Between these dates, authorization for the use of herbicides was granted to various levels through the Department of Defense and the State Department in a series of memorandum and documents called "Rules of Engagement (ROE)".

The original authority focused on defoliation and was limited to clearing roadsides, power lines, railroads, and other lines of communication, and the areas adjacent to depots, airfields, around other field installations. But every time the military wanted to use herbicides for another reason, the rules were changed.

NO

When aerial crop destruction was discussed as a strategy, the rules changed. When it was in support of Laos, both above and below the 17th parallel, the rules changed again. The rules changed again in 1968, 1969, and 1970. Even with all the political furor surrounding them, the use of herbicides was excluded from the government's position on the Geneva Protocol of 1925.

The Rules of Engagement (ROE), and the constant changes relative to military goals and requirements leads to my central theme. While many of us recognize that military commanders often tend to reinvent the wheel, it is especially when it is for their own egotistical and personal purposes that mis-prioritization is most likely. When something is established organizationally, especially when it entails cross-organizational (military/political) purposes, the military leaves it alone.

Therefore, as COMUSMACV used the ROE to establish the process for authorizing the use of herbicides in Vietnam and Laos, so did USMACTHAI in authorizing their use in Thailand. These rules were documented in regulations such as MACV Directive 525-1, Military Operations, Herbicide Operations [3] [KP3] and USMACTHAI/JUSMACTHAI Regulation 500-5, Arming of U.S. Military Personnel and Rules of Engagement.

As I researched other documents, I tied these to the ROE to gain not only the sequence of events, but also the more complete picture of the use of herbicides. It became apparent that the rules for herbicide use, which were applied in Vietnam, were the same in Thailand. While the U.S. Government still denies their specific use outside of Vietnam after 35 years, there is evidence to the contrary.

No they don't Report on DOD Herbicides outside of Vietnam

THE RULES OF ENGAGEMENT AND OPERATION RANCH HAND

TACTICAL Herbs 1944

Ranch Hand missions began on January 10, 1962 and continued through December 1962. Then there was a five month period of inactivity due to the suspension of all herbicide missions by the Joint Chiefs (JCS). The suspension required a review of the program at the "highest levels". Before the review was completed, the suspension was ended when on May 7, 1963; the State Department issued new guidelines[4][KP4] for both defoliation and crop destruction:

"Defoliation:

1. Authority to initiate defoliation operations is delegated to *Ambassador* and *COMUSMACV*.
2. Guidelines: Defoliation operations should be few in number, undertaken only in following circumstances:
   a) where terrain and vegetation peculiarly favor use of herbicides;
   b) in areas remote from population; and
   c) when hand cutting and burning are impracticable. A few high priority projects can be undertaken in populated areas where military advantage very clear and hand cutting and burning not feasible.

Crop Destruction:

1. All crop destruction operations must be approved in advance by Assistant Secretary FE and DOD.
2. Guidelines re Crop Destruction: a) Crop destruction must be confined to remote areas known to be occupied by VC. It should not be carried on in areas where VC are intermingled with native inhabitants and latter cannot escape. Also should be limited to areas where VC either do not have nearby alternative sources food or areas in which there is overall food deficit e.g. High Plateau and Zone D.

General Comments (applicable to both defoliation and crop destruction):

a. All herbicide operations to be undertaken only after it is clear both Psy-War preparations and compensation and relief machinery are adequate. Would appear GVN should increase compensation efforts.
b. Suggest further increase reliance on hand operations where feasible which less awesome than spraying by air.
c. Continue efforts counteract international effect Commie propaganda through demonstrations, visits by newsman, etc.
d. Request by first week in July a full report and evaluation all 1963 herbicide operations to serve as basis decision whether continue defoliation and crop destruction."

The "highest level" review, called the Olenchuck Report [5][KP5], was conducted by Lieutenant Colonel Peter G. Olenchuck. The report concluded with eleven major recommendations.

"The first recommendation was for the continuation of herbicide operations in South Vietnam under the existing guidelines governing where and under what circumstances these chemicals could be used. The second recommendation called for the delegation of approval authority over crop destruction to the U.S. Ambassador and COMUSMACV, a departure from the restrictions imposed by Secretary Rusk's message of May 7. Recommendation number three was to empower ARVN division commanders to authorize all hand spray herbicide operations subject to the concurrence of their U.S. division advisor."

The recommendation was also noted in the following excerpt from the notes of Alvin Young [6][KP6]; "In January 1964, authority was delegated to the senior U.S. Advisors serving with Vietnamese division for hand-spray operations. This greatly reduced log time that has existed from proposal to completion of small defoliation projects; i.e., around depots, airfields and outposts. Locations and types of herbicides unknown at this time."

"The other eight recommendations were technical in nature and concerned such things as improving the system for paying for herbicide damages, permitting follow-up spraying after the initial execution of defoliation missions, making meteorological support more effective, and conducting research to produce improved herbicides and delivery systems. *The primary importance of the Olenchuk Report; however, was that it pronounced defoliation and crop destruction both technically and militarily effective and obtained the endorsement of Ambassador Lodge and General Harkins for the continuation of the program.*"

The continuation of Ranch Hand flights based on logistics, weather, and military dictates continued through 1964 and 1965 without change to the authorities for the use of herbicides.

THE ROE ALLOWS EXPANSION OF HERBICIDE USE IN LAOS AND VIETNAM

The first change to that authority came via a request from the Department of State.

"In July 1965, Ambassador Lodge cabled the State Department requesting authority to expand the crop destruction program sufficiently to make a major impact on Viet Cong food supplies. For the expansion, he also requested authority to change the May 1963 guidelines to allow crop destruction operations in more populated and less remote areas of South Vietnam, if the insurgents dominated these areas and if significant military gains would result. Lodge evaluated past crop destruction operations favorably. He concluded that the Viet Cong had suffered considerable hardships from them, while the adverse reactions of the local people had been manageable.[13]"

"More liberal guidelines resulted from favorable Washington-level action on Lodge's request. The new authority Saigon received on August 7 continued the practice of requiring the U.S. Ambassador and a senior South Vietnamese official to approve, personally, each crop-destruction operation. The

message extended the range of possible targets to include less remote and more highly populated areas where the Viet Cong were experiencing significant food supply problems."

"On May 7, 1966, Westmoreland asked Ambassador Sullivan in Vientiane whether he would approve aerial crop destruction missions in an area traversed by Route 922. On the 18th, Sullivan replied that he had no objection to such herbicide sorties, but he asked to be kept informed of the progress of the operations through the usual Air Attaché channels.[22]"

"On August 16, 1966, Ambassador Lodge informed the Secretary of State that General Westmoreland had proposed defoliation in and immediately south of the southern half of the DMZ. On August 27, Admiral Sharp endorsed General Westmoreland's proposal and on October 4, the Secretary of Defense wrote the Secretary of State to add his endorsement. Over a month later, on November 18, Secretary Rusk concurred. The message to Saigon, sent on November 26, authorized defoliation operations in the southern portion of the DMZ, subject to the restrictions imposed in the May 7, 1963 guidelines. The first mission inside the DMZ took place on February 5, 1967."

"Less than three months later, on April 27, 1967, General Westmoreland requested authority to conduct selective defoliation within the north-portion of the DMZ as well as adjacent infiltration routes inside North Vietnam. On June 12, the State Department granted the necessary approval authority to the American Ambassador in Saigon."

"In January 1968, Ambassador Ellsworth (who had replaced Lodge the previous year) ordered a full policy review of the herbicide program. A committee consisting of senior representatives from the Embassy, MACV, the U.S. Agency for International Development (USAID) and the Joint U.S. Public Affairs Office (JUSPAO) prepared a report for Bunker during the period March 1 - May 1, 1968. The committee consulted a wide range of documents and interviewed many American officials—military and civilian—in South Vietnam."

"The committee called for the delegation of approval authority for helicopter defoliation operations to corps commanders and recommended area clearances for crop destruction operations so that targets of opportunity could be struck. They also recommended greater efforts to provide Saigon officials with the necessary information to manage and monitor the herbicide program effectively.[24]" Please note there is no conflict with Alvin Young whose previous notes indicate permission for "*hand-spraying operations*" was given to senior U.S. Advisors *with* Vietnamese divisions in January 1964.

Their report found, as had previous evaluations, that the herbicide program was successful from a military point of view. The authors clearly recognized how herbicides had contributed to the policy of substituting readily available firepower for manpower, a much more precious commodity to American political and military leaders. Ambassador Bunker formally approved the herbicide policy review report on August 28, 1964.[7][KP7]

At about the same time that the Embassy was promulgating its herbicide policy review, MACV completed two evaluations. In August 1968, MACV reported to CINCPAC that "...all field commanders, without exception, state that the herbicide operations had been extremely effective in assisting the Allied combat effort." Two months later, the results of another military evaluation ordered by MACV again supported the continuation of the herbicide program.[8][KP8] In spite of these

positive reports, the future of herbicides was clouded by ecological questions, President Thieu's attitude, and the fact that the disengagement of the United States from Southeast Asia was about to begin.[28]"

THE GENEVA PROTOCOL AND NIH STUDY AFFECT THE USE OF HERBICIDES

In the late part of 1968, the United Nations General Assembly adopted, without objection, a resolution calling for the convening of the United Nations Conference on Human Environment in 1972. At the same time, the General Assembly passed another resolution asking the Secretary General to prepare a report on chemical, biological, and bacteriological weapons. The General Assembly was considering endorsing the Geneva Protocol of 1925, a treaty not ratified by the United States. The Geneva Protocol banned "... the use in war of asphyxiating, poisonous, or other gases and all analogous liquids, materials, or devices and of bacteriological methods of warfare." If the interpretation of the Protocol included herbicides and riot control agents, the potential that the United States would be the one major country both not in compliance with and not able to ratify such a resolution was a political problem for the new Nixon Administration.

In fact this possibility fomented a number of National Security Study and National Security Decision Memorandum during the period between 1969 and 1971. They include the decision to conduct a study on U.S. Policy on Chemical and Biological Warfare and Agents in the Secret National Security Study Memorandum 59 of May 28, 1969,[9][KP9] which included a review of current applications of U.S. policy relating to non-lethal agents such as chemical riot control agents and chemical defoliants, the formation of the Vietnam Special Studies Group (VSSG) in the Top Secret/NODIS National Security Decision Memorandum 23 on September 16, 1969,[10][KP10] the establishment of a the United States Policy on Chemical Warfare Program and Bacteriological/Biological Research Program in the Top Secret/NODIS National Security Decision Memorandum 35 on November 25, 1969, the reiteration of the policy for approval of herbicide and riot-control agents based on the study required by NSSM 59, in the Secret National Security Decision Memorandum 78, Authorization for Use of Riot Control Agents and Chemical Herbicides in War on August 11, 1970.[11][KP11]

On November 25, 1969, President Nixon announced his intention to resubmit the Geneva Protocol outlawing chemical and biological warfare to the Senate for ratification. However, it was still the position of the United States that the Geneva Protocol did not include herbicides and riot control agents. The decision was documented that day in the Top Secret/NODIS National Security Decision Memorandum 35, signed by National Security Advisor Henry A. Kissinger. This interpretation was overwhelmingly rejected by the United Nations in December 1969, when a committee and the full assembly adopted resolutions that the protocol included all chemicals used in warfare, with no exceptions.

gunpowder

It is evident from Memorandum 35 that the United States would continue to maintain stockpiles of chemical weapons at overseas locations. While I have not ascertained what was in those stockpiles or where they were, the paragraph "f." specifically mentions that Okinawa would require consultation (the prefecture was about to be returned to Japan) and that if the FRG (Federal Republic of Germany) wished us to consult that could be accomplished.

goes from stockpiles of chemical weapons to herbicide storage

Here is an opportunity to discuss possible other sites used for the storage of herbicides "overseas". It is evident from the environmental studies conducted and the testimony provided that Guam was a primary site. Additionally, Okinawa and West Germany should be included. Other sites which should be considered, based on overseas military locations and U.S. Allies at the time, might include the Philippines (Clark AFB and Subic Bay NAS), the Republic of Korea, Great Britain, Italy, and Spain in Europe, and Australia and New Zealand. Canada, Alaska, and Hawaii may also have been used. I do not believe that this information will be obtained through a Freedom of Information Act Inquiry, due mostly to the relationship between the discontinuance of the classification of relevant material to the international furor the release of this information would create.

Additionally, a report by the National Institute of Health (NIH) had presented evidence that 2, 4, 5-T, a component of herbicide orange, could cause malformed babies and stillbirths in mice when administered in relatively high doses. This added to the already heavy burdens born by the herbicide program in South Vietnam.

On the morning of April 15, 1970, the Secretary of Health, Education and Welfare, the Secretary of the Interior, and the Secretary of Agriculture planned a joint statement, announcing the immediate suspension of all use of 2, 4, 5-T except in care controlled and registered applications on non-crop land. On that day, the Deputy Secretary of Defense informed the Joint Chiefs of Staff that the Department of Defense would temporarily suspend the use of 2, 4, 5-T in all military operations pending a more thorough examination. Through May 9, 1970, Ranch Hand crews drew down available supplies of agent white and on that day flew the last defoliation (but not crop destruction) mission.

THE FINAL CHANGE TO THE RULES OF ENGAGEMENT

There is much information highlighted in Mr. Buckingham's Ranch Hand document which details chronological changes in the approval process, certain approvals, and the workings of the approval process; however, my focus is not on the phase out of Ranch Hand but the subsequent approval of the use of herbicides in the following excerpts[12][KP12].

"In early December 1970, Ambassador Bunker and General Abrams decided, on the basis of a report prepared by their staffs in Saigon, to completely phase out the crop destruction program. General Abrams stopped any further procurement of white and blue herbicides. The herbicide stocks on hand in South Vietnam were adequate to defoliate base perimeters and to carry out highly selective crop destruction missions until about May 1971."

"Laird said that during this phase-out period, herbicide use would be restricted to remote, unpopulated areas and the vicinities of firebases and U.S. installations..."

Additionally the National Security Advisor requested senior State Department and NSC staff to conduct another study on the post-Vietnam use of riot control agents and herbicides in National Security Study Memorandum 112 [13][KP13]' with consideration of the Geneva Protocol. The results of

the study were issued in National Security Decision Memorandum 141[14] [KP14]and changed slightly in National Security Decision Memorandum 152[15] [KP15].

"With the May 1, 1971, date approaching and American forces still in South Vietnam, American commanders sought to have the deadline for herbicide use extended. In April, General Abrams informed his forces that unless further authorization came in time, they were to stop all use of herbicides by May 1. *The Joint Chiefs asked for continuing authority to spray base perimeters with* herbicides blue and white. On April 28, Ambassador Bunker concurred with this request, noting that there was no satisfactory substitute for herbicides on base perimeters seeded with mines and trip flares."

"On May 13, 1971, Laird asked the President to extend the date for herbicide use by U. S. forces to December 1 or *until South Vietnamese could take over the job...*"

"... Rogers said that if, however, Nixon felt that military considerations outweighed these political drawbacks, he should not extend the deadline beyond December 1 and should restrict herbicides to base perimeters only, excluding fields of fire."

"... They concluded that herbicides needed to be used beyond the December 1 deadline. The most difficult problem, as before, was finding an alternative to herbicides for removing vegetation around mines, booby traps, and barbed wire."

"President Nixon reached a decision on the intertwined issues of continuing herbicide use and Vietnamization on November 26. He acceded to the Defense Department's request on the former and, without a future expiration date, authorized American forces to spray herbicides from ground equipment or helicopters, subject to controls applicable in the United States, around bases where mines, booby traps, or wire ruled out other methods."

Of particular note in both Buckingham and the actual decision memorandum is that there was no expiration date. This is particularly important to U.S. bases in Thailand, as they would remain open and operating for several more years. Again it is noted that while this authorization speaks to specific types of spraying in Vietnam, nowhere in the document does it grant low level authorization for use in Thailand. *Therefore, pending further investigation of undisclosed documents, I make the assumption that the authority to use herbicides in Thailand still rested with the U.S. Embassy in Thailand and JUSMACTHAI military authorities.*

But not orange

HERBICIDE TESTS IN THAILAND

"In August 1963, Thailand requested Ranch Hand's aerial spray services through the U.S. State Department. This neighboring Southeast Asian country was suffering widespread and serious crop damage from locusts. One Ranch Hand aircraft and crew flew to Thailand on August 30 to coordinate the requested insect eradication project. On the following day, they flew the first of 17 insecticide missions which continued until September 16."

Use = Malnutrition

Jump from Locust spray to herbicides

Herbicide tests were conducted in Thailand according to the Scientific Advisory Group,[16][KP16] which began in 1964 and stretched through 1965.

This segment was also included in the Alvin Young collection, dated January 1966, in the declassified reports Oconus Defoliation Tests: Semiannual Report, 1 April to 30 September 1964,[17][KP17] and Vegetation Analysis of Pranburi Defoliation Test Area I. 66-07[illegible],[18][KP18] from the Defense Documentation Center, Defense Logistics Agency, Cameron Station, Alexandria, Virginia.

The authors, Captain John W. Kelly Jr., USA and Amnuay Kaosingha indicate a page was added by Alvin Young. These document both the 1964 and 1965 tests. While these tests were conducted approximately 125 miles SSW of Bangkok, Thailand; the tests mark the **beginning of herbicides** in Thailand. The following is a brief description of the operations taken from the report.

1st of purple used 18 Mar 65

"The test program was conducted in Thailand 1964 and 1965 to determine the effectiveness of aerial applications of Purple, Orange, and other candidate chemical agents in defoliation of upland jungle vegetation representative of Southeast Asia on duplicate 10-acre plots. Survey end preparations of two test sites were initiated in August 1963. Lanes were cleared to mark boundaries of a series of 10 acre test plots for a total of 1450 and 2000 acres of treatments at the two test site locations. Test site locations were established at the Pranburi Military Reservation with the assistance of MHDC officials. Arrangements were made with governmental authorities to use the facilities of the Ministry of Communications Airport at Hua Hin as a base of operations for the twin engine Beechcraft used for test applications."

"A twin engine Beechcraft equipped with spray distribution system has been provided by Air America Incorporated, under a general contract with ARPA R & D Field Unit (Thailand) under ARPA Order 483. The plane with full-time pilot and aircraft maintenance services was made available in late December 1963. An intensive series of static flow tests and flight-calibrations was made from January to March 1964 to secure suitable boom configurations for deposit of various spray volumes and chemicals."

"By 1 April 1964, the beginning of the report period, test site preparation and equipment calibrations were completed sufficiently that treatments and subsequent evaluations could be initiated."

"Area spray treatments were applied at rates of 0.5 to 3.0 gallons per acre on two test sites representing tropical dry evergreen forest and secondary forest and shrub vegetation. Applications were repeated in alternate 2- to 3-month periods to determine minimal effective rates and proper season of application[23]."

See Herb Site 13

I believe based on documents from tests at Eglin AFB, and use in Vietnam that these tests were extensive, to include tests using mixtures outside those recommended as safe, both for humans and environmentally. Another important point should be made here. Barrels of herbicides (AO) were buried under the runway at Bor Phai and not found until March, 1999.

"On March 9, 1999, a construction company doing improvements in the runway of Bor Phai airport, unearthed one 200 liter and fifteen 20 liter barrels of unknown, strong smelling chemicals, suspected to be Agent Orange.

There are speculations that during the Vietnam War, the US military used the airport which was then a Thai air base as a staging ground for its many bombing missions over Indochina.

Thai government officials, on the other hand deny that Bor Phai airport was among the air bases used by the US military for staging the bombing missions in Vietnam. Officials familiar with US military records have acknowledged, however, that the Americans did use the airport to test defoliants in Thailand in the mid-60's. Moreover, there are accounts that the forest area surrounding the airbase in the Southern Thai province of Prachuab Kirikhan was also used as a 'laboratory' to conduct tests for the herbicide.

NO PURPLE

Both the Thai and U.S. governments initially denied that the unearthed chemicals were Agent Orange. But subsequent tests conducted by the US EPA on the sample as well as on the soil confirmed that the chemicals unearthed were indeed Agent Orange. The results of the tests showed the presence of 2, 3, 7, 8- TCDD and 2, 3, 7, 8-TCDF as well as 2, 4-D and 2, 4, 5-T.

Both Thai and U.S. government officials, however, insist that the level of dioxins was too small to pose any risk to human health. At the moment, the Thai government is proposing to bury the contaminated materials in a clay-lined landfill also within the vicinity of the airport most likely to be paid for by Thai taxpayers.

The US government claims that they had spent US$100,000 on the collection of the samples and the laboratory tests and that such should already be considered a demonstration of their financial responsibility.

This whole episode has reinforced fears about the existence of buried Agent Orange and other toxic chemicals not only in other spots inside Bor Phai airport, but in the other air bases in Thailand as well that were utilized by the American military in it's war with Vietnam.[19][KP19]"

RANCH HAND SORTIES FLOWN FROM THAILAND

Additionally, the well documented work of Paul Frederick Cecil identifies sorties flown from four Thai Air Bases by Ranch Hand aircraft against targets in Laos.[20][KP20]

The Chapter "Flight To Squadron: More Planes, More Hits, More Problems" identifies that in 1966, after five years in Vietnam, sorties were flown from NKP and Takhli RTAFB, Thailand.

"In February, the Laos defoliation project spread north of the 17th parallel to expose segments of the infiltration route along the North Vietnam/Laotian border. Some sorties on the northern sections of the trail were flown out of American bases at Nakhon Phanom and Takhli, Thailand, with the concurrence of the Thai and Laotian governments."

In Cecil's Chapter "New and Old: K Models and Airlift Duty", he identifies a November 1968 mission to Udorn RTAFB, Thailand. "November 1968 found the squadron involved in a highly classified mission into Laos, at the covert invitation of the Laotian government. The mission began with

Lieutenant Colonel Phillip Larsen, OIC of the Da Nang detachment, and his targeting officer, First Lieutenant Lloyd West, were ordered to Udorn Air Base, Thailand for a special briefing, where they learned the intended target was a large area of rice fields approximately forty miles north of Vientiane, Laos, in the Nam Sane and Nam Pa valleys. In civilian clothing, the officers boarded an Air America transport plane for a survey flight over the area. On 5 November, the spray crewmen flew another aerial survey of the target, this time using an unmarked RANCH HAND aircraft. Noting the sparseness of crop in the designated area, the targeting officer assumed the mission was more a political gesture than a military necessity[44]."

"On November 11, Colonel Larsen returned to Udorn with four UC-123Ks. For the next four days the spray planes attacked various targets in the Laotian complex." Although the crews questions the effectiveness of their mission to Laos, they enjoyed the almost stateside atmosphere of the base in Thailand; before leaving they threw a party in the officers' club that left no doubt among the permanent party officers that RANCH HAND had been there."

Ranch Hand flew mission sorties against Laos again from Ubon RTAFB, Thailand on January 1969, and again from Udorn in August 1969.

The author in documenting the obsolescence of the airframe notes a 1969 mission writes: "In addition to continuing attacks throughout South Vietnam, on 17 January seven spray planes flew to Ubon, Thailand, to attack a target in Laos the following day. The mission was uneventful, and the planes returned to Vietnam without being hit."

"On 31 August RANCH HAND once more deployed five UC-123Ks to Udorn Air Base, Thailand for a special mission. At the request of the commander of Military Region V in Laos, with the concurrence of the Laotian prime minister and the American Embassy at Vientiane, the target was a group of enemy held rice fields in central Laos. Twenty-eight sorties were flown from Thailand in a seven-day period, using Blue herbicide against the Laotian crop targets. During the mission, the five spray planes were hit 42 times by hostile fire. This operation was so politically sensitive that the unit historical report, classified "Confidential" gave no details of the event, other than to note the deployment to Thailand and remark that "higher headquarters prohibits the documentation of this mission in this report." Even the mission statistics were left out of the quarterly statistical analysis. With the furor over the Cambodian affair not yet died down, headquarters apparently was concerned over further unfavorable publicity should details of the Laotian operation become known."

Military personnel with any logistical and operational experience would be immediately aware that the November 11, 1968, and the August 31, 1969, missions would require the pre-positioning of substantial supplies of the herbicides used on a multi-day, multi-sortie mission. Additionally, while little is known about the "sorties" flown from NKP and Takhli in 1966, there is evidence that indicates that B-57s flew escort on more than one occasion.

The author includes Ranch Hand C-123s often visiting Clark AB, Philippines, permission was given to use herbicides on base perimeters in Thailand with Embassy permission in 1969, aircraft were flown to CCK, Taiwan for maintenance (1966 - 1970) and Kadena AB, Okinawa in 1970 for corrosion control caused by insecticides.[21][KP21]

Please also note that in the Ranch Hand History by Buckingham, there are multiple instances mentioned by that author that indicate absolutely no precautions or cleaning were done between changes in the Ranch Hand aircraft's mission; i.e. from herbicide spraying to troop or cargo transport. There are also a number of clear references to the problems with leaking spray equipment and the exposure of personnel to herbicides.

In the same chapter the author quotes a flightline controller, "...scrounged (stoled[,] begged and borrowed] any and every thing we could find on base"... Hence the stripped frame parked in the Ranch Hand area, of a Case tractor which had disappeared from the ramp at Clark Air Force Base in the Philippines at the same time a RANCH HAND aircraft transited the base."

The dissertation of Mr. Cecil is referenced by Alvin Young in at least one list of references and is also footnoted by other official USAF sources[22][KP22]. Despite claims to the contrary, the USAF Ranch Hand aircraft visited Clark AFB, Philippines, CCK AB, Taiwan, Kadena AB, Okinawa, and flew herbicide sorties requiring pre-positioning or standard supplies of herbicides from NKP, Takhli, and Udorn RTAFB, Thailand. The description of the mission from Ubon RTAFB did not necessarily require herbicides to be supplied from that base; however, it does not preclude the possibility that herbicides were there.

AIR BASE DEFENSE - VEGETATION CONTROL IN VIETNAM

Processes and procedures for the use of herbicides in vegetation control in Vietnam were established which comply with the ROE. There is direct correlation between these excerpts from the Air Force History for Air Base Defense in Vietnam and those used later in Thailand. Additionally, it establishes that there were a variety of other problems associated with the approval of use and storage of herbicides.[23][KP23]

"No element of the Vietnamese environment was more detrimental to base defense than the invincible ground cover described earlier. This rampant vegetation hid the enemy, shut off friendly observation and fields of fire, neutralized fencing and other defense barriers, slowed security forces, and nullified detection by sentry dog teams. The need to control this jungle was evident and urgent how to do it was the sticking point."

"Clearing approaches to the base was the first order of business. This meant defoliating a zone around the outside circumference of the installation, an area outside the Air Force's accepted defense responsibility."

"Another critical area calling for the most complete defoliation was the air base perimeter. Here physical factors crippled or canceled out progress."

"Rarely if ever charted, the minefields of the perimeter barrier prohibited use of manual labor to cut and remove the vegetation. The mines, fencing, and wiring prevented mowing or scraping by mechanized equipment. Burning was unsatisfactory on several counts. Vegetation was highly fire resistant, particularly during the rainy season when growth was most rapid. It ignited slowly, even if

sprayed with a flammable such as contaminated jet fuel. Because fire hardly ever consumed the vegetation, the residue went on obscuring the barrier system and offering cover to penetrators. Burning also detonated or destroyed mines and flares within the complex."

"Next in importance was defoliation of the base interior. Here too, the ideal was to clear the ground cover that concealed penetrators and reduced surveillance by defense forces. For example, the defense vegetation negated sentry dog detection-the base's most reliable alarm. And the exertion in plowing through this thicket sapped dog and handler. Because the interior was without the perimeter's hazards or obstructions, it seemed that the clearing methods mentioned earlier could be given full play. In practice this was not the case. Safety factors forbade burning in or near fuel and munitions storage areas. The immense labor entailed in clearing a sizable area in a reasonable time curtailed manual cutting. Cutting by hand nonetheless left the root system intact, and so was well-suited to Cam Ranh Bay's very unstable soil. Elsewhere, however, an undisturbed root system meant rapid regrowth of vegetation. Even though scraping served well in the base interior, the conventional USAF civil engineer squadron usually lacked the needed mechanized equipment.

In light of these facts, the answer to vegetation control in the base interior as on the perimeter appeared to be herbicides."

"By the time the Air Force turned to herbicides for base vegetation control, they were in full-scale military use in support of other ground operations. The dispensing of defoliants centered on foliage along thoroughfares to deny the enemy ambush cover."

"The use of these herbicides was a GVN program supported by the United States. The U.S. Ambassador and COMUSMACV acted jointly on GVN requests for herbicide operations on the basis of policy formed by State and Defense Departments and approved by the President.[50] Senior U.S. Army advisors at ARVN corps and division level were delegated authority to approve requests in which dispersal of the herbicides was limited to hand or ground-based power-spray methods."

"A herbicidal defoliation request from a USAF air base was prepared and documented by the base civil engineer, using a set checklist. It was then processed through U.S. military channels to the senior U.S. Army headquarters in the corps tactical zone. If approved there, it was sent on to the ARVN commanding general of the same CTZ for military approval and political clearance. It was at this point that delay most frequently occurred, due to opposition from the district and/ or province chief. These officials were influenced by such things as superstition, concern for local crop damage, and possible propaganda value to the VC/NVA. Final action on requests for ground-delivered herbicides was taken at this level. If aerial delivery was desired, the request could only be approved at USMACV/ JCS level. There are similar more detailed checklists and required reports in MACV 525-1 for defoliation and crop destruction missions.

Checklist for Defoliation Requests

1. Overlays or annotated photographs depicting the exact area.
2. Target list:
   a. Area-province and district.
   b. UTM coordinates.

c. Length and width.
d. Number of hectares.
e. Type of vegetation.

3. Justification:
   a. Objectives and military worth.
   b. Summary of incidents.
4. Psychological warfare annex (prepared by sector):
   a. Leaflets.
   b. Loudspeaker texts.
5. Civil affairs annex (prepared by sector):
   a. No crops within 1 kilometer.
   b. Contingency plan to provide food or money to families whose crops are accidentally damaged by the defoliation operation.
6. Certification by province chief:
   a. Province chief approval.
   b. Indemnification will be made by the Republic of Vietnam for accidental damage to crops.

SOURCE: Lib of Cong Report, 8 Aug 69, to the House Subcommittee on Science and Astronautics, 91st Cong, 1st session, A Technological Assessment of the Vietnam Defoliant Matter: A Case History, p 19."

"Approval and execution of herbicidal defoliation projects were time consuming and uncertain. In February 1968 Phan Rang requested defoliation of a 200-meter strip both inside and outside the perimeter, around the entire circumference of the base. The approving authority reduced the scope of the project to one-half the perimeter. In addition, problems in obtaining herbicide and other obstacles delayed completion of the project for 1 year.[52]"

"Excessive vegetation at Tan Son Nhut and Bien Hoa hindered the base defenders throughout the 1968 Tet attacks.[53] At Bien Hoa the approval process for aerial defoliation was termed "hopelessly complicated," one that might take two or more months. Plant growth meanwhile continued unabated, Even when authorized, a project was apt to be fettered with restrictions. Thus aerial delivery of Orange was denied at Bien Hoa, and only parts of its perimeter were approved for chemical defoliation. Accordingly, because Blue and White were not suited to local conditions, Orange had to be dispensed from a tank truck by a power spray that did not reach beyond the second fences. Local terrain made it impossible to go outside the third and fourth fence and spray inward.[54]"

"As noted earlier, Binh Thuy faced the most extreme defoliation problem. Here the one herbicide approved for use was Blue, which killed only those portions of plants with which it came in contact. With the root systems left intact, regrowth was rapid. In 1 month, 2,420 gallons of Blue valued at $22,000 were sprayed over limited areas of the interior and a narrow zone around the perimeter of the 550-acre installation without making any significant inroads against the teeming vegetation.[55]"

"Herbicides for air base defense seldom if ever improved the horizontal view at installations by the desired 40 to 60 percent.[56] Defoliation needs of the 10 primary bases were specific, permanent, and known in advance. Still no ongoing long-term program to satisfy them was ever set up. Instead the job was done piecemeal, with each base handling defoliation requests. Despite administrative and technical controls, chemical agents remained the single sure way to control vegetation in places where other means could not-notably in the critical perimeter complexes. As the war drew to a close;

however, curbs on the use of herbicides grew more and more rigid. The last herbicide mission by fixed-wing aircraft was flown on 7 January 1971."

"On 1 May, a presidential directive ended all U.S. herbicide operations.[57] In the ensuing months, mines killed eight and injured seven Army personnel who were trying to clear vegetation by hand from wire entanglements and fields of fire.[58] With the Ambassador's full backing, COMUSMACV urged Washington to alter at once the ban on chemical herbicides because immediate defoliation was "essential to security of bases." [59]"

"On 18 August the President permitted the resumption of chemical defoliation until 1 December 1971. He authorized the use of Blue and White but not Orange. Approved herbicide operations were restricted to the perimeters of firebases and installations, with delivery limited to solely helicopter or ground-based spraying equipment, under the same regulations applied in the United States.[60] As the expiration date for this authority neared, COMUSMACV asked for an extension. On 26 November 1971 the President authorized continued use of herbicides and set no termination date. At the same time, he stipulated that U.S. defoliation assistance to the Government of Vietnam be confined to "base and installation perimeter operations and limited operations for important lines of communications." This policy prevailed until the last U.S. forces departed RVN in 1973.[61] "

While this report in the Air Base Defense History provides substantive detail related to the justification for continued use of herbicides, its description of the use of the policy pertains only to South Vietnam or else indirectly conflicts with the actual document, the Ranch Hand History, and other declassified reports. Additionally, it seeks to suggest that the program was a Vietnamese program, while the Ranch Hand History provides overwhelming evidence that the program was initiated, planned, expanded and supplied by the United States and more particularly the military, the President, and senior administrative officials of the government.

At least for the purpose of vegetation control, this history's conclusion was that while there were no effective ways to clear vegetation, it did not stop military command from continuing their use.

"No defoliant method tried for air base defense purposes in South Vietnam proved to be at once efficient, economical, and politically acceptable. The practical value of herbicides was much impaired by technical, administrative, and political constraints. For chiefly technical reasons, the same could be said for techniques such as burning and scraping. For the United States-as it had for France-vegetation remained a major unresolved problem."

AIR BASE DEFENSE - VEGETATION CONTROL IN THAILAND

The information in this section confirms the use of herbicides on base perimeters without an expiration date and the establishment of approval procedures which were used and documented in the Project CHECO Report: Base Defense in Thailand[24][KP24]. The report was gained through FOIA 07-066 by the author of this paper. The document underwent a number of declassification reviews; in 1981, 1987, and 1994, but was not declassified until my request. It spent several months being declassified by the Secretary of the Air Force Declassification Office and there are several unreleased

sections still being reviewed by the Office of Special Investigations (OSI) under AFOSI 2008-FOIA-00067.

This same authority and approval procedures are evidenced in the request for herbicides after sapper attacks at four bases in Thailand between 1968 and 1972. The need for the use of herbicides is evident also.

While I have yet been unable to secure a copy of USMACTHAI/JUSMACTHAI Regulation 500-5, Arming of U.S. Military Personnel and Rules of Engagement, I have secured a copy of the USMACTHAI/JUSMACTHAI Memorandum Mission Policy on Base Defense, dated November 1, 1969[25][KP25]. The memorandum is directive in nature and directs that all new base defense planning, arrangements and major joint exercise proposals are to be coordinated in advance with the U.S. Embassy so that due account can be taken of the vital necessity to balance the political and military factors in base defense. The next paragraph reiterates the Rules of Engagement.

In paragraph 4, subparagraph J, the policy states "approval to conduct soil sterilization and/or defoliation operations on or around U.S. occupied installations will be obtained from the U.S. Embassy. Coordination will be affected with the US Consul where applicable."

This paragraph confirms the use of herbicides on base perimeters without an expiration date and the establishment of approval procedures documented in "Project CHECO Report: Base Defense in Thailand", February 13, 1973[26][KP26]. This same authority and the approval procedures are evidenced in the request for herbicides after sapper attacks at four bases in Thailand between 1968 and 1972. The need for the use of herbicides is evident also.

Chapter III, Physical Defenses and Limitations

Introduction

The report notes that "Two CHECO reports on base defense concepts and measures in the Republic of Vietnam provide additional information.[123]" The footnote references CHECO reports also referenced in the USAF History Air Base Defense in the Republic Of Vietnam 1961 – 1973, 1979 by Lieutenant Colonel Roger P. Fox. The history is referenced herein.

Active and Passive Defense Measures

The author documents the need "to further aid in observation, **herbicides were employed to assist in the difficult task of vegetation control**. Use of these agents was limited by such factors as the ROE and supply problems."

Limitations

Also on the same pages, the problem of vegetation is documented under the heading -

"Contiguous population centers at many of the bases severely limited opportunities for both observation and effective counterfire. Further, tropical vegetation aided by seasonal monsoon rains grew almost faster than it could be controlled. Dense jungles were rated as the greatest threat to the defenses at U-Tapao.[137] ...*The extent to which vegetation has been cleared is graphically illustrated in the case of NKP.* The photograph of that base on the following page shows the extent of vegetation inside the base perimeters in the early days of construction when the airfield was carved out of virgin jungle. An interesting comparison between NKP 1966 and NKP 1972 can be made by reference to the picture of that base that appears earlier in this report (See Figure 6.)"

In subsequent pages of the report, this excerpt below documents the U.S. Embassy's ROE -

"Soil sterilization and herbicide use was also approved in 1969, but these were subject to extensive coordination with local RTG authorities and final permission from the Embassy. They could only be used on areas within the perimeter and under no circumstances could the vegetation control agents be used to clear areas of observation to fire off-base.[144] This lengthy process, and the inability to go beyond the fences, significantly limited the use of those agents at many bases.[145]"

Base Analysis

Here the report is definitive -

"Korat RTAFB. Vegetation control was a serious problem at this base in 1972, especially in the critical RTAF area near the end of the runway. The dense growth offered opportunity for concealment in the area contiguous to the unrevetted KC-135 parking ramp. Further, vegetation was thick in many sectors of the concertina wire on the perimeter. *The base had received Embassy permission to use herbicides and had just begun that program in June.*"

The report continues -

"Nakhon Phanom RTAFB. *NKP also had the usual rainy season vegetation problems, but heavy use of herbicides kept the growth under control in the fenced areas.* Interior vegetation was usually kept closely cut."

Under the same heading, the report also mentions Ubon -

"Ubon RTAFB. Ubon had undertaken a unique approach to solve one of its problems, that of controlling off-base vegetation. The ROE prohibited the use of herbicides outside the perimeter, but Base Civic Action undertook the project of having vegetation cleared 100 meters from the MMS area fence and had additionally contracted with local villagers to clear 150 meters of dense underbrush from around the base perimeter."

In an attempt to decipher this comment, it appears to say that while the ROE prohibited use of herbicides outside the perimeter so the base hired local villagers to cut and clear vegetation, but herbicides were not prohibited inside the perimeter, *therefore on-base vegetation was cleared by using herbicides.*

Finally, continued in the report -

"U-Tapao RTNAF. Vegetation control was all but impossible over the entire reservation. Vegetation control was further hindered *by the inability of the base to get herbicide through supply channels during the first half of 1972."*

As the use of herbicides in Vietnam wound down, circa late 1971, accompanied with the drawdown of supplies in Vietnam; additional supplies of herbicide finally became available for the defoliation of U-Tapao and Korat in June 1972.

FLIGHTS TO AND FROM SOUTHEAST ASIA

To many Thailand veterans, proving presumption means trying to prove visitation or transit through Vietnam. Due to record maintenance retention dates, copies of orders, travel vouchers, and pay records have long been destroyed. What seems pertinent, and more convenient to say, is that the Department of Defense and the Department of Veterans Affairs appear to have waited until most records had been destroyed, or maintain classification on relevant documents to prevent and provide justification for denial of claims by veterans.

Again, research into Air Force History through the use of FOIA provides some evidence that statements made by aircraft commanders, flight schedulers, the Air Force Historical Research Agency, and thousands of veterans coincide with the histories. One of the more informative documents is Tactical Airlift [27][KP27].

The author Ray Bowers records in his chapter "Auxiliary Roles" identifies 1962 as the beginning of the use of four C-123s at Don Muang to fly round robin to Takhli, Korat, Chiang Mai, Ubon, Udorn, and NKP[28][KP28]. This became known as the "Bangkok Shuttle".

It also identifies that by September 1965, the C-123 detachment had grown to six aircraft, but were then replaced in early 1966 by C-130s which were stationed at same bases as the C-123s had been stationed previously. This page actually mentions the Bangkok shuttle at the bottom of the page[29][KP29].

The chapter continues and identifies 1966 as the year the Military Airlift Command began transporting cargo and passengers. It says that by 1968, MAC military and contract transports were carrying 150,000 passengers and 45,000 tons of cargo monthly to SEA. It also says that MAC transports to Vietnam at first landed only at Tan Son Nhut, making it necessary to transship to other bases in Vietnam using the Common Service Airlift System. As new airfields opened it became possible to land at Da Nang and Cam Ranh Bay, and later at Pleiku, Bien Hoa, and Phu Cat. Continuing in the chapter it also says the following:

> In 1966 interisland use of MAC transports in the Western Pacific did not cause an overlap in services. (Interisland in this case included the Philippines, Taiwan, Okinawa, Japan, Guam and Hawaii)

In 1966 contract transports took over airlifts from Vietnam for R&R.
In 1968 the Deputy Secretary of Defense ordered the use of C-130s over water discontinued.
In 1970 - 1971, the C-5A at first could only land at Cam Ranh Bay, but later could load at Tan Son Nhut and other bases.

The chapter "Campaigns of 1969-1971, Cambodia and the Panhandle" describes the fact there were one hundred C-130 flights every six months between Bangkok and Saigon[30][KP30].

Again, the chapter "Auxiliary Roles" identifies that in 1970, the C-130s moved to U-Tapao. In late 1971, the daily round robin to all Thai bases was flown from Tan Son Nhut. *This means that every passenger at up-country Thailand bases enroute either elsewhere in PACAF or the Pacific Command would have flown through Ton Son Nhut.* In late April 1973, the U-Tapao C-130 contingent took over mission responsibilities for Thailand, Cambodia, Vietnam flights of C-130s. This coincides with the AFHRA information on Chart V-17 (C-141)[31][KP31].

The chapter "The Eastern Offensive - The Countrywide Response" describes the use of C-130s from Clark for tasked missions within Thailand from U-Tapao and introduction of C-141s flying in and out to Tan Son Nhut and then to out of country bases in April 1972[32][KP32]. Please pay special attention to the charts from AFHRA, particularly Charts V-16 and V-17 (C-141).

"Return to Cold War in Southeast Asia" details the continuation of C-130 flights after the cease fire and briefly having more C-130s stationed at NKP to move troops out of Viet Nam into Thailand in the early summer of 1972[33][KP33].

The chapter continues to detail the 1972 move of the 374th TFW Detachment from Tan Son Nhut to NKP and the reintroduction of C-141s from Clark in and out of Vietnam, flying into Tan Son Nhut, and then flying to Da Nang, Nha Trang and back to Ton Son Nhut before returning to Clark[34][KP34]. This again is reflected in the AFHRA Charts, Maps, and Tables[35][KP35].

On October 7, 2003, AFHRA responded to an inquiry made by Susan Belanger[36][KP36]:

"As a general rule, military cargo aircraft, especially those engaged in "airlines" would stop over at Tan Son Nhut Air Base, Republic of Vietnam enroute to bases in Thailand. Very few of this sort of flight were made "direct" to bases in Thailand from bases outside Southeast Asia. This would have been wasteful of airlift capability."

I ask my audience to think about this information. The data provided to me by AFHRA indicates that in FY 1972 there were 990,866 passengers traveling to and from Southeast Asia and in FY 1973, 617,800 passengers. If these numbers do not include other passengers such as U.S. Navy and Marines, and some U.S. Army personnel then in two years there may have been as many as 1,750,000 veterans passing through Vietnam.

Thailand bases opened in the 1964 - 1967 time frames so it might be assumed that from 1964 through April 30, 1975, a period of roughly ten years, thousands of Thailand veterans transited the Pacific Ocean. During this period, military personnel in Thailand ranged from 6,000 personnel in 1964 to 50,000 in 1969 and from 29,118 to 50,000 again after the 1972 buildup. The number of

veterans in Thailand that passed through Vietnam, particularly from 1969 - 1975, can only be estimated but it does appear from statements[37][KP37] and histories that many if not most personnel flew through Tan Son Nhut or Danang.

Additionally, what many in the Department of Veterans Affairs and the Veterans Benefits Administration fail to recognize is the nature of military reimbursement. In the most likely instances, a permanent change of station (PCS) or a temporary duty assignment (TDY), or a military leave, whether regular or emergency, or a rest and recuperation (R&R), one thing remains pertinent.

In all situations, if the veteran was on a military aircraft, travel personnel in military finance sections were not concerned with intermediate stops, only time of departure from the original port, a time of arrival at the debarkation port (in the case of leave back to the CONUS this means arrival in the United States) because no payment was made for the travel, only the travel time.

The best example is my emergency leave from Korat RTAFB, Thailand on December 8, 1972. Leave began upon my arrival at Travis AFB, California; I was given a military transportation authorization (MTA) for travel to Augusta, Georgia and return to Travis, and I flew to and from Korat to Travis on military aircraft.

The travel section was concerned with only two things; the first was my arrival date at Travis, and the second that I return the endorsed MTA so that payment for my commercial airlines could be made by the USAF. All other information was superfluous. The departure from Korat to Travis was travel time, the arrival at Travis until my return to Travis was emergency leave, and the travel from Travis back to Thailand was travel time. Since I was not entitled to travel pay for any of it, and was only entitled to per diem for the travel time, no other information was necessary.

OTHER DOCUMENTATION AND THE CONCLUSIONS OBTAINED

Despite the fact the National Security Decision Memorandum #23 indicates there were stockpiles of chemicals stored around the world, it did not indicate where these stockpiles were located, or what chemicals were stored there. It seems apparent from the environmental studies and the testimony of veterans stationed in Guam that it is most probably one of those stockpiles. In my work with more and different groups, I have made a number of friends involved with the SHAD 112 project and with Fort Greeley, Alaska who indicate that if herbicides were not stored in Alaska, they came from Guam.

Based on reports of polar bear populations suffering from dioxin poisoning, it is feasible that dioxin may have been stored in the Aleutian Islands or elsewhere in Alaska (Tok).

I have other friends that state that they shipped herbicides from Germany to Southeast Asia. While a CONUS to Germany to Southeast Asia route may have been the most efficient supply route at the time, I find it much more feasible that the stockpile was in Germany. However, it indicates that there may have been veterans exposed there.

Canada is another possibility, based on the testing there, but also based on the large mainly uninhabited amounts of land mass.

Finally, the Darrow Trip Report to Vietnam[38][KP38], included herein, does give pause. If in fact Dalapon and/or Agent Blue were used on U.S. Army and Air Force bases to routinely spray to reduce vegetation, it could cost the U.S. Government trillions of dollars. Dalapon is one of the herbicides tested at Gagetown, New Brunswick, Canada. And unless U.S. Courts were to continue to dismiss suits where it was used as it did with Thailand and Vietnam, they may owe the countries where it was stockpiled and stored billions or trillions more. It is no wonder why these documents are still shrouded in secrecy after so many years.

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ABOUT THE AUTHOR

Kurt Priessman is a retired Master Sergeant and Disabled Veteran whose professional experience included twenty years in the United States Air Force from 1970 to 1990, and sixteen years as a Civil Servant in the United States government.

During the first four years of his Air Force career, he was an 81150A, Security Policeman, Military Working Dog Handler. After a brief tour at Mather AFB, California where he quickly obtained his Craftsman level, he received orders for U-Tapao RTNAB, Thailand. After completing the Security Police Combat Preparedness Course, he assumed duties at his new station on October 9, 1971. He was the Charge of Quarters for the 635th K-9 kennels the night U-Tapao was attacked (January 10, 1972) and was in a position to see much of what transpired after the initial attack on post K-3. His next two assignments were Consecutive Overseas Tours (COTs) to the 388th Security Police Squadron, Korat RTAFB, Thailand and the 824th Security Police Squadron, Kadena, AB, Okinawa. Sergeant Priessman suffered a near fatal accident in downtown Korat when he was struck by a speeding baht bus. His injuries did necessitate his cross-training in November 1974, to the Air Operations career field.

Many of his years were spent in the 27100 Air Operations career field, including serving as NCOIC, Flight Operations at Kadena; NCOIC, Squadron Operations at Castle AFB, California, Kunsan AB and Taegu AB, Republic of Korea, and Myrtle Beach AFB, South Carolina; NCOIC, Aircrew Training and finally Superintendent, Operations Resource Management Systems at Myrtle Beach AFB, South Carolina and Davis Monthan AFB, Arizona. His duties included being intimately familiar with Flight Planning Documents (FLIPS), Enroute Supplements, the Foreign Clearance Guide, navigational charts, notices to airmen (NOTAMS), takeoff and landing weather minimums , aircraft maintenance and scheduling, standardization evaluation requirements, aircraft technical order publications, AF Manuals and Regulations relating to aircraft , aircrew flying training, and flight management requirements, as well as unit requirements mandated by classified OPLANS and OPORDS. His experience included many detailed discussions with instructor pilots and navigators. As a passenger, he once correctly diagnosed an unsafe gear indicator light which he discussed with the aircraft's pilot who was astounded that anyone but the aircrew would know. They both laughed when the pilot indicated they had lost the #3 engine to a bird and flew across most of the Northern Pacific Ocean with three engines.

MSgt Priessman spent eight years and 9 months in PACAF and was stationed at U-Tapao RTNAB and Korat RTAFB, Thailand, Kadena AB, Okinawa, Japan, and Kunsan and Taegu AB, Republic of Korea. His travels include places such as Korat, Bangkok, Sattahip, and Pattaya, Thailand, Hong Kong, the entire Okinawan island, Clark AFB, Philippines, Anderson AB, Guam, Midway and Wake Islands, Hickam AFB, Hawaii, Tokyo and Yokota AB, Japan, and the major portion of the South Korean peninsula from Kunsan to Taegu to Pusan and from Pyongtaek to Osan to Seoul and the DMZ. Finally, he returned to the Continental U.S. (CONUS) in October, 1981, where he scheduled aircraft against weapons controllers (SAGE) for the 23rd Air Division.

During his career, he handled many additional duties to include equipment and supply custodian, COMSEC/OPSEC manager, Mobility NCO, OJT Trainer/Supervisor, and Resource Advisor for a squadron, the Deputy Commander for Operations, and the Wing Commander. His expertise in Operations Systems Management with added financial, logistical, and administrative experience gives him a broad background in a variety of fields, crucial for a researcher.

While still on terminal leave, Master Sergeant Priessman went to work as a Budget Analyst in the Department of Health and Human Services, Public Health Service in Tucson, Arizona. He often served as the Financial Management Officer position during periods required by the Area Director, and became expert in budget preparation, submission, and execution, accounting, and reporting. He also established expertise in healthcare administration, crafting legislation, and systems required by Public Laws and Treasury regulations. He also served as the Business Office Manager and Contract Health Service Officer, and the Health Insurance Portability and Accountability Act Coordinator.

He earned a Bachelor of Arts in Business Administration from Saint Leo College in 1988, and a Masters Degree from Golden Gate University in 1989. Additionally, he gained certification as a Certified Public Manager from Arizona State University in 1994.

Kurt Priessman, Master Sergeant, USAF (Retired)
Masters of Business Administration
[redacted]
Vernon, Texas 76384-4167
Phone: [redacted]
Email: [redacted]

Steve Maxner, Ph.D.
Director
The Vietnam Center
Texas Tech University
Lubbock, TX 79409-1041

Info removed by the VNCA