Herbicide Exposure at Udorn RTAFB, Thailand



January 13, 2011

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Presentation-		
Attachments		

I will be providing a presentation on Udorn RTAFB, Thailand, the base I was stationed at from August 1970- July 1971, where I was an Aircraft Inertial Navigation and Radar Systems Repairman working on RF-4C and F4-D Aircraft that were located in/near the base perimeter. I performed maintenance on RF/F-4 aircraft while working on the aircraft that were parked in the revetments located in/near the perimeter and on occasions was dispatched to the end of the flight line where the aircraft receive final check and weapons crews remove all safety devices on munitions on the aircraft which is located in the perimeter if there were any INS related problems prior to take off.

The VA has accepted the USAF CHECO Report- Base Defense, Thailand, which acknowledges herbicides (commercial or tactical) were used at Udorn (CD Attachment). I would like to also point out some other facts in the accepted CHECO Report:

- A. Page 58 refers to the use of herbicides to control vegetation.
- B. Page 64 refers to the rapid growth of tropical vegetation thus the need for continuous use of herbicides.
- C. Page 67 discusses where soil sterilization and herbicide use was authorized in 1969.
- D. Page 73- Base analysis "Udorn RTAFB'The perimeter was also very close to the aircraft at several points, denying the defenders the necessary "battle room" to employ the three-defensive- rings technique."

Udorn was attacked on July 26, 1968 by a force between, depending on whose data, either 8-10 or estimated 25 attackers, by Intelligence or Security Forces respectively (See USAF CHECO Report- Attack on Udorn, page 17 (Provided as attachment on CD provided.). This was in the Northwest portion of the base, in the same area where I was dispatched to troubleshoot an F-4D prior to take off at the end of the runway. It was called the arm/re-arm area. There was one at each end of the runway.

The standards, set forth in the May 2010 C&P Service Bulletin, page 3, to be met for herbicide exposure in Thailand are:

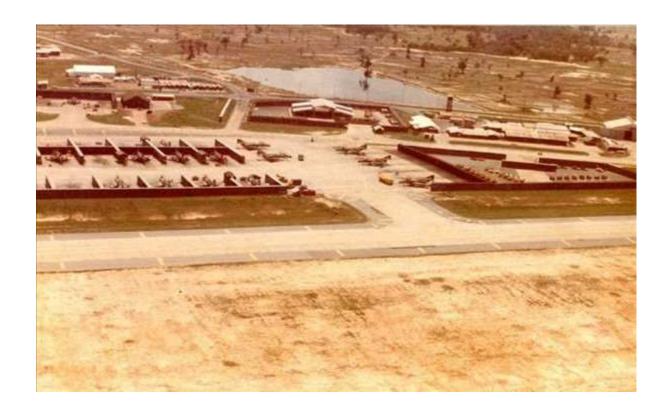
- 1. Be stationed at one of the bases in Thailand (Udorn is listed.)
- 2. <u>Served</u> as a security policeman, security patrol dog handler, member of a security police squadron, or <u>otherwise served near the air base perimeter</u>, as shown by MOS (military <u>occupational specialty</u>), performance evaluations, or other credible evidence, then herbicide exposure should be acknowledged on a facts found or direct basis.
- 3. Applies only during the Viet Nam Era, from February 28, 1961 to 7 May 1975.
- 4. Project CHECO Southeast Asia Report: Base Defense in Thailand has been accepted by the VA as the verifying source for herbicide use on US military bases in Thailand.

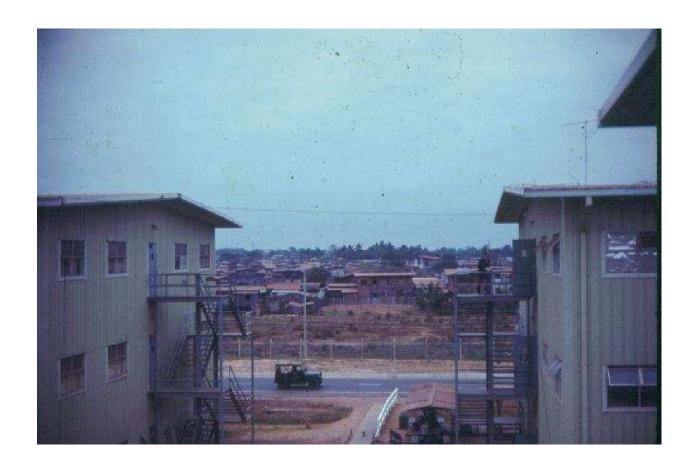
Udorn Aerial Map- This map shows the overall base, including the perimeter. #1 and #2 show the revetment areas where the RF-4C and F4-D's were parked respectively (Close to the perimeter). #3 shows the barracks area and how close it was to the perimeter as well. #4 shows were the INS Maintenance Shop is located as well as its relationship to the revetment area for RF-4C's and the perimeter. #5 shows the POL Storage area and its proximity to the barracks area. #6 is the Arm/Re-Arm area where final checks of aircraft are completed prior to or after landing. This area is where the Attack on Udorn occurred in July 1968. I have been dispatched to this area to troubleshoot INS problems prior to aircraft taking off. There also is a similar area at the opposite end of the runway. The runway is 10,000 ft by approximately 125 ft., also look at the length vs. width of the base when it came to spraying herbicides. #7 shows the bus route that went through the flight line area (As shown by Udorn Left, Aerial Photo.) This area was also sprayed with herbicides, which would place us in/near the flight line area (See page 73, USAF CHECO Report, Base Defense, Thailand. This the accepted document by the VA on herbicide exposure for Veterans stationed in Thailand.), as per the May 2010 C&P Service Bulletin.

Udorn RTAFB, Inailand

- 1. RF-4C Revetment Area
- 2. F4-D Revetment Area
- 3. Barracks Area
- 4. INS Maintenance Shop
- 5. POL Storage Area
- 6. ARM/Re-ARM Area
- 7. Bus Route









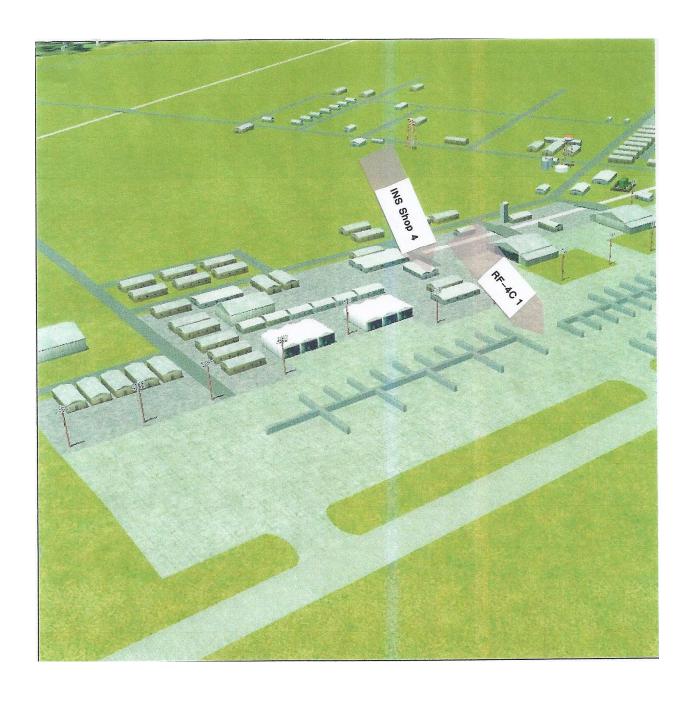
This is #6- located near the Trim Pad. Location where the aircraft were last checked prior to take off or after landing- where the munitions were armed or disarmed.





3-D Model of Udorn RTAFB by George Knowles - Ubon RTAFB 1967-1968 Interactive Map Information Pop-Ups by Ervin Davis - Udorn 1966-67 & Ubon 1967-68



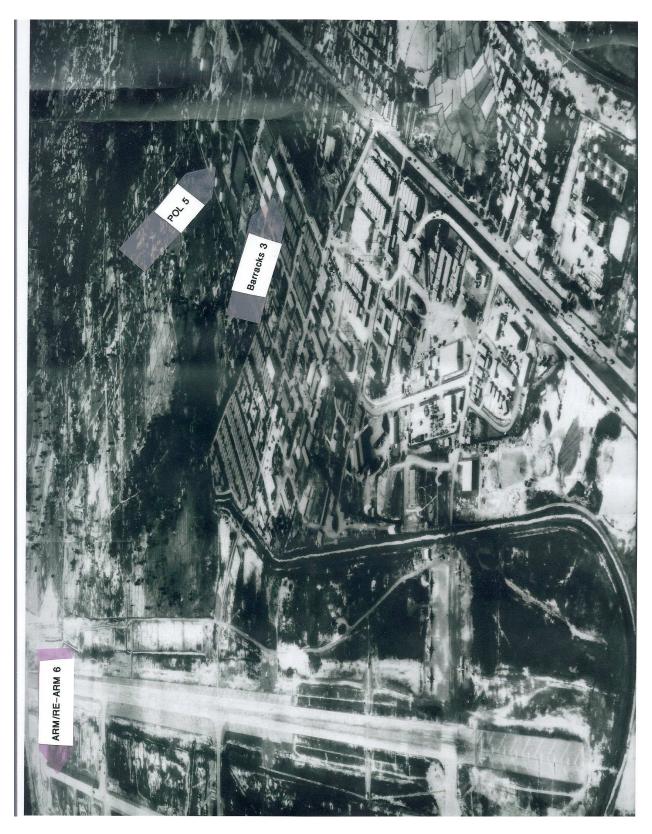


INS Shop- located across from large hangar in upper left. #4 on map. RF-4C Revetment area #1 on map.





Udorn-Right Photo



Udorn Before/After Defoliation, #4 on map.



Same area, opposite looking direction, #4 on map:

This photo is the same area, just from opposite view, after defoliation. Note from VA accepted

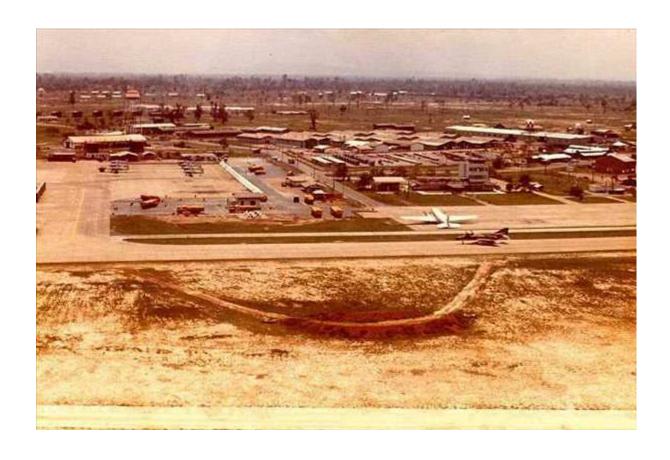
USAF CHECO Report- Base Defense, Thailand:

- A. Page 58 refers to the use of herbicides to control vegetation.
- B. Page 64 refers to the rapid growth of tropical vegetation thus the need for continuous use of herbicides.
- C. Page 67 discusses where soil sterilization and herbicide use was authorized in 1969.



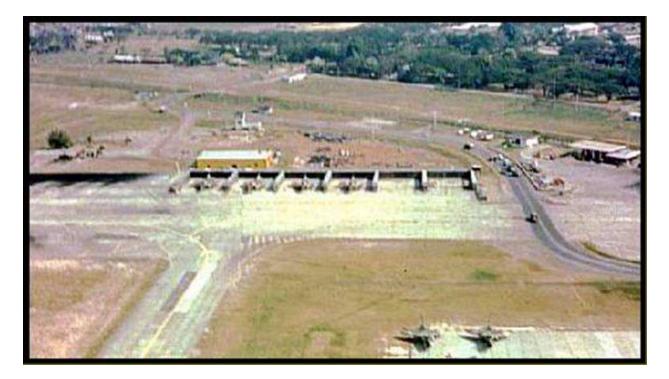
Additional pictures, both are #2 on map:





This is #7 on map, Bus Route. It passes through flight line area where we would have to wait for aircraft coming from or going to the Air America and Det 1, 56th SOW area. The flight line area

appears to be treated with herbicides as per USAF CHECO Report- Base Defense, Thailand (See pages 58, 64,



This also shows how close the flight line is to perimeter and bus route:



The above information presented shows the requirements of May 2010 C&P Service Bulletin have been met or exceeded. At a minimum, the evidence presented would be in equipoise for the veteran.

I would like to also address a couple of points on the SOC (Attachment- CD) issued by Wichita VARO, dated August 31, 2010, page 17 (highlighted in bold type) with my responses below SOC's statements:

Documented evidence indicates that you did not begin providing security to Air Forces bases until after your service in Thailand. It has been identified that your military occupational specialty while you were in Thailand was that of Avionic navigation and radar technician. Internal mechanical repairs were completed in hangers to keep internal avionic equipment as dust free and dry as possible and to keep the repairmen out of the sun and rain. The extreme heat in the summer and the unexpected rain made most repairs to aircraft be accomplished in the safety of the hanger where the parts and tools were located. There is no evidence to show that you worked on aircraft close to the proximity of the perimeter of the base and that you could have been contaminated by Agent Orange chemicals that may have been used by the Air Force to control weeds.

First and foremost, the May 2010 C&P Bulletin (Attachment-CD) does not only state the likelihood that security personnel were exposed, but also those MOS's working in close proximity to the perimeter. Additionally, the rater(s) evaluating my claim may have not evaluated the facts correctly. My military occupational specialty is Aircraft Radar and Inertial Navigation Systems Equipment Repairman, AFSC 30154 later changed to AFSC 32854. Repairs to the Inertial Navigation System consisted of Flight line diagnostics/troubleshooting, removing/replacing 'black boxes' or after the equipment has been removed from the aircraft and taken to the shop where more in depth testing, troubleshooting, repairs and turnaround to be placed back into aircraft. The Flight line maintenance took place in the revetment areas of the flight line not in aircraft hangers. The accepted USAF CHECO Report-Base Defense Thailand, Page 73- Base analysis "Udorn RTAFB'The perimeter was also very close to the aircraft at several points, denying the defenders the necessary "battle room" to employ the three-defensive- rings technique." Buddy statements in Attachment #1 also support my claim of working on the Flight line and not in hangars. Copies of my Airman Performance Reports, Attachment #2 show I worked on the Flight line as well. We did not perform 'Internal mechanical repairs' and did not have the luxury of being in a hanger to perform maintenance to protect us from the heat, sun, or rain. Our tasks were performed on the Flight line!

Aircraft hangers are not located close to the perimeter of the airport for the safety and sabotage considerations of aircraft. Aircraft were never routinely sprayed with herbicides and great care was used to keep aircraft from the corrosive properties of any defoliant used to control weeds. There has been no evidence provided other than mere speculation of your possible exposure to Agent Orange chemicals during your service in the Air Force while you served in Thailand.

Aircraft hangers at Udorn were used by FMS (Field Maintenance Squadron) personnel and there were only a few of them which were used for removal of aircraft

engines, hydraulic repairs or required phase inspections of aircraft (Maintenance inspections done at scheduled flying hours completed.). Between the four squadrons of F-4/RF-4 aircraft there were approximately 100 aircraft. As shown in the pictures of Udorn, Aircraft Hangars were located close to the perimeter!

The USAF CHECO Report previously cited on page 73 places flight line in the perimeter. Attachment #4, shows maps and photos of Udorn RTAFB of the entire base.

You have provided an opinion from your treating physician who has indicated that it is more likely than not that your diabetes mellitus condition was due to your exposure to Agent Orange while you were on active duty. The opinion was based on your history of the facts that cannot be verified by the available evidence of record.

The medical statement (Nexus Letter) from Dr. Richard xxxxxx dated February 11, 2010, (Attachment #3) clearly states there are no other risk factors other than exposure to herbicides that would have caused me to have diabetes, type 2, which is accepted as one of the diseases recognized resulting from exposure to herbicides, such as Agent Orange. In Lewis Prather's case, Citation Nr: 1033121, pages 12 and 13, same type letter was accepted as proof there were no other risk factors in his lifestyle other than exposure to herbicides. The fact is that the Department of Veterans Affairs has not provided a medical examination to confirm Dr. Lochamy's diagnosis, nor has it accepted my medical treatment records from my physician as evidence in this case.

Base parameters:

1. Looking at the 3-D map of Udorn, Attachment #4, the flight line is 10,000 feet long which would make the base approximately 2 miles at it longest points. The width of the base is considerably smaller in size. Herbicides were sprayed along the inside of the base perimeter. For base defense purposes this would mean the entire base perimeter was sprayed. In my Security Police career field, I was in AFSC 81170 with an SEI (Special Experience Identifier) 327, Air Base Ground Defense Specialist (I feel I am qualified to make these assertions). In Attachment #4 you can see not only was the perimeter along the flight line but areas near the revetments and even near the barracks area where I stayed you can see the brown/dead grass near the perimeter fence (Which supports theory that herbicides were sprayed around the entire base perimeter.). It would not make sense to just spray the perimeter near the flight line and leave the remaining area to have tall grass. To do so would allow a person total concealment up to the aircraft should they get through the perimeter fence undetected. Therefore, the use of herbicides, as shown in the flight line and barracks pictures show it was used elsewhere. In Army FM 3-3, Tactical Use of Herbicides, Para 5-2, d, discusses 'a 500-meter buffer distance should be maintained to avoid damage to desirable vegetation near the target' when using a ground dispersal system. What about avoiding personnel to exposure as well? Note: 500 meters = 546+ yards or .31 miles.

Being in a tropical climate as stated in the accepted CHECO Report- Page 64 refers to the rapid growth of tropical vegetation thus the need for continuous use of herbicides. Also in Lewis Prather's case, Citation Nr: 1033121, pages 11 and 12 states this as well. Both are on Attachment- CD

- 2. Now taking the guidelines: In Army *FM 3-3, Tactical Use of Herbicides*, Para 5-2, d, discusses 'a 500-meter buffer distance should be maintained to avoid damage to desirable vegetation near the target' when using a ground dispersal system. What about avoiding personnel to exposure as well?
 - 1. The runway is 10,000.00 feet long or 3048 meters long. Measures 18 cm.
 - 2. 1 cm= 169.3 Meters
 - 3. 2.95 cm (1 1/16th inch) = 500 Meters or 546+ yards (More than 5 football fields!)

Taking the measurement of $1\ 1/16^{th}$ inches will place almost any area where I worked, lived or traveled through in an area that could have exposed anyone to herbicide exposure.

3. I have the historical wind data at Udorn as well as rainfall accumulation to show the following: 1. How far did the spraying actually go from its intended area due to winds, thus potentially exposing more areas than anticipated. 2. The need to keep spraying due to tropical climate, as stated in the accepted CHECO Report, page 64.

Udorn Wind Velocity

Mean wind speed	
(Km/h)	Max sustained wind speed (Km/h)
5.8 (3.6mph)	15.3 (9.51mph)
5 (3mph)	15.2 (9.44mph)
5.2 (3.23mph)	14.9 (9.26mph)
5.2 (3.23mph)	13.8 (8.57mph)
5.3 (3.29mph)	13 (8.08mph)
5 (3mph)	13.4 (8.33mph)
5.4 (3.36mph)	14.3 (8.89mph)
6.5 (4.04mph)	15.5 (9.63mph)
6.7 (4.16mph)	17.4 (10.81mph)
6.3 (3.91mph)	15.5 (9.63mph)
6.4 (3.98mph)	16.3 (10.13mph)
8.4 (5.22mph)	19.6 (12.18mph)
	(Km/h) 5.8 (3.6mph) 5 (3mph) 5.2 (3.23mph) 5.2 (3.23mph) 5.3 (3.29mph) 5 (3mph) 5.4 (3.36mph) 6.5 (4.04mph) 6.7 (4.16mph) 6.3 (3.91mph) 6.4 (3.98mph)

Source: http://www.tutiempo.net/en/Climate/Udon_Thani/08-1970/483540.htm

NOTE: Min wind speed ranges from a low of 1.1 Km/h (.69mph) to a high of 15.2 Km/h (9.44mph)

Max sustained wind speed ranges from a low of 11.1 Km/h (6.9mph) to a high of 38.9Km/h (24.17 mph)

Comments on Wichita VARO Hearing Transcript, Dated February 10, 2010, pertaining to my herbicide exposure and other medical issues (Attachment CD). On:

- A. Page 3: I testified to working on the flight line which was located in the perimeter (As specified by the accepted CHECO Report.). This is also corroborated in Buddy Statements and Performance Evaluations.
- B. Page5: Discusses the flight line being in/near the perimeter as well as witnessing the spraying of herbicides by using a tractor pulling a 55 gallon drum (Also corroborated in Buddy Statement, previously submitted by James King.).
- C. Page 6: I testified about working in the Phase Dock Hangar. This was to remove INS equipment from and aircraft that was there for periodic maintenance (Non Operational during this time) and INS Parts were needed to make another aircraft Operational. This was done due to a lack of spare parts, so the parts were 'cannibalized' to make one or more aircraft Operational. Normally the replacement parts would be available to make the Non Operational aircraft operational when it came out of the Phase Dock maintenance.
- D. Page 12: I was asked about the medical condition- Diabetes. The DRO asked about my condition and who diagnosed Diabetes "And that was VA or a private..." He also asked if anyone in my family had Diabetes, which I responded "No".

Based on the information presented:

- A. Maps of Udorn RTAFB, Thailand
- B. Photographs
- C. Buddy Statements
- D. Other documentation

I have clearly shown, as per May 2010 C&P Service Bulletin, I was exposed to herbicides while stationed at Udorn RTAFB, Thailand, be it: 1. Direct Exposure., 2. Presumptive. Or 3. In Equipoise for the Veteran based on the facts presented.

- 1. Buddy Statements.
- 2. Airman Performance Reports (Performance Evaluations).
- 3. Doctor Richard Lochamy's Nexus Letter.
- 4. Maps and Photographs of Udorn RTAFB.
- 5. CD with reference data-

3-D Maps

CHECO Reports

Dr. xxxxxxNexus Letter

DRO Hearing Transcript and My Response

FM-3-3 Tactical Use of Herbicides

Lewis Prather's Case

May 2010 C&P Service Bulletin

Udorn Aerial Photos

VBA Cases- Herbicide Exposure at Udorn

Weather Data