18 Pages Narrative
66 Slides
(4 Pages on slides etc)

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U.S. MILITARY VETERINARY

ACTIVITIES IN SOUTH VIETNAM

United States Army Veterinary Corps officers were originally assigned to the U.S. Military Assistance Advisory Group, Vietnam, in early 1962. * (Chart #1, U.S. Military Campaign, VN). Throughout the Advisory and Defensive Campaigns a succession of veterinary officers and enlisted specialists provided veterinary support to the U.S. Military Advisory and Support Groups and the Army of the Republic of Vietnam (ARVN). Beginning in early 1965, increasingly larger U.S. forces were committed to the military campaign in ~~the Republic of~~ South Vietnam ~~(RVN)~~. Medical ~~Companies~~ and veterinary units were increased to support these forces. By January 1966, three veterinary units (the 4th Medical Group and the 75th Veterinary Service Detachments and the 936th Veterinary Small Animal Hospital) were in the country. The 504th Veterinary Small Animal Dispensary arrived in October of that same year. Until recently these detachments provided the majority of veterinary services throughout the Republic of Vietnam. Currently, there are 18 Tos & E Veterinary Detachments in Vietnam. In addition, veterinarians are assigned to the Preventive Medicine Unit, the four Transportation Terminal Commands, the Special Forces and the Veterinary Department, 9th Medical Laboratory, which provides laboratory support to all U.S. military veterinary activities in the Republic of Vietnam.

* Charts are no longer available

The 44th Medical Brigade, which arrived in April, 1966, assumed operational control of all medical service detachments. The Brigade's Staff Veterinarian exercised this responsibility for all veterinary units. ~~The chart (Chart #2, Command Structure) illustrates the relationship of U.S. Army veterinary activities.~~ Veterinary detachments maintain close liaison with the Preventive Medicine Detachment and outside of the medical structure with the logistical support commands, the Regional Exchange Service, and the USA Procurement Agency, Vietnam. In August 1967 the Medical Brigade was transferred from the 1st Logistical Command and placed directly under the Headquarters, U.S. Army Vietnam. The Surgeon USARV assumed command of the Brigade. The Brigade Veterinarian now serves as Staff Veterinarian to the USARV Surgeon and operational control of Veterinary detachments is exercised by the 522 Veterinary Headquarters Detachment (AF Team)

With the increasing military activities, the extension of veterinary services into the field was accelerated (Chart, #2 Location Veterinary Activities, Vietnam). In early 1966 Chart #2 on This illustrates the widespread distribution of Veterinary units in VN. The 4th Medical Detachment expanded from a Headquarters and 4 stations in March of 1966 to a Headquarters and 21 field stations by December. The 75th Detachment with headquarters in DaNang established field stations in Chu Lai and Red Beach in October; in December an additional field station was opened in Phu Bai to support Hue, Quang Tri and Dong Ha. Control of the

widely scattered field stations was hampered by lack of adequate and reliable communication. In order to improve the operational control of these stations, the country was divided into areas of veterinary responsibility which coincide with those of the three Medical Groups in II, III, and IV Corps Areas. Provisions were made to designate a veterinary officer as Medical Group Veterinarian. Each group area was subdivided into areas, with an Area Veterinarian assigned to each of these. The Commanding Officer of the 75th Medical Detachment was assigned responsibility for all veterinary activities in his designated area, whereas the Group Veterinarian is responsible for coordination of veterinary activities throughout the group area. (Chart #2 off)

(Chart #4, Veterinary Mission, Vietnam) The military veterinary mission in Vietnam comprises four main functions: (1) Food Inspection (2) Zoonoses Control (3) Animal Care (4) Civic Action. The conditions which prevail in Vietnam challenge the ingenuity and resourcefulness of our personnel in fulfilling their mission. Each function will be discussed individually and associated activities illustrated with slides. (Chart #4 off)

Food Inspection

(Slide #1 - Food supplies)

The vast quantities of food delivered to the port cities of Saigon, Cam Ranh Bay, Qui Nhon, and DaNang, and distributed through the developing depots and ration points, created unusual problems and imposed unique requirements on the veterinary inspection service. Initially the port at Saigon was congested as harbor facilities were inadequate for unloading and receiving supplies. (2 - Newport Army Terminal) Considerable relief was realized with the opening of the Newport Army Terminal in July 1967. The terminal is approximately 3 miles upstream from Saigon and is completely self-contained. The port handles about 430,000 tons monthly. The average turnaround for ships is now 6 days as compared with 89 days a year before; and the number of deep draft barges waiting clearance is practically nil whereas there were as many as 80 a year before. Other adverse conditions prevail, and supplies are continuously subjected to the rigors of the hostile environment of Vietnam. (3 - Storage) Supplies may be exposed to excessive heat, rain, and humidity because of insufficient refrigeration and open storage. Lack of mechanical handling equipment may impair rotation of stock. (4 - Inspection) Inspection is concerned with product damage and deterioration (5 - Damage Product Damage, 6 - Ice Cream Deterioration Product Damage, 7 - Torn Sacks) and with their effects on wholesomeness and service. These slides illustrate some conditions. The majority of these conditions can be evaluated by organoleptic and subjective examinations;

however, objective laboratory tests (#8 - Laboratory Testing Canned Rations) are periodically requested to support inspection findings and opinions (#9 - Blank).

Veterinary inspection of food storage areas was extended as far forward as possible. This service contributed significantly to correcting unsatisfactory conditions and became recognized as essential to the development of Class I ~~Ration Storage and Distribution Points~~ (#10 - Class I Cu Chi). Class I Veterinary Inspection The operations at the ~~25th~~ Division Base Camp at ~~Cu Chi~~ illustrate the success of this arrangement and the Successful quality management of subsistence as provided by veterinary personnel.

The Class I Yard receives supplies directly from Saigon (#11 - Truck Delivery Cu Chi) by convoy, a hazardous two-hour trucking operation. Recombined milk and ice cream manufactured in Saigon is delivered in refrigerated trucks. (#12 - Inspection Refrigerated Truck) Condition of the product is inspected on arrival and samples are collected to confirm the quality of the product as delivered. The Division (#13 - Ice Cream Plant) also operates its own ice cream making machines, producing approximately 250 gallons daily. This product is one of the best quality food items available to the soldier.

The superiority and cleanliness of the product is a direct result of close intensive supervision by veterinary inspectors, laboratory testing, and (14 - Santizing Ice Cream Equipment) conscientious cooperative GI management. In those instances in which Division ice cream plants were operated without veterinary supervision, quality and cleanliness were decidly inferior as reflected in excessively high total bacteria and coliform counts. The operation and product of the Quartermaster (15 - QM Bakery) Bakery platoon that is also located at the Camp are inspected (16 - Vet Inspection QM Bakery) by veterinary personnel. The platoon bakes approximately 13,000 one-pound loaves daily for distribution to surrounding camps and field operations. (17 - Ice Plant) Ice is obtained from a plant constructed by an American engineering firm and operated under a contract with the U.S. Forces. Veterinary inspectors maintain surveillance of the quality and potability of the item. Samples of the water supplies are periodically tested at the Veterinary Department, 9ML. The capacity of this plant is 15 tons daily, which far exceeds the maximum production obtained from the smaller Vietnamese operations (18 - Inspection Vietnamese Ice Plant) as typefied by this plant being inspected by the Navy PM and Army veterinary personnel at Phu Bai. Similar duties as I have illustrated are performed

Despite intensive efforts to construct sanitary ice making facilities, it is estimated that as yet approximately 30 % of the ice used by US Forces is supplied from VN vendors. Ice from unapproved sources is believed the source of an extensive Infectious hepatitis outbreak in April - June 1969 involving 71 personnel of the 1st Infantry Division.

by field veterinarians at other camps; for example, (19 - Phu Loi, 20 - Pleiku) Phu Loi and Pleiku.

(21 - Blank) Procurement inspection of indigenous foods expanded rapidly beginning in 1966. The number of food and ice establishments listed in the Directory of Approved Food Sources as a result of veterinary sanitary inspections increased from 12 to more than 39 at the end of 1966. The poundage of food and ice inspected by veterinary personnel went up from 8 million to almost 33 million pounds. Recombined milk and dairy products are produced in plants in Saigon (22 - Milk Plant Interior) and DaNang which are operated by American firms using modern equipment and food components manufactured in the United States. (23 - Milk Plant QC) The Veterinary Department, 9th Medical Laboratory, assumed responsibility for dairy plant inspection in Saigon and instituted a coordinated program of inspection and laboratory testing for evaluation and control of locally manufactured dairy products. This consolidation of inspection responsibility proved very efficient and effective in improving the quality of the product and milk plant sanitation. The laboratory maintained a courier service to the DaNang plant on the Navy Base which facilitated transmission of samples to the laboratory and timely reporting of results.

The laboratory conducted (#24 - Bacteriological Testing) microbiological (#25 - Cheimical Analysis) testing and chemical analysis. The later verified conformance of the product with ~~specification~~ Contract requirements for butter fat content, an expensive anhydrous fat component that determined the cost of the product to the U.S. Forces. ~~Recent~~ Present instructions ~~have~~ directed the substitution of anhydrous vegetable fat for anhydrous butter fat. The former, incidentally, makes a comparatively superior product.

Occassionally the Veterinary Department was requested to test sodas and other bottled beverages which were suspected of being poisoned. In no instance did the laboratory disclose any evidence of poisoning of soda pop; however, a number of cases of methanol poisoning of Montagnards and merchant seamen were identified by the Chemistry Department, 9ML. (#26 - Chemistry Dept. Methanol Samples) In the latter cases, poisoning was attributed to consumption of methanol contaminated whiskeys bottled in discarded Anglo whiskey bottles and resealed with counterfeit labels.

Veterinary personnel worked closely with the U.S. Army Procurement Agency, which was activated in May 1966, to develop approved local sources of fruits and vegetables for U.S. Forces. (#27 - Inspection Local Produce) Specifications and standards for local produce were written. Veterinary inspectors provided

instruction to prospective Vietnamese vendors in acceptable methods of washing, trimming, and packing. Procurement centers in Saigon and Dalat were staffed with veterinary inspectors. Combined purchases of these centers exceeded 1 million dollars monthly. (28 - Dalat) Dalat and its environs is the leading vegetable growing area. (29 - Vietnamese Farmer) Farming is by conventional methods. Production in 1966 rose to 76,000 tons from 48,000 in 1963. The U.S. military buys approximately 30% of the production. (30 - Palletized Load) Produce is crated and palletized for air or rail delivery. (31 - Lab Examination) Soils and produce are periodically tested for parasites and parasite ova although it was reported that no night soil was used to fertilize vegetable fields. (32-Blank)

Despite the magnitude of problems inherent in the logistics of food supply, critical shortages were never encountered. Occasionally the supply of an item was delayed, but a complete nutritionally balanced menu was always available. The military veterinary contributions to quality management of subsistence have been significant and contributory to the success of the food service program and the eating enjoyment of our soldiers and marines throughout Vietnam. (Lights out)

Control of Zoonotic Diseases

Rabies is highly endemic throughout Vietnam. Military physicians are particularly concerned with the possibility of exposure in the many cases of soldiers and marines who are bitten by animal pets, mascots, strays and wild rodents, principally rats. As a consequence, rabies is undoubtedly the zoonotic disease of major military interest. In 1966, 1,506 U.S. military personnel suffered animal bites; 628 of these received antirabies treatment. Information received through OCT 1969 does not suggest any improvement. 1082 military were recorded as exposed and 565 were treated with DF vaccine. Authorities at the Pasteur Institute in Saigon estimate that in 1966, 10,122 Vietnamese were exposed to animal bites; 4,845 of these received antirabies treatment. Six human deaths were reported. Two hundred and forty (51%) of the 470 specimens examined at the Pasteur Institute for rabies were positive. These data are generally limited to Saigon, Nha Trang and Dalat and do not accurately reflect the disease picture in South Vietnam. (although no) cases of rabies have occurred in U.S. Military Forces, (as of May 1967) many personnel have required prophylactic treatment, which has removed them from operational duties. Pre-exposure immunization of military personnel is not required; however, it was standard practice that all members of the Veterinary Department, 9ML, be vaccinated because of the high risk of exposure to positive specimens. Approximately 35% of the dog heads examined in a one-year period (1966-67) were

The incidence reported for 1967 is similar.

positive for rabies. The Department provided a rabies diagnostic service regularly

to the II, III, and IV Corps areas. The convenience of an accurate and efficient rabies diagnostic capability was widely appreciated throughout Vietnam. (lightbox) Specimens (dogheads) arrived in a variety of containers from ammo boxes (#33 ~~30~~ - Ammo Box) to ration cartons (#34 ~~31~~ - Ratio Carton) suggesting the urgency of the request.

An intensified coordinated rabies control program for Vietnam was begun in May 1966. This encompasses (a) vaccination of all suseptible pets (#35 ~~3[redacted]~~ - Vaccination of Troopers Pet), (b) registration and control of military pets and other animals, (#36 ~~3[redacted]~~ - Registration) (c) quarantine of rabies suspects, and (d) collection and evaluation of rabies statistics and other pertinent animal information. The program faces many obstacles; (1) The number of pets acquired by Americans in Vietnam is not accurately known; however, records show that 7,095 animals were immunized in 1966. (2) These pets are scattered throughout Vietnam in many separate commands creating difficulties in making and implementing Command policies on control of pets. (3) There is no civilian rabies control program in Vietnam and the reservoir of disease is perpetuated. (# ~~3[redacted]~~ 37 Missing - Vaccination Vietnamese Village) To minimize the potential reservoir surrounding military bases, veterinary personnel have instituted vaccination programs in many Vietnamese villages.

Military Animal Care

The success of the sentry and scout dog (38 - Dog Aboard Helicopter) in tactical operations in Vietnam assures the continuous use of animals in specific military roles. The military veterinarian derives deep satisfaction from the professional services he renders in caring for these lifesaving animal sensors and sentinels. Veterinary enlisted specialists, one of whom is assigned to each scout dog platoon, constitute the first echelon in veterinary aid and provide routine medication, care, and emergency first aid. These specialists, trained at the Division of Veterinary Medicine, WRAIR, have proved of invaluable assistance in providing veterinary aid. Professional veterinary care is provided in the field by military veterinarians from the field stations who visit the platoons in their geographical areas on a scheduled basis or on call in emergency situations. (39, 40, 41, 42, 43, 44, 45 - Views Illustrating U.S. and Vietnamese Scout & Sentry Facilities) Attached is description of slides. Dogs requiring definitive treatment, (46 - Surgery) military dog surgery, or hospitalization are (47 - Air Evacuation) air evacuated to either of two veterinary small animal facilities: ~~(48 - 936th, 43 - Surgery)~~ (48 the 936th Veterinary Hospital at Tan Son Nhut) or the (49 - 75th) 75th Veterinary Dispensary at the Marine Base in DaNang. The Veterinary Department, 9ML, provides comprehensive

time I visited the Platoon, some six months after arrival, they had established an outstanding record in operations. Two dogs were KIA.

#40 - The Marine Scout Dog kennels at Da Nang. The Marines worked hard at improving the facilities for their dogs. [redacted]

#41 - Navy Scout Dog kennel at Da Nang. I believe the finest kennel accommodations anywhere in Vietnam. Facilities were constructed and ready at time animals arrived.

#42 - Air Force Sentry Dog Kennels at Tui Hoa illustrating the resourcefulness of personnel in making attractive areas.

#43 - Air Police Sentry Dog Kennels at Bein Hoa; still awaiting more permanent type construction.

#44 - Disease and operations have taken their toll of dogs.
Military Dogcemetary

#45 - Our field veterinarians extended their assistance to Vietnam scout dog platoons in their areas.

Description of Slides #40 - #45

#50
(45 - 9ML Examination) clinical laboratory service and histopathological examinations in conjunction with the Pathology Department, 9ML, and the Armed Forces Institute of Pathology. Although complete utilization of the laboratory services was impeded by difficulties in communication and transportation, these impediments were being corrected with the continuous improvement of communications and development of scheduled collections and deliveries to the laboratories.

#51
(46 - Sick call 936th) The types of canine disease most frequently seen are analagous with the medical problems reported in military troops. Heartworm, Dirofilaria immitis, an insect-borne parasitic disease (as is malaria) poses as a potentially severe canine disease problem. Examination of scout dog platoons revealed incidences of microfilaremia as high as 30 - 40% in some platoons. Despite this high proportion of positive findings, veterinary clinicians have not reported overt signs of disease in any significant number of dogs. It may be only a question of time before the subtle effects will change to more severe signs. Maturation of the heartworm is controlled to some degree by periodic prophylactic therapy. The incidence of hookworm infection is comparable to that of heartworm; but the clinical signs are more severe and often incapacitate the dog. Heat exhaustion, ectoparasites, myasis, nasal

leeches, and dermatoses of varying etiology constitute the principal diseases and conditions of veterinary interest. Outbreaks of a disease resembling leptospirosis have occurred but laboratory examinations have not confirmed the clinical impression. Sporadic infections have been recognized serologically Although babesiosis is reported to occur in S.E. Asia, it has ~~not~~ been found in only one or two instances in U.S. military dogs. (# 52 Black) (Lights out)

The British have reported a disease syndrome of unknown etiology in their Labrador tracker dogs in Malaya. ~~The dog becomes clinically anemic. All cellular components of the blood are severly depressed, especially the granulocytes and thrombocytes. Death may occur relatively quickly or the dog may appear to recover only to relapse again.~~ The disease is of concern to our veterinary authorities, since similar signs have been observed in trackers purchased for the U.S. Forces in Vietnam.

The military dog is well regarded and is earning its way through its performance as is documented in USARV operational reports.

Civic Action

Veterinary civic action programs in Vietnam were not organized until July 1966. Prior to this time there were some individual actions by veterinary officers in response to specific requests for assistance as illustrated in these scenes taken at a small orphanage outside of Saigon. (Lights off) (# 53 - Orphanage)

In July 1966, a veterinary officer and a veterinary enlisted specialist were attached to the 1st Division to provide veterinary support to a Division pacification program to be conducted in the villages surrounding Phu Loi. Working through the Province Animal Husbandry Chief, the team set up a program to encourage the villagers to help themselves by active participation in a project to improve their swine. Efforts were directed to the construction of concrete-floored pigpens, (#54 - Vietnamese Pig Pens) vaccination for hog cholera, and treatment of internal parasites. Arrangements were made to secure garbage from the Division Base Camp to improve the feed. The program gained the active participation of most villagers who owned swine. It was successful in improving the condition and health of the livestock. Unfortunately, as has happened to some pacification programs, military operations required the removal of security forces from the area and the program was suspended until security could be reestablished.

In January 1967, U.S. military forces moved into the area known as the Iron Triangle. (#55 - Vietnamese Refugees) Vietnamese refugees from the area were initially resettled at a camp near Phu Cong. (#55 Refugees) The veterinarian attached to the 1st Division Artillery at Phu Loi assisted in resettlement of the vil-

lagers by vaccinating livestock for hog cholera, rinderpest, and hemorrhagic septicemia, the principal livestock disease of Vietnam.

In this same province, the U.S. and ARVN forces operate a Chieu Hoi Village (57 - Chieu Hoi) (open arms program) for rehabilitation of sympathizers and some hard-core Viet Cong. Veterinary personnel participate in the instruction of these people in swine management.

The Veterinary Department of the 9ML assists the civic action officer with laboratory support and (58 - Veterinary Field Kit) supplies them with veterinary field kits for collection of samples. The laboratory also compiled a small booklet of useful agricultural terms with Vietnamese translations.

The Veterinary Department pursued a program of veterinary assistance to the Vietnamese Experimental Animal Farm at Tan Son Nhut. (59 - TSN Farm) The Farm had encountered repeated problems in their poultry and (60 - TSN Farm) swine stock. Laboratory assistance was extended to the pullorum control program which had been instituted on the farm. The swine were surveyed for brucellosis and leptospirosis. Laboratory investigations conducted in cooperation with the Veterinary Division, WRAIR, of a fatal condition repeatedly seen in young pigs suggested intoxication. The composition of the feed mix was reviewed and the situation was apparently alleviated by a change of feed components. (61 - Vietnamese Field).

At the request of the 4th Division, a veterinarian was attached to the Division's G5 section to participate in the pacification program or, as it was later known, the Revolutionary Development Program, of the Division in the Montagnard villages in the highlands around Plei Ku. A veterinary officer was assigned who served as veterinarian to the Montagnards. (62 - Treating Montgnard Livestock) (~~50 [illegible]~~) He treated livestock of these villagers, endeavored to improve husbandry practices, and (63 APC Roundup) directed one of the 1st APC roundups of livestock to protect them from the Viet Cong. A peril of these assignments is (64 - Drinking rice wine) initiation into the villages which required drinking from the communal rice wine jar. (65 - Departure) Obviously the village Chief was well pleased.

Civic action--but, more specifically, veterinary participation in organized pacification programs--is a function of the greatest potential significance. Recently an agreement ~~was~~ concluded between USAID, the GVN, and the Assistant for Veterinary Services, OTSG, ~~which~~ provides ~~five~~ veterinary ~~officers to~~ technical assistance to the Vietnamese in laboratory operations and in the production of quality veterinary biologicals. Such specialized teams coupled with organized field activities constitute an emerging element of veterinary service in militarily strategic areas which are largely dependent on an agricultural economy. I am confident that we shall witness increasing participation in this area. (66-Blank)(lights on)

Conclusion.

Military veterinarians and the services they provide are an integral part of the total military medical support effort as shown by operation reports and lessons learned in the Republic of Vietnam. This group of professional officers and their enlisted technicians have earned the highest respect possible from their fellow soldiers and the civilian population of the RVN.

This respect has been earned in both food inspection and animal medicine. The Army veterinarian has accomplished his difficult and thankless task of food inspection so well no major food poisoning outbreak has occurred in Vietnam. He has also provided exceptional medical care to the sentry, scout and tracker dogs used by our forces in RVN. The military veterinarian has been faced with new animal diseases never before described and unknown in the United States. To cope with these new disease problems communication and laboratory links had to be established between the United States and the theater of operations never before required.

The military veterinary service also provided the technical knowledge required by the Vietnamese to produce animal biological products for use by the Vietnamese farmer. These veterinarians have also provided the professional consultation and assistance which have materially increased the amount of animal protein food available to the indigenous population. These many accomplishments of Army veterinarian have contributed to the development of attitudes friendly to the United States and its purposes.

My presentation is based upon my personal observations and records and reports which I have examined for the purpose of presenting a comprehensive perspective of U.S. military veterinary adtivities in Vietnam through May 1967.

This narrative and the accompanying illustrations reflect only a segment of military veterinary activities in RVN. I have not elaborated on the veterinary advisory functions to ARVN nor on the many splendid contricutions of Air Force staff and base veterinarians.

For material and slides, I am indebted to many unit historians who dutifully recorded the history of their detachments while in service in Vietnam, to those amateur photographers who have generously provided me copies of their photographs, and particularly to the professional team of photographers from WRAIR who so splendidly recorded medical service activities in Vietnam.