Anexo A

Actividades de Armas Química de Estados Unidos en Panamá, por Sitio:

Isla San José
Sito de pruebas extensas de municiones químicas de 1944 hasta 1947. Las áreas blanco mas probablemente contienen cientos o miles de municiones sin explotar. Ver sección IV-B.

Cerro Tigre
Area de almacenamiento para agentes químicos en bruto empezando en los 1930s y hasta por lo menso 1956, tanto en áreas al aire libre como en almacenes tipo iglú.

Chivo Chivo
Un montículo en el "Sendero Chivo Chivo" utilizado como sitio de prueba y disposición final de municiones químicas en los 1950s.

Curundú
Sitio para el almacenaje y pruebas de materiales tóxicos en "área de demostración" desde 1952 hasta 1956. Supuestamente un sitio para el análisis y descontaminación del Centro de Estudios Tropicales de agente neurotóxico VX en las pruebas de los 1960s.

Fuerte Clayton
Sitio para las pruebas de gas mostaza en soldados en 1941. Incluía almacenes de 8 x 12 pies para el almacenamiento de municiones químicas en 1941. También el cuartel general del Equipo de Pruebas Tropicales del Cuerpo Químico en 1956.

Río Hato
Sitio cerca de la pista de aterrizaje que fue área de almacenamiento de bombas y municiones químicas traidas por aviones para el Proyecto San José, 1944-1947.

France Field
Incluía almacenes de 30 x 45 pies para el almacenaje de bombas y municiones químicas en 1941. Supuestamente sitio de entierro de agentes o municiones químicas de la era de la Segunda Guerra Mundial.

Campo de Tiro Emperador/Balboa Oeste
Probablemente el sitio para las pruebas de detonación de minas de agente neurotóxicos VX (con o sin agente vivo) en los 1960s. Todas las Pruebas Tropicales químicas fueron probablemente conducidas en 9.988 grados x 6.508 grados. (Antiguo Sitio Químico, Balboa Oeste), o 9.31 grados x 6.51 grados (Sitio NBC-12, Empire).

Isla Iguana
Sitio para pruebas del "rociado químico"" durante el Proyecto San José, 1944-1947.

Fuerte Sherman
La desembocadura del Río Chagras fue el sitio para el almacenaje y "rehabilitación" de cuatro barcazas de municiones químicas en 1948, después de la evacuación de la Isla San José.

Aguas del Pacífico
Las municiones químicas vertidas desde las barcazas a distancias tan cerca como 30 millas de la Isla San José en 1947-48. También sitio para las pruebas químicas en el mar, 1944-45.

Fuerte Gulick
Incluía un almacén de 8 x 12 pies para municiones químicas en 1941

Base Howard
Incluía un almacén de 16 x 20 pies para municiones químicas en 1941.

Base Paraíso
Incluía un almacén de 8 x 12 pies para municiones químicas en 1941.

Corozal
Incluía dos almacenes para bombas y municiones químicas en 1941, uno de 8 x 12 pies, otro de 20 x 30 pies. También el cuartel general del Equipo de Pruebas Tropicales del Cuerpo Químico en los 1950s.

Base Albrook
Incluía un almacén de 8 x 12 pies para municiones químicas en 1941.

Anexo B

Lista de Municiones Quìmicas del Proyecto de San Jose Project y Estimaciones

Prueba No.	Numero de Descargas	Munición	Tipo de Agente
#6	8	1000-lb. bombas	CK, CG
#14	62	M79 bombas	AC
#16	96	1000-lb. bombas	CG, CK
#17	1260	4.2" morteros	CK
#18	596	4.2" morteros	H
#19	400	105mm proyectiles howitzer	H
#20	180	M70 bombas	H
#30	840	105mm proyectiles howitzers (560) 4.2" morteros (280)	H
#31	86	4.2" morteros	HT
#50	240	4.2" morteros rounds	CG
#51	1440	4.2" morteros rounds	CK
#53	91	M79, M78, M70 bombas	CK
#68	24	100 lb. bombas	H
Pruebas donde el número de descargas no es conocido:			
#2	?	1000-lb. bombas	CK, CG
#3	?	500-lb. MKII bombas	"agente persistente"
#4	?	50-lb. LC A/C bombas	?
#5	?	?	H vapor
#8	?	M70 115-lb. bombas	H
#9	"43 tons./milla cuad."	M47A2 bombas	H
#10	?	4.2" morteros	"agente persistente y no persistente" [En el segundo de dos espoletas "todos los tiros se enterraron solos"]
#11	?	Bangalore torpedo	H
#11a	?	M1A2 "flame thrower"	AC
#12	?	1000-lb. bombas	Butane, CK, CG, "dejado en agua"
#13	?	1000-lb. bombas	CG, CK
#15	?	500-lb. M78 bombas	CK
#17	"pruebas de campo en grande escala"	4.2" morteros	CK, CG
#18	?	4.2" morteros	?
#19	?	105mm Proyectiles howitzer	H
#20	?	M70 115-lb. bombas	H
#21	?	M1XA2 canister	Ammonia
#22	?	?	"gas no persistente"
#23	?	?	?
#24	0	gotas en los brazos	H
#25	?	?	H
#27	?	?	H

#28	?	50-lb. bombas	"agente simulador"
#29	?	M2-2 flamethrower	AC, CK, CG, NP, liquid fuel
#32	?	4.2" morteros bombas	methyl salicylate, otro
#33	?	LC 50-lb. bombas	HT
#34	?	LC 50-lb. bombas	H
#35	0	LC 500-lb. bombas	"HTV simulador"
#36	32	LC 500-lb. bombas	HTV/MM
#44	?	"jets anti tanque"	AC, CK
#45	?	LC 50-lb. Grupos de bomba	Y3
#47	26 grupos de apertura rápida y 40 dirigibles	M74 bombas	H
#48	?	M70 115-lb. Bombas	"agente simulador persistente" [muchas espoletas malfuncionaron]
#49	?	M79 1000-lb. bombas	CG
#52	? [360? "tirados de 1, 2, y 12 veinticuatro-carril lanzadores, respectivamente"]	7.2" T21 cohetes	CG
#56	?	M78 500-lb. and M70 115-lb. bombas	CG, CK
#58	?	7.2" cohetes	CG
#60	? [16 cuadros de artillería]	M70 115-lb. bombas	H
#61	?	M79 1000-lb. bombas	CG
#62	?	E27R1 clusters of 50 lb. bombas	agente simulador
#64	?	? [como defoliante]	H
#65	?	M70 115-lb. bombas	H
#67	?	500-lb. bombas	CG
#69	?	500-lb. Mark II bombas	Methyl salicylate
#70	?	?	?
#71	?	500-lb. Mark II bombas	H
#72-#73	cancelados		
#76	?	7.2" cohetes	?
#77	0	"creeper"	explosivo convencional?
#79	?	?	H en liquido [no tiros?]
#80	0	vapor	H
#81	?	M47A2 100-lb. bombas	H

Fuentes: Cuartel general, Proyecto San Jose, "General Order Number 11," 6 July 1944, reporte sobre el Proyecto San Jose, resúmen de pruebas #1-81; y Project Coordinating Staff, Edgewood Arsenal, Maryland, "Interim summary on the performance of U.S. and British 4.2" mortars charged mustard on tropical wooded terrains," Reporte No. 6, 7 Diciembre 1944, en NARA.

Clave

CK	Cloruro Cianógeno
H	Mostaza
HT	Mostaza Distilada
AC	Cianuro Hydrógeno
CG	Fosgeno

Anexo B

Lista de Municiones Quìmicas del Proyecto de San Jose Project y Estimaciones

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#30	840	105mm proyectiles howitzers (560) 4.2" morteros (280)	H
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#5	?	?	H vapor
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#9	"43 tons./milla cuad."	M47A2 bombas	H
#10	?	4.2" morteros	"agente persistente y no persistente" [En el segundo de dos espoletas "todos los tiros se enterraron solos"]
#11	?	Bangalore torpedo	H
#11a	?	M1A2 "flame thrower"	AC
#12	?	1000-lb. bombas	Butane, CK, CG, "dejado en agua"
#13	?	1000-lb. bombas	CG, CK
#15	?	500-lb. M78 bombas	CK
#17	"pruebas de campo en grande escala"	4.2" morteros	CK, CG
#18	?	4.2" morteros	?
#19	?	105mm Proyectiles howitzer	H
#20	?	M70 115-lb. bombas	H
#21	?	M1XA2 canister	Ammonia
#22	?	?	"gas no persistente"
#23	?	?	?
#24	0	gotas en los brazos	H
#25	?	?	H
#27	?	?	H

Resumen

Número de pruebas en que número de descargas es conocido: 13
Número de pruebas en que la información indica que no municiones fueron descargadas: 5
Número de descargas de agente químico vivo donde el número es conocido: 4,397
(2859 eran CK; 62 eran AC; 1200 eran H; 276 eran CG)
Número promedio de los descargas químicas vivas lanzadas en pruebas para que el número es conocido o para que no habían descargas: 244.3
Número total estimado para la pruebas: 128
Número total de descargas químicas, si el promedio para las pruebas conocidas se mantiene para todas las pruebas: 31,267
Porcentaje de descargas químicas que no funcionaron (inoperantes): 10%
Número estimado de explosivos qúímicos no detonados, si estas calculaciones se mantienen: 3,126

Annex C

Mapa de la Isla San José

de I.M. Johnston *Sargentia VIII: The Botany of San Jose Island*
Boston: Arnold Arboretum, 1949

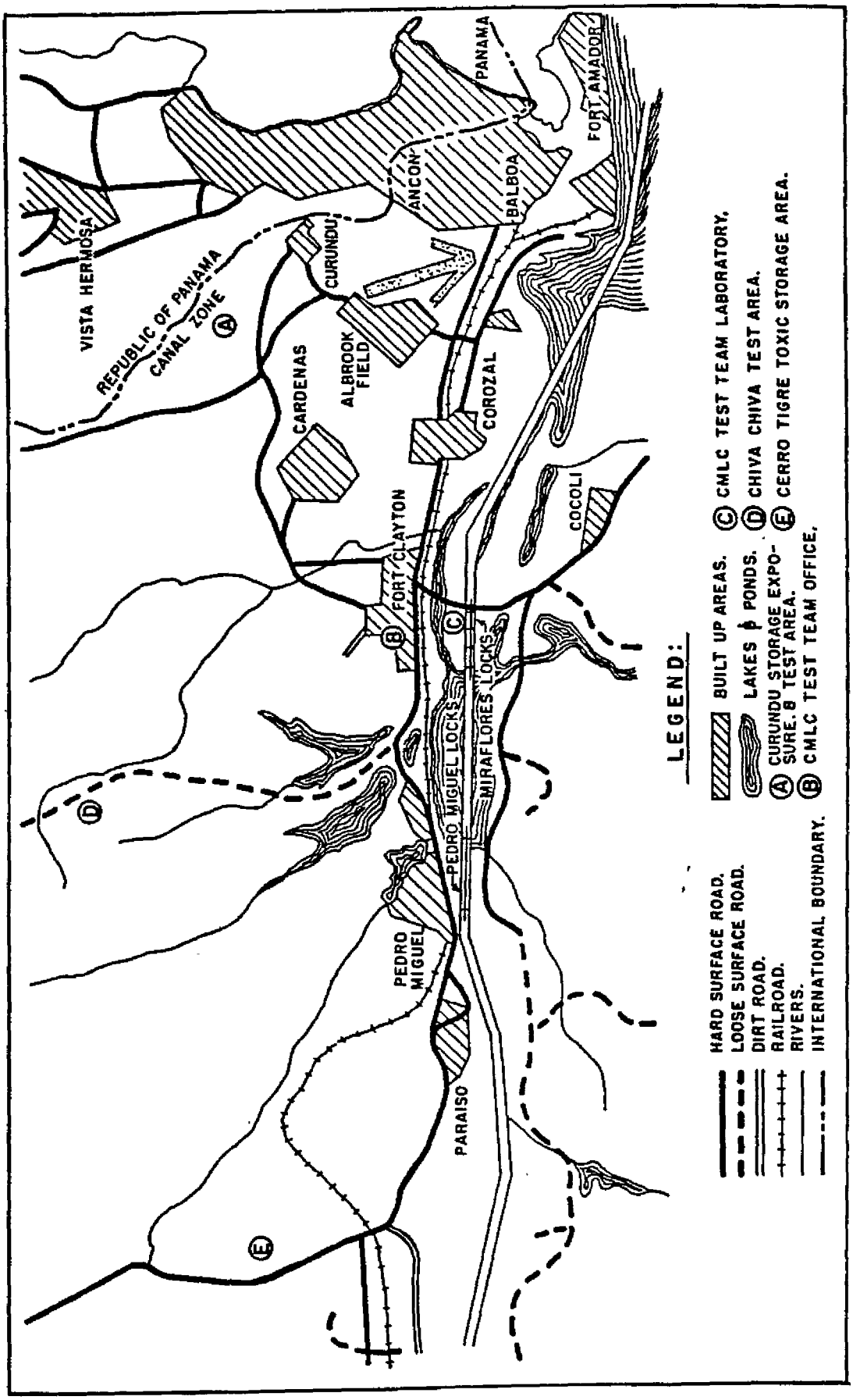


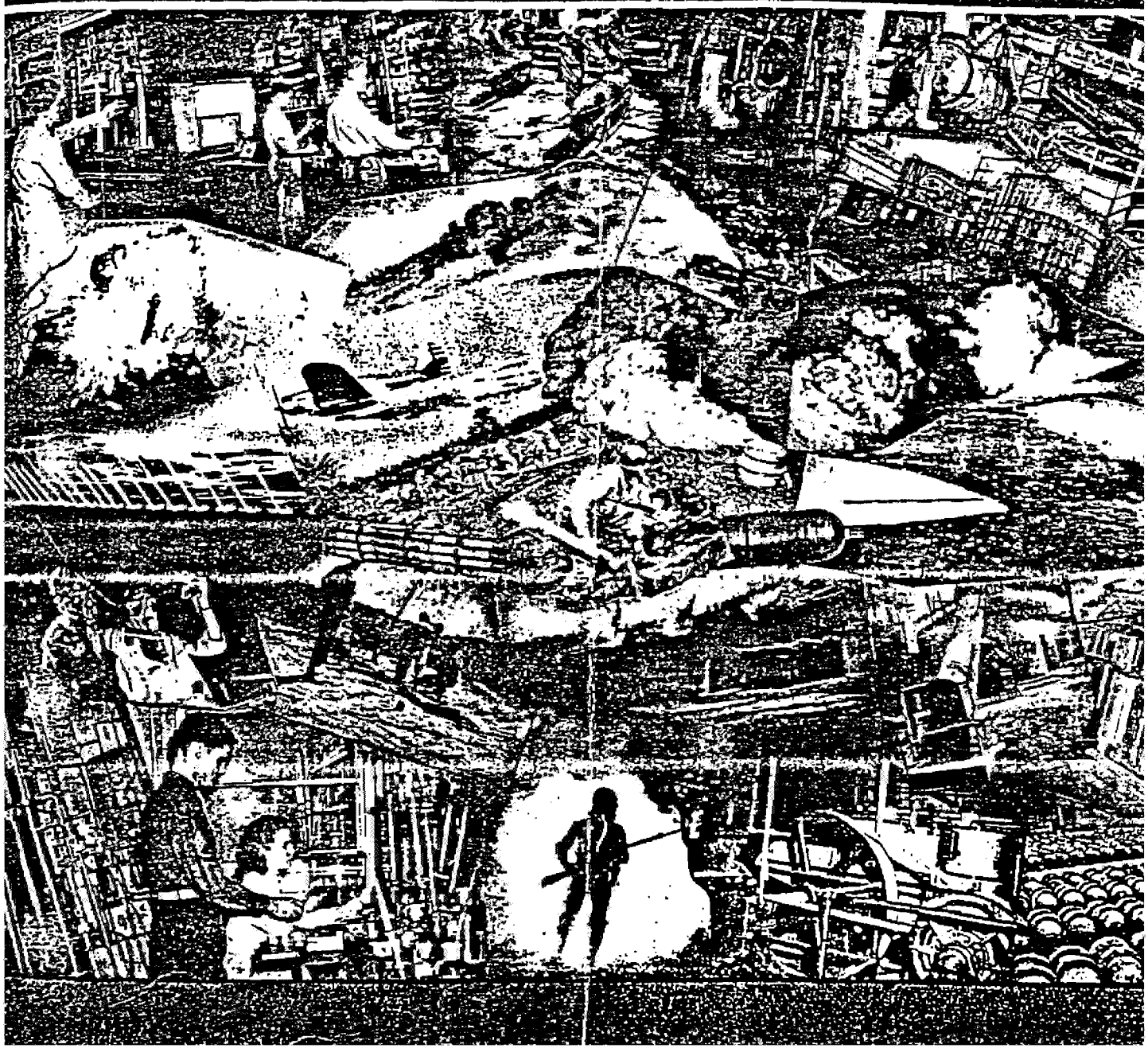
Fig. 2.– Tropical Test Team test areas. Enlargement of rectangular area marked off in Frontispiece.

Annex D

"El Proyecto San José se Mueve"
***Armed Forces Chemical Journal*, Enero 1949**

VOL. XII, No. 3 JANUARY 1960

ARMED FORCES CHEMICAL JOURNAL



ROTC, Agricultural and Mechanical College, College Station, Texas—Instructor, Major A. O. Wiken, CmlC.

ROTC, Georgia School of Technology, Atlanta, Georgia—Instructor, Lt. Colonel N. I. Decker, CmlC.

ROTC, Massachusetts Institute of Technology, Cambridge, Massachusetts—Instructors, Lt. Colonel J. W. Fitzpatrick, CmlC; Captain William Bell, III.

Headquarters, U. S. Army, European Command—Chief Chemical Officer, Colonel C. E. Loucks, CmlC.

Headquarters, U. S. Army, Far East Command—Chief Chemical Officer, Colonel D. R. King, CmlC.

Headquarters, U. S. Army, Pacific—Chief Chemical Officer, Lt. Colonel R. W. Breaks, CmlC.

Headquarters, U. S. Army, Caribbean Command—Chief Chemical Officer, Lt. Colonel J. S. Terrell, CmlC; Col. Rogner E. Johnson.

Headquarters, U. S. Army, Alaska—Chief Chemical Officer, Major G. A. Eaton, CmlC.

Major Department of Air Force Installations (Chemical Officers)

Headquarters, Air Defense Command, Mitchel Air Force Base, Hempstead, Long Island, New York—Air Chemical Officer, Lt. Colonel R. A. Wys, USAF.

Headquarters, Air Materiel Command, Wright-Patterson Air Force Base, Dayton 1, Ohio—Air Chemical Officer, Lt. Colonel D. R. Keefe, USAF.

Headquarters, Tactical Air Command, Langley Field Air Force Base, Virginia—Air Chemical Officer, Lt. Colonel T. J. Cummins, USAF.

Air Chemical School, Keesler Air Force Base, Biloxi, Mississippi—Commanding Officer, Lt. Colonel C. H. Breedlove, USAF.

Headquarters, U. S. Army, Far East Command—Air Chemical Officer, Lt. Colonel T. P. Gahan, USAF.

Headquarters, Far East Air Force—Air Chemical Officer, Colonel R. D. McLeod, Jr., CmlC.

Headquarters, Pacific Air Command—Air Chemical Officer, Lt. Colonel L. J. Vaughan, USAF.

Headquarters, Caribbean Air Command—Air Chemical Officer, Lt. Colonel C. C. Valle, USAF.

The San Jose Project Moves

By CAPT. JAY S. STOCKHARDT, *CmlC*, and 1ST LT. STEPHEN D. NOYES, *CmlC*

The San Jose Project which had been located for four years on the Island of San Jose in the Perlas Group in the Bay of Panama received last year a rather unwelcome Christmas gift. With almost no warning it was told to move, and to move in a hurry. About midnight 23 December 1947 the project was informed that it would have to get out at once with no new home to move into.

To appreciate what this meant the following facts will have to be considered. The project was located on an isolated tropical island otherwise uninhabited. There were two complete communities. One, the Post proper, had every facility normally associated with a small Army Post. The other, the Engineer camp, might be looked upon as an industrial establishment with complete housing and recreational facilities for its workers. These two establishments were entirely self-contained. They had to supply all their own utilities such as electricity, water, communications, etc. In addition to these communities there was an enormous amount of materiel peculiar to a Chemical Corps Proving Ground. There existed laboratories with specialized laboratory equipment, warehouses full of technical supplies, toxic yards containing thousands of tons of chemical agents, explosives and Chemical Corps materiel. All of this had to be moved. The Army authorities in Panama allowed the evacuation to be handled on an emergency basis and set a deadline of 31 January 1948 for the evacuation to be completed.

The evacuation was completed and the island returned to the Panamanian Government on the 28th of January 1948.

Beating the deadline date was not accomplished by working union hours. The 20 officers, 150 enlisted men, and an equal number of civilians at San Jose Project worked practically around the clock every day during the month of evacuation. It should be appreciated that every pound of material had to be moved across the beaches

against the vicissitude of a 20-foot tide and the meanest weather period of the year. No freight docks were available and no materiel handling equipment existed. There were not at San Jose, as there might have been on a larger installation, specialists from the Transportation Corps, Quartermaster Corps, Engineer Corps, etc., who would have been familiar with the problems of packaging and moving of large amounts of materiel. The Chemical Corps officers and men had to do it all. The variety of the problems will be appreciated when it is realized that the goods to be moved ranged from baby high-chairs to diesel electric generators. Everything was moved by hauling it to the beach, there packaging and crating it as required, loading it onto 500-ton ocean-going barges and towing these barges over 60 miles of the Pacific to the Canal Zone. A total of 31 of these barges were used. The problem was complicated on the receiving end by the fact that there was no new home for San Jose to move into.

Headquarters and Headquarters Detachment of San Jose Project was given two barracks at Fort Clayton, Canal Zone, and the families were scattered from the Atlantic to the Pacific side of the Zone wherever accommodations were found for them.

The materiel owned by San Jose was stored wherever space could be found. Some of it was placed in the basements of barracks, more in an abandoned motor pool, and a toxic yard was established at the mouth of the Chagres River on the Fort Sherman Reservation.

This move was all made necessary by the failure of the Panamanian Government to ratify an agreement authorizing renewal of defense site bases in the Republic of Panama. When the Panamanian Government refused to ratify the agreement extending our leases for five years, the decision was made to abandon immediately. San Jose's particular problem was to move out, establish itself temporarily in the Canal Zone and find a new home. All three of these aims were accomplished simultaneously within the month following the "eviction notice."

Without belaboring the point that the job of evacuation was tremendous, the following excerpt from the San Jose Diary for the 13th of January 1948 is quoted:

"13 Jan 48—Barge #1897, towed by Tug ST872, returned after accomplishing mission of dumping munitions at sea. Barge returned this project 0500 hours.

"Barge #1898, towed by Tug ST872, departed San Jose Project 0600 hours. Barge loaded with miscellaneous equipment.

"Boat departed San Jose Project with passengers and cargo 1800 hours.

"Eight enlisted men from Post Transportation departed SJP to take up duties at Fort Clayton.

"C-45 plane arrived SJP 1455 hours.

"Major Ball and Captain Eder returned from mainland after moving dependents to new quarters.

"C-45 plane departed SJP 1505 hours.

"Captain Duty on reconnaissance nww Hq., Fort Clayton, C. Z., for this project, accompanied by S/Sgt. Meyers, Personnel Clerk.

"Barge #1885, towed by Tug ST844, departed SJP 1700 hours. Barge loaded with Ordnance vehicles consigned to Post Motor Pool, Fort Clayton, to be held for SJP.

"Pigeon loft burned at 2000 hours by order of USARCARIB.

"Engineer camp closed, and movement to main camp area was accomplished.

"If movement of equipment progresses as scheduled, closing date of this project will be advanced to an earlier date than that set by USARCARIB."

During the time that San Jose Project was located in the Canal Zone, troops participated in

all training schedules of the Pacific Sector, Canal Zone, and, in addition, prepared the materiel brought in from the Island for reshipment. The toxic munitions were all given complete maintenance and kept under 24-hour-a-day guard. This guard, incidentally, soon gained itself a reputation as the most efficient and toughest guard in the entire Zone.

The search for a new home for San Jose was extensive. Every available site in the Caribbean area was scouted. Some of the sites considered were Swan Island, Portland Bight in Jamaica, Navassa Island west of Haiti, Mona Island between the Dominican Republic and Puerto Rico, Culebra and Vieques lying between Puerto Rico and St. Thomas, V. I. and St. Thomas, Virgin Islands itself. It was decided that the most advantageous location was on St. Thomas, where an abandoned Naval Submarine Base was available and a large amount of land could be obtained. Formal possession of these facilities in the Virgin Islands was obtained on 7 April 1948. The San Jose Project personnel then had a multifold job. An advance party had to be sent to the Virgin Islands to prepare the way for the main body. All equipment had to be moved from the various locations, where it was stored, to the dock where it would be picked up by the Army freighter. San Jose moved all its own equipment to the ship's side. The ship that moved the project was rated at 6,500 tons. When it left the dock every bit of its capacity was used. The decks were piled high with equipment too bulky to go below decks. The explosives and toxics were moved separately on ocean-going barges towed by tugs. Just to add complications, one of the barges sprang a leak during heavy weather and nearly sank.

All personnel, including dependents and civilian employees, were air-lifted from Panama to the Virgin Islands by way of Jamaica and Puerto Rico. Approximately 170 military, 17 women and 19 children were moved without incident. Personnel filtered into the new station in groups ranging in size from 2 to 40 people. Thanks to herculean labors on the part of the advance party, accommodations were ready for everyone. At first, all dependents lived in the BOQ, giving it somewhat the air of a DP cantonment. Before too long, family quarters were made ready and the BOQ took on its normal function.

Upon the arrival of the freighter and the barges, the work of reestablishing San Jose commenced in earnest, and continues today. While all normal accommodations of an Army Post existed at St. Thomas and land was available for test purposes, none of the specialized facilities required by the project existed. Construction of these facilities has been requested and when completed San Jose Project will have proving ground facilities of which the Chemical Corps may well be proud. In the meantime, testing work is going on on a limited basis by the use of temporary expedients. A small chemical laboratory has been fitted out in one corner of a former torpedo storage room; a decon station has been set up in an old mess hall; a photographic laboratory is functioning in a former refrigeration room. Other makeshifts are in use so that some work can be carried on. Facilities now under control of San Jose Project consist of the land and buildings of a former Submarine Base, the quarters and beach of a former U. S. Marine Air Base, the whole of Water Island (a former Army cantonment), and some 2100 acres of land on the westernmost tip of St. Thomas.

The climate is very similar to that in Panama except that there is not as much rainfall. The temperature is as hot or hotter than it was on the Island of San Jose and the humidity is about the same range. The vegetation varies from that typical of semi-arid tropical climate to typical tropical growth. There is no high canopy jungle but scrub jungle abounds. There are areas in which practically any tropical or semi-tropical condition can be met.

Annex E

Oficina del Secretario de Defensa,
Memorándum sobre la Isla San José, 19 de Diciembre 1979
de la Biblioteca Presidencial de Jimmy Carter

OFFICE OF THE SECRETARY OF DEFENSE
WASHINGTON, D.C. 20301

December 19, 1979

MEMORANDUM FOR Mr. Jeffrey Farrow
Counselor on Territorial Policy
Domestic Policy Staff
Room 420, OEOB

Pursuant to your request, attached is a fact sheet on San Jose Island, Panama.

Grant S. Green, Jr.
LTC, U.S. Army
Military Assistant

Attachment

INFORMATION PAPER

DAMO-NCC
22 October 1979

SUBJECT: San Jose Island, Panama

FACTS.

1. During the early 1940's, the U.S. Army leased San Jose Island from its Panamanian owners as a tropic test site for chemical equipment, munitions and agents. San Jose is an island of the Las Perlas group, sixty miles south of the Canal Zone in the Bay of Panama. (Tab A) Testing was terminated abruptly in December 1947 when negotiations with Panama for continued use were unsuccessful. The island was evacuated shortly thereafter.

2. A variety of chemical agent filled bombs, artillery shells and mines were evaluated on the island from 1945 to 1947.

3 a. Protected and unprotected personnel were exposed to chemical agents, mustard (H) and thickened mustard (HT).

b. Other agents tested (not on personnel) were hydrogen cyanide (AC), phosgene (CG), and cyanogen chloride (CK).

c. No nerve agents were tested

d. Tests included aerial delivery of chemical bombs.

3. Known munitions were destroyed and detoxified when the island was evacuated in 1947.

4. In some tests, complete functioning of munitions could not be verified because of the jungle and marsh environment.

5. There have been several inquiries since 1965 concerning whether San Jose Island is safe for habitation.

a. Request received from owners of the island in 1965.

b. Panamanian Ministry of Foreign Affairs request in December 1969.

c. In May 1970, Panama asked if any new technical means might be available to survey the island. U.S. responded that none were available.

6. U.S. has consistently responded that the island could not be declared absolutely safe. Technical assistance has been offered should any munitions be discovered, but none have ever been reported.