

ADDENDUM TO SECTION B BRIEFING
BOOK FOR SEPTEMBER 28, 1994
CONGRESSIONAL HEARING

HEARING ON EXPERIMENTS WITH HUMAN TEST SUBJECTS
BRIEFING BOOK FOR SEPTEMBER 28, 1994

ALPHABETICAL INDEX OF TOPICS

Bari, Italy Bombing Raid - Memorandum Forwarding Listing to VA
Bills to Commend Veterans Exposed to Mustard Gas & Goss Correspondence
Biological Warfare Research and Chemical Experiments
Chemical Weapons Exposure Study Task Force
Chemical Weapons Testing Sites Using Human Subjects
Clinton Reply to Congressman Browder - February 1993
Database - Chemical Biological Weapons Site Locations
Database - Personnel
DepSecDef Letter to Montgomery - March 9, 1993
DepSecDef Memo to DoD Components - March 9, 1993
Edgewood Data on Experimental Agents and Subjects
GAO Report - February 1993
GAO Study - September 1994
Great Lakes Chicago History
Goss Letter to President Clinton - January 1994
Harts Island Test Verification
Human Experimentation - Fact Sheet
Identification of Individuals Exposed
Letter of Verification on Chemical Exposure in Ondal, India
Montgomery Letter to SECDEF - January 1993
National Academy of Sciences Report - January 1993
Nuclear Test Personnel Review Program (NTPR)
Records Repositories
Records Review
Security & Privacy Issues
Testimony - February 1994
Unit Records of WW II Chemical Warfare Service
Update of CWEST Status for Congressional Staff - July 1993
Utah & Colorado News Releases
VA Sharing

HEARING ON EXPERIMENTS WITH HUMAN TEST SUBJECTS

September 28, 1994

Alphabetic Listing of Topics

Bari Italy Bombing Raid -- On December 2, 1943, German airplanes raided the harbor at Bari, Italy which was packed with ships. The raid was highly successful. At least 2 of the ships exploded. One was loaded with 100 tons of 100 pound mustard bombs. Some of the mustard was released and dissolved in the oil and gasoline floating in the harbor. DDR&E letter of March 17, 1993, to the VA promised a list of the personnel involved. OUSD(P&R) has been able to piece together a list of 504 personnel who were on ships in the harbor. **At Tab 1 is (A) copy of the DDR&E letter and (B) the package forwarding the names to the VA .**

Bills to Compensate or Recognize Persons Exposed to Radiation or Mustard Gas

HR 1055 - To direct the Secretary of Defense to issue a commendation to each individual exposed to mustard agents during W.W.II. HR 3743 - To provide for payments to individuals who were the subjects of radiation experiments conducted by the Federal Government. "Sense of the Congress" contained in the Authorization Act of FY 1995 suggests that SecDef should identify mustard gas test subjects, notify them of the degree of their exposure, and give them some kind of commendation. In April we wrote to the Chairman of the HASC and stated that we concurred with the proposed legislation. On September 1, 1994, Mr. Goss wrote to SecDef and asked us to honor our commitment to support the legislation and commend these veterans and to notify them about their exposures. On September 22, Mr. Goss's office forwarded a list of potential test subjects to OUSD (P&R), which has been included here. We will begin immediately to make contact with the persons on this list. **At Tab 2 is (A) a copy of the final and proposed legislation, (B) Mr. Goss's September 1 letter reminding us of our commitment and our April 1994 letter concurring with the legislation,, and (C) our proposed response to Mr. Goss, (D) list of contacts from Mr. Goss's office.**

Biological Warfare Research - Summary We received updated information on the biological research programs via OASD (LA) from the information that was compiled by OASD (International Security Policy) while researching information for the non-proliferation treaties. The first page is a summary of our biological activities. The formal list of projects with number of volunteers is from the ISP report. We have been in contact with the ISP project manager for bio collection, Lisa Bronson. She said they did not have names, but that they would share whatever information they had when we were ready for it. Some of the contract personnel we have on our Battelle CBIAC contract did work on the bio project as a sub to BDM the principle contractor. **Tab 3 is a (A) a Summary Bio Factsheet, (B) a list of Bio Projects and (C) Chemical Agent Fact Sheets.**

Chemical Weapons Exposure Task Force (CWEST) -- The Chemical Weapons Exposure Task Force is led through my office. Members are senior analysts from several OSD offices and the Military Departments. It was established to oversee the efforts

directed by Dr. Perry to provide information on sites and individuals potentially exposed. To meet our goals, it was immediately obvious that our first priorities had to be design of the data bases we planned to develop and location of sites where information is stored. We worked closely with VA staff to design the data bases to ensure they would contain the information critical to their efforts. The group met formally several times in the first months of the effort. Formal meetings are less frequent now, but the members keep in regular contact on an informal basis. GAO has copies of these minutes. **Summary Sheet and Minutes at Tab 4.**

Chemical Weapons Testing Sites Using Human Test Subjects - Updated List

We have added Fort Detrick, MD; Fort Benning, GA; and Harts Island, NY to the list of human subject research test sites that was provided during the March 1993 hearing. Fort Detrick was the center for biological warfare research. There is a significant collection of records on Ft. Detrick at WNRC, Suitland. OUSD(P&R) analysts identified a group of medical files at NPRC St. Louis that were from the LSD testing around the late 60's early 70's using volunteers from Fort Benning. The Harts Island identification was made by two different methods. In November, 1993, VA forwarded to DoD a copy of a medical card and commendation from a veteran which clearly referenced mustard gas warfare tests. In December, 1993, NPRC St. Louis found a copy of correspondence between the Chemical Weapons Service and the Secretary of the Navy authorizing use of prisoners at the U. S. Navy Disciplinary Barracks at Harts Island, New York. As a result of an earlier visit by OUSD(P&R) to NPRC, the Director of the Military Records Section forwarded us copies. **Updated Human Test Site list at Tab 5. Copy of record validation on Harts Island at Tab 6. History of University of Chicago Toxicity Lab at Tab 7.**

Clinton Reply to Congressman Glen Browder - February 93 -- Glen Browder wrote to the President after publication of the NAS Report in January 1993, to urge him to commit the resources of DoD to finding and helping veterans. The President replied that the VA was diligently attempting to identify the veterans and they had asked for our help. *He told Mr. Browder this issue would not be treated as "business as usual."* **Tab 8 is Mr. Clinton's reply and the original letter from Mr. Browder.**

Database - Chemical and Biological Weapons Site Location -- This database contains information on where chemical and biological agents were tested, produced or stored, test dates; whether or not there were human test subjects; the agent used; and information on source documents for further reference. So far, there are about 500 sites, representing over two thousand entries in the automated database; these are not all test sites, many are storage or production sites, or transportation terminals. Not all information is available for each entry. Contractor support is being used to research and populate the database. To date, the automated contents of the database reflect information extracted from automated files at the Chemical/Biological Warfare Analysis Center and from files at the Technical Library at Edgewood Arsenal. The contractor is at this time at Dugway Proving Ground extracting information from the records holding area and the Technical Library. Our manual review has also identified additional experiments which

will be added to the database. We received additional funding and have now committed \$244K to this effort. Sample page from the database is at Tab 9.

Database - Personnel -- This database identifies individuals (military and civilian) who may have been exposed to chemical and/or biological agents and assists VA in their verification. The database contains available information on: name, service number or SSN, Military Department, rank, date of birth, age at exposure, current health status, agents and type of exposure, location, project name and start/end date, and record location and type (medical/personnel/technical). To date, there are 12,743 names in the database. Not all information is available for all entries. We have designed expanded personnel file software to capture information on exposures. Tab 10 is a breakdown of the sources for the names in the database and a sample page of file maintained by DMDC.

Edgewood Data on Experiments and Subjects -- LTC Rick Jackson, our former Army POC on the CWEST, uncovered information on the chemicals tested and the numbers of subjects at Edgewood. Information like this on each site where experiments were conducted would be invaluable in establishing a projected universe. Data at Tab 11. In March 1994, we located 7,000 names on automated tapes at Edgewood. The records are for experiments conducted from 1955 up through the 70's and include LSD test subjects. Edgewood converted the tapes for us and in August, and we obtained copies of the data. Sample of Information at Tab 12.

GAO Report - February, 1993 -- A GAO report was issued in February, 1993, which attempted: to identify all chemical and biological experiments; to review VA handling of claims; and to review VA's efforts to contact veterans. They cited a lack of data as a reason for difficulty in VA validating claims. Two-page summary of GAO results is at Tab 13.

GAO Study - September 1994 -- The GAO is conducting another review at the request of Congressman John Conyers, Chairman of the Subcommittee on Legislation and National Security, House Committee on Government Operations. This study started September, 1994. It is examining the efforts that DoD has been making to locate the names of test subjects from various types of research including radiological, chemical and biological. *Questions concerning the chemical weapons exposure study have been directed at the amount of resources (both fiscal and personnel) that have been put toward this effort, where the principle responsibility lies for the effort, and whether or not we have been making any effort to notify test subjects of the potential long term effects of their exposures.* Tab 14 is (A) Summary of GAO meetings, (B) entrance letter, and (C) Questions from Congressman Conyers via RECC.

Goss letter to President Clinton - January 1994 -- Congressman Porter Goss wrote to the President to remind him of the plight of veterans who were used in W.W.II chemical warfare experiments. He asked him not to let their sacrifice and patriotism be forgotten as we react to the needs of persons used in radiation experiments. Mr. Goss' letter is at

Tab 15 with a copy of another letter forwarding it to Ike Skelton, Chairman of the Subcommittee on Military Force and Personnel.

Identification of Individuals Exposed -- One of our best sources has been phone calls and letters. In some cases, these contacts have given us clues to additional information on sites and experiments. In addition, we have identified individuals through: review of records, technical reports, scientific notebooks, and/or other documents archived or stored at Federal and DoD records repositories. We have been especially interested in talking to veterans who seem to have knowledge of the testing activities carried out at the Naval Training Center Great Lakes since paper documentation on the tests have been so illusive. Mr. Nat Schnurman has recently provided us names from his personal research.

Human Experimentation - Fact Sheet -- Fact sheet at Tab 16.

Montgomery Letter to Secretary Aspin - January 22, 1993 -- Copy at Tab 17.

NAS Report - January, 1993 -- The NAS report focused on mustard and lewisite. Conclusions observed that there was a lack of follow-up on the human subjects; that the numbers of subjects were probably much higher than previously thought; and that tens of thousand of people (military and civilian) may have been exposed. They were concerned with difficulty of obtaining information from DoD. They found evidence of causal relationship between exposure and a list of specific health conditions (pp 4-5 of executive summary). **A copy of the Executive Summary is at Tab 18.**

Nuclear Test Personnel Review (NTPR) Program -- Established in 1978, this DoD Program, undertaken by the Defense Nuclear Agency, has developed an extensive support system to assist veterans of atmospheric nuclear tests in assessing the significance of their participation and radiation exposure. Veterans can obtain details of their participation, including radiation doses, and be informed of health care availability and other assistance by the VA. To date, they have identified over 400,000 individuals and spent over \$200 million. **Fact Sheets at Tab 19.**

Perry Letter to Mr. Montgomery - March 9, 1993 -- Our letter informing Mr. Montgomery of DoD actions to be taken concerning human test subjects. **Copy of letter at Tab 20.**

Perry memo to DoD Components - March 9, 1993 -- Our letter, directing the DoD components to provide information to OUSD(P&R) and to declassify. **Copy of memo at Tab 21.**

Records Repositories -- In addition to the National Archives in Suitland and St. Louis, to date, we have identified five major DoD records holding sites and one University site: Edgewood Arsenal, in MD; Naval Research Laboratory, in MD; Dugway Proving Ground, in UT; Army Chemical School Library, in AL; Rocky Mountain Arsenal, in CO; and the University of Chicago. We have most recently visited retrieved information from

the National Archives in Washington, D. C., and from one of their regional archives in Chicago. Information on the ships sunk at Bari Harbor was retrieved from the U. S. Coast Guard. P&R staff have visited all of the above sites to take inventory on the amount of data and to conduct a sample review of the content of the data. We also believe that additional information may be housed at as yet unidentified contractor facilities and universities. We are considering alternatives for locating and reviewing these sites. **Site by site summary at Tab 22.**

Records Review - Most of the data are not in collections of personnel or medical records. Many records are not indexed or sorted, and when they are, it is still not clear which records contain information relevant to our study. For example, records on exposures from occupational accidents at rocky Mountain Arsenal were listed on the automated index as Technical Investigations. Names of individuals can often be extracted from scientific notebooks; plans and operational orders; administrative correspondence such as interagency letters, memos, and messages; technical reports; personnel rosters; and morning reports. To ensure that all relevant information is extracted, a page by page review is required. Complicating the effort, much of the information is still classified and may contain weapons schematics, technical drawings, treaties, operational plans and directives, and scientific formulas. **Records Review issues and a sample of an archived Morning Report are at Tab 23.**

Resources -- No special office has been established to support this effort. When the project was initiated, it was assumed it would be done through existing resources by the various organizations. The Task Force was established to oversee the effort. The Military Departments put out instructions to all organizations to review records and files and report findings. Our first priority was to identify the locations where records were stored so that a more comprehensive review could follow. Four members of my staff dedicate a significant amount of time to this project, ranging from 100 percent for one individual and 10 to 30 percent for the others. During the week of February 22, a full-time Chemical Corps Officer reported for a one-year assignment to support the technical review of the records. I have also directed the Defense Manpower Data Center to provide support on an as-needed basis to develop and maintain the databases. Actual fiscal funding for contractor support from Battelle through the CBIAC has been \$244K.

Security and Privacy Act Issues -- Personal information, whether stored in personnel records, medical records, or even administrative records, is covered by the Privacy Act. We can provide information to VA; we can try to contact individuals; we can provide information to individuals who request information about themselves or, in some cases, a close relative; but we cannot open up the personnel data base to the general public. **Information at Tab 24.**

Testimony February 10, 1994. Military Forces and Personnel Subcommittee-HASC

This transcript is from the hearing concerning Porter Goss's bill, HR1055, to give commendations to veterans that were used as mustard gas test subjects during World War II. Based on our discussions with GAO, and with feedback from Service points of

contact that they have visited, those portions of the testimony that may come up during the upcoming hearing are highlighted. Hearing Transcript is at Tab 25, (A) Ms. Fites Testimony begins.

Update of Chemical Weapons Exposure Study for Congressional Staff- July 93

In July of 1993 members of the OUSD (P&R) staff briefed Congressional staff on the progress of the chemical weapons exposure study. A copy of the briefing package is at Tab 26.

Unit Records of WWII Chemical Warfare Service -- This information was taken from a history of the Army Chemical Warfare Service published in 1959 by the Office of the Chief of Military History for the Army. This document contains a descriptive title for the unit (Chemical Mortar or Smoke Generating Units), the unit designation, date activated, training dates, overseas service, and date and place of inactivation. A sample of the unit information is at Tab 27.

Utah and Colorado News Releases -- On September 20 we received an inquiry from Congressman McInnis's office at Pueblo, CO. We have the Pueblo Army Depot there, and apparently on 24 August there was a routine leaking incident where one of the employees was potentially exposed to mustard agent. The staffer requested information on symptoms of mustard agent exposure. OUSD (P&R) referred her to the NAS Report, and faxed her the Executive Summary which is at Tab 18. Contact with Army DCSOPS DAMO/FDB (Chemical Matters) confirmed that there was a routine leaking incident at the Depot. It had been reported to DCSOPS. The employee was treated at Fort Carson medical facility, and also at Fitzsimmons Army Medical Center. The diagnosis was possible mustard gas exposure with no residual effects. There were no obvious burns and a pulmonary examination was done. Dugway Proving Ground Press releases describe testing programs that were underway at Dugway during the February hearings. While of interest, they do not relate to historical experiments using human subjects. Press releases at Tab 28.

VA Sharing -- We continuously share data and information with VA staff. VA staff helped design our data bases to ensure that appropriate information would be included to support their efforts. Most recently we provided the Bari Harbor names extracted from historical records. In the past we provided a copy of the Preliminary Site Location Database from CBIAC, and a copy of the Service Records for Chemical Warfare Service Units W.W.II. In addition we were able to share information concerning exposures to veterans who served in India. VA sent us photographs of a veteran carrying munitions which he had submitted with his claim. Not only were we able to validate his claim by having a munitions expert at Edgewood Arsenal identify the mustard and phosgene canisters in the photo, the photos helped Edgewood verify that mustard was stored in Ondal, which is something they have suspected. The veterans unit deployment was a matter of record in the Service Records for Chemical Warfare Units. Tab 29 is a copy of the letter forwarding the site database and W.W.II unit list. Tab 30 is a copy of a package sent to us by VA and our response on the Ondal, India site.



OFFICE OF THE DIRECTOR OF
DEFENSE RESEARCH AND ENGINEERING

WASHINGTON, DC 20301-3030

17 MAR 1993

Honorable Jesse Brown
Secretary of Veterans Affairs
Department of Veterans Affairs
Washington, DC 20420

Dear Mr. Secretary:

We are continuing to review the January, 1993, report entitled "Veterans at Risk: The Health Effects of Mustard Gas and Lewisite," prepared by the National Academy of Sciences. Please be assured that we will make every effort to assist your Department in obtaining chemical agent exposure data on military personnel involved in mustard gas and Lewisite testing as you requested.

Specifically, we will assist in the following areas:

(a) Compilation of the names of exposed personnel, specific test protocols, and available data for mustard gas testing during and subsequent to World War II. Personnel data from Edgewood Arsenal mustard gas testing conducted between 1955 and 1965 will also be included.

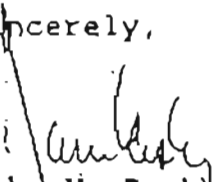
(b) Compilation of the names and exposure data for military chemical agent workers exposed to mustard gas or Lewisite via production, handling, or training. In addition, the names of personnel exposed to chemical agents during the Bari, Italy, harbor disaster will also be compiled.

(c) Identification of points of contact for each military service will be provided to assist your Department in expediting the collection of available information.

Additionally, the Deputy Secretary of Defense has signed a memorandum to release service individuals from any non-disclosure restrictions (e.g. oaths of secrecy) so that they may receive full medical evaluation and disability benefits as determined by the DVA.

We hope to provide the requested information this fiscal year and look forward to working with your Department on this significant health issue for our veterans.

Sincerely,


John M. Bachkosky
Deputy Director
Defense Research and Engineering



PERSONNEL AND
READINESS

OFFICE OF THE UNDER SECRETARY OF DEFENSE
4000 DEFENSE PENTAGON
WASHINGTON, D.C. 20301-4000



SEP 13 1994

MEMORANDUM FOR Department of Veterans Affairs (BVA), ATTN: Lance Peterson
(211 Room 644 1800G), 810 Vermont Avenue, N.W.,
Washington, DC 20420

SUBJECT: Listing of Personnel From Incident at Bari, Italy on December 2, 1943

1. Reference our telephone conversation last week on the subject of Bari, Italy.
2. Enclosed is a listing of a spreadsheet listing personnel who were present in the harbor at Bari, Italy on December 2, 1943, when it was raided by German bombers. This data was assembled mainly from report files from the National Archives and the U.S. Coast Guard. Additions will be made to the list as new information is uncovered. The source file (Microsoft EXCEL spreadsheet) is available.
3. Also enclosed is an explanation of the data, its sources, and any special problems encountered in its assembly.
4. Please feel free to call me at (703) 696-8710 if you require any more information.

FREDERICK A. KOLBRENER
Colonel, Chemical Corps
Staff-Chemical Officer

Enclosures
As stated



Listing of Personnel Present in Har. at Bari, Italy on December 2, 1943

Ship Name	Name	First	Middle	Rating	Branch	Service No.	Date Atci	Reference	Status	Exposed?	SSAN
John Bascom	Ainsworth	Walter	J	S1c	V-6, USNR	629 67 51	11/3/43	RG 38, NA	WIA Repat	Probable	
John Bascom	Anderson	Horace	W	GM3c	V-6, USNR	410 35 89	11/3/43	RG 38, NA	WIA Repat	Probable	
John Bascom	Apland	Ross	H	S1c	V-6, USNR	730 93 65	11/3/43	RG 38, NA	WIA Repat	Probable	
John Bascom	Baker	Reginald	J	S1c	V-6, USNR	202 89 83	11/3/43	RG 38, NA	WIA Repat	Probable	
John Bascom	Balconis	Francis	A	S1c	V-6, USNR	710 36 99	11/3/43	RG 38, NA	WIA DH		
John Bascom	Bauer	Robert	F	S1c	V-6, USNR	306 22 23	11/3/43	RG 38, NA	WIA DH		
John Bascom	Behm	Arthur	A	S1c	USNR	306 24 52	11/3/43	RG 38, NA	WIA Repat	Probable	
John Bascom	Benitz	Jesus	Leonides	Cook	Mer. Marine	Z 359 059		28 USCg Rcd	Repat		none
John Bascom	Bergman	Alfred		Deck Cadet	Mer. Marine	276 647		24 USCg Rcd	Repat		none
John Bascom	Bernhardt	Robert		S1c	USNR	280 05 48	11/3/43	RG 38, NA	WIA DH		
John Bascom	Bishop	Stanley		S1c	V-6, USNR	813 42 52	11/3/43	RG 38, NA	WIA Repat	Probable	
John Bascom	Bliss	Darrell	E	S1c	V-6, USNR	629 63 79	11/3/43	RG 38, NA	WIA DH		
John Bascom	Borges	John		S1c	V-6, USNR	202 83 38	11/3/43	RG 38, NA	WIA Repat	Probable	
John Bascom	Boyce	Robert	L	S1c	V-6, USNR	723 29 72	11/3/43	RG 38, NA	WIA Repat	Probable	
John Bascom	Brandenstein	Warren		S1c	V-6, USNR	710 36 59	11/3/43	RG 38, NA	WIA Repat	Probable	
John Bascom	Bright	Robert	J	S1c	V-6, USNR	202 85 77	11/3/43	RG 38, NA	WIA Repat	Probable	
John Bascom	Burngardner	Gerald		O.S.	Mer. Marine	Z 400 380		18 USCg Rcd	Repat		
John Bascom	Campo	Gus	Anthony	Hoseman	Mer. Marine	Z 407 904		21 USCg Rcd	Repat		
John Bascom	Carew	Warren		Basun	Mer. Marine	Z 205 843		40 USCg Rcd	WIA		
John Bascom	Carroll	Dallas	H	Wiper	Mer. Marine	Z 418 590		40 USCg Rcd	Repat		
John Bascom	Cosavant	Gabriel		Fireman	Mer. Marine	Z 354 924		21 USCg Rcd	Repat		
John Bascom	Cheong	Ng		Messman	Mer. Marine	Z 303 832		30 USCg Rcd	Repat		
John Bascom	Collazo	Jose	Maria	Utility	Mer. Marine	Z 237 434		41 USCg Rcd	Repat		
John Bascom	Collins	Allen	G	3d Mate	Mer. Marine	Z 261 343		31 USCg Rcd	DH	Yes	
John Bascom	Courcournels	John		O.E.	Mer. Marine	Z 272 761		17 USCg Rcd	Repat		
John Bascom	Elin	Nicholas		1st Asst Eng	Mer. Marine	Z 59 116		28 USCg Rcd	KIA		
John Bascom	Fox	Chester	D	S1c	V-6, USNR(SV)	850 83 20	11/3/43	RG 38, NA	WIA DH		
John Bascom	Franko	Theodore	M	S1c	V-6, USNR(SV)	821 71 39	11/3/43	RG 38, NA	WIA DH		
John Bascom	Furhman	Ray	E	Fireman	Mer. Marine	Z 318 349		22 USCg Rcd	WIA Repat		
John Bascom	Goldstein	David		Cox	V-6, USNR	614 49 00	11/3/43	RG 38, NA	WIA Repat	Probable	
John Bascom	Hamrick	Clinard	B	GM3c	V-6, USNR	656 17 60	11/3/43	RG 38, NA	WIA Repat	Probable	
John Bascom	Heinse	Leroy	C	Engine Cadet	Mer. Marine	146 036		23 USCg Rcd	Repat		
John Bascom	Herrick	Dean	Martin	Ch. Engr	Mer. Marine	239 286		40 USCg Rcd	Repat		
John Bascom	Hietman	Otto		Master	Mer. Marine	153 262		USCG Rcd	Repat	Yes	

Listing of Personnel Present in Hospital at Bari, Italy on December 2, 1943

John Bascom	Hughes	Anthony	J	1st Mate	Mer. Marine	Z 101 795		44	USCG Rcd	WIA		
John Bascom	James	Albert	E	Steward	Mer. Marine	Z 68 546		38	USCG Rcd	Repat		
John Bascom	Johnson	B	R	A.B.	Mer. Marine	Z 269 751		40	USCG Rcd	WIA		
John Bascom	Kelch	Ralph	L	FM/WT	Mer. Marine	Z 400 460		18	USCG Rcd	WIA Repat		
John Bascom	Kelly	Robert	T	SM3c	V-6, USNR	667 06 27	11/3/43	RG 38, NA	WIA Repat	Probable		
John Bascom	Kettunen	Oliver	O	A.B.	Mer. Marine	Z 8 690		22	USCG Rcd	WIA		
John Bascom	Keveess	Arthur	Sheppard	Radioman	Mer. Marine	Z 267 315		27	USCG Rcd	Repat		
John Bascom	Kopperrud	Romeo	N	3d Asst	Mer. Marine	138 667		33	USCG Rcd	Repat		
John Bascom	Kreimer	William	A	SM2c	V-6, USNR	612 36 51	11/3/43	RG 38, NA	WIA Repat	Probable		
John Bascom	Lefkowitz	Charles		A.B.	Mer. Marine	Z 376 392		29	USCG Rcd	Repat		
John Bascom	Lesesne	William	B	Purser	Mer. Marine	Z 208 346		38	USCG Rcd	WIA	Yes	
John Bascom	Upton	Roy		Jr. Radioman	Mer. Marine	Z 339 090		23	USCG Rcd	WIA		
John Bascom	Lysk	Stephen	Charles	Deck Engr	Mer. Marine	Z 236 654		25	USCG Rcd	Repat		
John Bascom	Margaritz	George		Wiper	Mer. Marine	Z 266 391		43	USCG Rcd	Repat		
John Bascom	Mastronardi	Gene	J	RM3c	V-6, USNR	601 15 67	11/3/43	RG 38, NA	WIA Repat	Probable		
John Bascom	McCallum	Gilbert		Oiler	Mer. Marine	Z 255 310		29	USCG Rcd	Repat		
John Bascom	Merkel	Stanley	A	3d Asst Engr	Mer. Marine	Z 152 930		24	USCG Rcd	MIA PD		
John Bascom	Morales	Alberto	C	Oiler	Mer. Marine	Z 70 834		34	USCG Rcd	Repat		
John Bascom	Myers	Albert		Messman	Mer. Marine	Z 369 691		17	USCG Rcd	Repat		
John Bascom	Norton	Donald	L	S1c	V-6, USNR	611 67 58	11/3/43	RG 38, NA	WIA Repat	Probable		
John Bascom	Raphael	Jacob		Fireman	Mer. Marine	Z 93 444		51	USCG Rcd	Repat		
John Bascom	Rayburn	Chester		GM3c	V-6, USNR	662 68 29	11/3/43	RG 38, NA	WIA DH			
John Bascom	Robbins	Kenneth	Thomas	S1c	V-6, USNR	203 20 61	10/16/43	RG 38, NA	WIA Repat	Probable		
John Bascom	Roberts	Lester	Frank	S1c	V-6, USNR(SV)	800 56 53	10/16/43	RG 38, NA	WIA DH			
John Bascom	Rochford	William	Anthony	S1c	V-6, USNR(SV)	811 37 62	10/16/43	RG 38, NA	WIA Repat	Probable		
John Bascom	Ruddiman	Rodney	John	S1c	USN	606 92 80	10/16/43	RG 38, NA	WIA Repat	Probable		
John Bascom	Rudolph	William	Raphael	2d Mate	Mer. Marine	Z 118 382		49	USCG Rcd	Repat		
John Bascom	Saari	Paul	William	Oiler	Mer. Marine	Z 5 552		19	USCG Rcd	Repat		
John Bascom	Stephens	George	Henry	A.B.	Mer. Marine	Z 236 384		29	USCG Rcd	Repat		
John Bascom	Stumpf	John	Lawrence	A.B.	Mer. Marine	Z 376 397		20	USCG Rcd	Repat		
John Bascom	Sullivan	Marcellus		A.B.	Mer. Marine	Z 141 342		35	USCG Rcd	DH	Yes	
John Bascom	Suon	Tan Yak		Messman	Mer. Marine	Z 303 834		40	USCG Rcd	WIA		
John Bascom	Valle	Florentino		Cook	Mer. Marine	Z 133 461		26	USCG Rcd	Repat		
John Bascom	Vesole	Kay	K	Ens	USNR	210513	11/3/43	RG 38, NA	WIA DH			
John Bascom	Vivas	Carlos	Albert	Cook	Mer. Marine	Z 73 794		37	USCG Rcd	Repat		

Listing of Personnel Present in Harbour at Bari, Italy on December 2, 1943

John Bascom	Walden	Eugene		Utility	Mer. Marine	Z 401 688	25	USCG Rcd	Repat	
John Bascom	Williams	Charles		2d Asst Engr	Mer. Marine	Z 161 731	33	USCG Rcd	WIA	
John Harvey	Bailey	Wilford	A	Oiler	Mer Marine	Z 377 445	25	USCG Rcd	MIA PD	
John Harvey	Barr	Kenneth	Edward	RM3c	V-6, USNR	615 89 75		RG 38, NA	MIA PD	NA
John Harvey	Bish	Arnold	Jay	S1c	V-6, USNR(SV)	822 42 95		RG 38, NA	MIA PD	NA
John Harvey	Blevins	Francis	A	Utilityman	Mer Marine	Z 377 865	19	USCG Rcd	MIA PD	
John Harvey	Braun	Carl	H	1st Asst Engr	Mer Marine	228 409	52	USCG Rcd	MIA PD	
John Harvey	Brennan	Lawrence	O	A.B.	Mer Marine	Z 91 376	24	USCG Rcd	MIA PD	
John Harvey	Brewer	Charles	Edward	S1c	V-6, USNR	602 33 72		RG 38, NA	MIA PD	NA
John Harvey	Brewer	Roy		S1c	V-6, USNR(SV)	855 60 46		RG 38, NA	MIA PD	NA
John Harvey	Brodie	Marvin	W	Engine Malsp	Mer Marine	274 723	21	USCG Rcd	MIA PD	
John Harvey	Brooks	Walton	N	O.S.	Mer Marine	Z 244 740	20	USCG Rcd	MIA PD	
John Harvey	Bruyn	Johan	Barand	S1c	V-6, USNR	726 72 29		RG 38, NA	MIA PD	NA
John Harvey	Cahill	James	L	Deck Cadet	Mer Marine	274 792	18	USCG Rcd	MIA PD	
John Harvey	Carter	Guy	A	Jr. Engr	Mer Marine	029 270	23	USCG Rcd	MIA PD	
John Harvey	Cronin	James	Francis	S1c	V-6, USNR	245 82 10		RG 38, NA	MIA PD	NA
John Harvey	Croxton	Cecil	C	A.B.	Mer Marine	Z 336 094	31	USCG Rcd	Died in fall	18-Nov-43
John Harvey	Deem	Luther	D		Mer Marine	Z 276 317 ?	38	USCG Rcd	MIA PD	
John Harvey	Desmarais	Philip	Joseph	S1c	V-6, USNR(SV)	806 72 97		RG 38, NA	MIA PD	NA
John Harvey	Dolan	Harold	F	Wiper	Mer Marine	Z 291 464	38	USCG Rcd	Repat	
John Harvey	Doland	James	Albert	Cox	V-6, USNR	706 06 42		RG 38, NA	MIA PD	NA
John Harvey	Dounetos	Michael	John	GM3c	V-6, USNR	204 72 19		RG 38, NA	MIA PD	NA
John Harvey	Driscoll	William	Gerard	S1c	V-6, USNR(SV)	801 92 95		RG 38, NA	MIA PD	NA
John Harvey	Duerr	Thomas	E	Carpenter	Mer Marine	Z 383 270	19	USCG Rcd	MIA PD	
John Harvey	Farnsworth	Frank Jr.	Eugene	GM3c	V-6, USNR	204 96 41		RG 38, NA	MIA PD	NA
John Harvey	Fellman	Frederick	J	Ch Steward	Mer Marine	Z 336 434	44	USCG Rcd	MIA PD	
John Harvey	Fletcher	Marshall	A	2d Cook/Bkr	Mer Marine	414 021	22	USCG Rcd	MIA PD	
John Harvey	Flynn	Less	U	Night Baker	Mer Marine	Z 284 906	35	USCG Rcd	Paid Off	21-Oct-43
John Harvey	Francis	Russell	A	Messman	Mer Marine	Z 170 241	21	USCG Rcd	Repat	
John Harvey	Fulton	Jasper		2d Cook	Mer Marine	Z 396 298	41	USCG Rcd	MIA PD	
John Harvey	Gabriel	Peter	P	Fireman/WT	Mer Marine	Z 23 901	19	USCG Rcd	Repat	
John Harvey	Gawlak	Joseph	Francis	S1c	V-6, USNR(SV)	807 88 19		RG 38, NA	MIA PD	NA
John Harvey	Gentile	John	Lawrence	S1c	V-6, USNR(SV)	802 18 41		RG 38, NA	MIA PD	NA
John Harvey	Glannetti	Domenic	Joseph	S1c	V-6, USNR	762 11 87		RG 38, NA	MIA PD	NA
John Harvey	Glauche	Richard	B	Deck Cadet	Mer Marine	276 197	19	USCG Rcd	MIA PD	

Listing of Personnel Present in Harbor at Bari, Italy on December 2, 1943

John Harvey	Gloddy	Richard	Paul	Stc	V-6, USNR	573 23 32		RG 38, NA	MIA PD	NA	
John Harvey	Goodwin	John	W	Utilityman	Mer Marine	Z 226 715	26	USCG Rcd	MIA PD		
John Harvey	Gore	Lloyd	E	Messman	Mer Marine	Z 174 113 D2	32	USCG Rcd	Repat		
John Harvey	Gronquist	John	L	3d Officer	Mer Marine	260 629	42	USCG Rcd	MIA PD		
John Harvey	Harrison, Jr.	Baylis	W	Utilityman	Mer Marine	Z 358 005	22	USCG Rcd	MIA PD		
John Harvey	Hopkins	Leroy		2d Asst Engr	Mer Marine	Z 997 738 D1	29	USCG Rcd	MIA PD		
John Harvey	Howard	Bob		A.B.	Mer Marine	Z 203 939	22	USCG Rcd	MIA PD		
John Harvey	Hutton	George	W	Utilityman	Mer Marine	Z 358 358	29	USCG Rcd	MIA PD		
John Harvey	Jones	Robert	F	Fireman/WT	Mer Marine	Z 110 725	26	USCG Rcd	MIA PD		
John Harvey	Justis, Jr.	Alvin	H	Engine Mdsp	Mer Marine	276 147	18	USCG Rcd	MIA PD		
John Harvey	Kaukolo	Toive	Jacob	GM3c	V-6, USNR	305 40 67		RG 38, NA	MIA PD	NA	
John Harvey	Killen	Robert	Bruce	Stc	V-6, USNR	604 73 98		RG 38, NA	MIA PD	NA	
John Harvey	Knowles	Edwin	F	Master	Mer Marine	150 908		USCG Rcd	MIA PD		
John Harvey	Kuhns	Dale	Edward	Stc	V-6, USNR(SV)	862 34 69		RG 38, NA	MIA PD	NA	
John Harvey	La Chapelle	Willard	E	3d Cook	Mer Marine	Z 315 356	35	USCG Rcd	Paid off	21-Oct-43	
John Harvey	Linehan	Patrick	Francis	Stc	V-6, USNR	762 10 64		RG 38, NA	MIA PD	NA	
John Harvey	Main	John	G	Oiler	Mer Marine	Z 380 090	28	USCG Rcd	MIA PD		
John Harvey	Majewsky	Stephen	M	Deck Engr	Mer Marine	Z 389 878	44	USCG Rcd	MIA PD		
John Harvey	Meade	Shelton	C	O.S.	Mer Marine	Z 381 421	21	USCG Rcd	MIA PD		
John Harvey	Morgan	Charles		Purser	Mer Marine	228 791	40	USCG Rcd	MIA PD		
John Harvey	Mrvan, Jr	John		Fireman/WT	Mer Marine	Z 400 581	24	USCG Rcd	MIA PD		
John Harvey	Nannery	Joseph		A.B.	Mer Marine	Z 99 393 D1	28	USCG Rcd	Repat		
John Harvey	Noel	Joseph	Henry	Stc	V-6, USNR	642 63 90		RG 38, NA	MIA PD	NA	
John Harvey	Nuckels	Clifford	Sheries	Stc	V-6, USNR	641 24 62		RG 38, NA	MIA PD	NA	
John Harvey	Odlund	Thorval	A	Bosun	Mer Marine	Z 285 706	51	USCG Rcd	MIA PD		
John Harvey	Paloso	James	Raymond	Stc	V-6, USNR(SV)	823 54 06		RG 38, NA	MIA PD	NA	
John Harvey	Panter	Leo		Radio Opr	Mer Marine	Z 162 063	33	USCG Rcd	MIA PD		
John Harvey	Rellly	John		1st Officer	Mer Marine	000 544	51	USCG Rcd	MIA PD		
John Harvey	Sadler	Leroy	F	A.B.	Mer Marine	Z 90 556	28	USCG Rcd	MIA PD		
John Harvey	Shattlers	David	Edward	Stc	V-6, USNR	644 65 05		RG 38, NA	MIA PD	NA	
John Harvey	Smith	Carl	W	O.S.	Mer Marine	Z 291 873	26	USCG Rcd	MIA PD		
John Harvey	Smith	Glenn	Earl	Stc	V-6, USNR(SV)	825 07 07		RG 38, NA	MIA PD	NA	
John Harvey	Smith	Robert	M	Wiper	Mer Marine	Z 229 085	33	USCG Rcd	MIA PD		
John Harvey	Spitz	Michael	J	Ch Cook	Mer Marine	Z 152 844	53	USCG Rcd	MIA PD		
John Harvey	Stanton	Andrew	Daniel	Stc	V-6, USNR	762 27 68		RG 38, NA	MIA PD	NA	

Listing of Personnel Present in Har... at Bari, Italy on December 2, 1943

John Harvey	Stasevitch	Elfm		Baker/2d Ck	Mer Marine	Z 144 888		48	USCG Rcd	Deserter	7-Oct-43	
John Harvey	Sufer	Edward	M	A.B.	Mer Marine	Z 284 643		34	USCG Rcd	MIA PD		
John Harvey	Thompson	George Jr.		Lt(jg)	D-V(S) USNR				RG 38, NA	MIA PD	NA	
John Harvey	Toth	Michael		Messman	Mer Marine	Z 90 614 05		39	USCG Rcd	Repat		
John Harvey	Warden	richard	D	Oiler	Mer Marine	Z 317 750		22	USCG Rcd	MIA PD		
John Harvey	Warner	Harold	J	A.B.	Mer Marine	Z 291 749		27	USCG Rcd	Off ship	11-Oct-43	
John Harvey	Wheeler	Paul	E	Utilityman	Mer Marine	Z 355 276		21	USCG Rcd	MIA PD		
John Harvey	White	John	J	Ch Engr	Mer Marine	089 232		38	USCG Rcd	MIA PD		
John Harvey	Wilson	George	William	SM3c	V-6, USNR	710 63 97			RG 38, NA	MIA PD	NA	
John Harvey	Young	Myron	E	2d Officer	Mer Marine	157 502		42	USCG Rcd	MIA PD		
John L. Motley	Abrams	Albert		Messman	Mer. Marine	Unknown			USCG Rcd	MIA PD		Unknown
John L. Motley	Adams	J	F	CPL	US Army	Unknown			USCG Rcd			
John L. Motley	Aeschlman	L	V	SGT	US Army	Unknown			USCG Rcd			
John L. Motley	Alberts	D	S	PVT	US Army	Unknown			USCG Rcd			
John L. Motley	Albrecht	E	A	PVT	US Army	Unknown			USCG Rcd			
John L. Motley	Alterice	Patrick	Angelo	SM3c	USN	250 78 83	9/13/43		RG 38, NA	MIA		
John L. Motley	Altman	C	B	PVT	US Army	Unknown			USCG Red			
John L. Motley	Anderson	G	R	PVT	US Army	Unknown			USCG Rcd			
John L. Motley	Bagdonas	John	F	O.S.	Mer. Marine	Unknown			USCG Rcd	WIA DH		Unknown
John L. Motley	Bailey	Kenneth	C	2LT	US Army	O-1589675			RG 24 NA	MIA PD		
John L. Motley	Belanger	Ernest		Fireman/WT	Mer. Marine	Unknown			USCG Rcd	MIA PD		Unknown
John L. Motley	Billington	R	R	PVT	US Army	Unknown			USCG Rcd			
John L. Motley	Bird	Francis	L	Wiper	Mer. Marine	Unknown			USCG Rcd	MIA PD		Unknown
John L. Motley	Bloomberg	Melvin	H	Radioman	Mer. Marine	Unknown			USCG Rcd	WIA DH		Unknown
John L. Motley	Bognacki	Charles	John	Cox	V-6, USNR	647 07 41	9/13/43		RG 38, NA	MIA		
John L. Motley	Brown	C	F	PVT	US Army	Unknown			USCG Rcd			
John L. Motley	Buchler	Anthony		A.B.	Mer. Marine	Unknown			USCG Rcd	MIA PD		Unknown
John L. Motley	Buck	Lee	D	Messman	Mer. Marine	Unknown			USCG Rcd	MIA PD		Unknown
John L. Motley	Cagliardi	Joseph		Bosun	Mer. Marine	Unknown			USCG Rcd	WIA DH		Unknown
John L. Motley	Cannella	J	G	PVT	US Army	Unknown			USCG Rcd			
John L. Motley	Chase	James		O.S.	Mer. Marine	Unknown			USCG Rcd	MIA PD		Unknown
John L. Motley	Chmiel	E	J	PVT	US Army	Unknown			USCG Rcd			
John L. Motley	Cleary	J	J	PVT	US Army	Unknown			USCG Rcd			
John L. Motley	Clinger	Charles		PFC	US Army	Unknown			USCG Rcd			
John L. Motley	Coffman	Clarence	E	1st Lt	US Army	Unknown			USCG Rcd			

Listing of Personnel Present in Honour of Bari, Italy on December 2, 1943

John L. Motley	Cannolly	N	F	PVT	US Army	Unknown		USCG Rcd		
John L. Motley	Contreras	Antonio	A	Oiler	Mer. Marine	Unknown		USCG Rcd	WIA DH	Unknown
John L. Motley	Couillard	Joseph	P	1st Asst Engr	Mer. Marine	Unknown		USCG Rcd	WIA DH	Unknown
John L. Motley	Daniels	Edward Jr.	Hilton	RM3c	USN	274 87 35	9/13/43	RG 38, NA	Repat	
John L. Motley	Davis	Thomas	C.	GM3c	V-6, USNR	651 02 35	9/13/43	RG 38, NA	MIA	
John L. Motley	Deuman	E	F	PVT	US Army	Unknown		USCG Rcd		
John L. Motley	Dickinson	William	C	Oiler	Mer. Marine	Unknown		USCG Rcd	KIA	Unknown
John L. Motley	Flawicz	Chester	B	Utility	Mer. Marine	Unknown		USCG Rcd	Repat	Unknown
John L. Motley	Flammang	R	W	PVT	US Army	Unknown		USCG Rcd		
John L. Motley	Fontnette	Richard		Utility	Mer. Marine	Unknown		USCG Rcd	WIA DH	Unknown
John L. Motley	Fracassi	A	J	PVT	US Army	Unknown		USCG Rcd		
John L. Motley	Frohlich	William	George	S1c	V-6, USNR	653 02 20	9/15/43	RG 38, NA	MIA	
John L. Motley	Gearrey	Harry	T	Utility	Mer. Marine	Unknown		USCG Rcd	MIA PD	Unknown
John L. Motley	Gilbert	John	L	Utility	Mer. Marine	Unknown		USCG Rcd	MIA PD	Unknown
John L. Motley	Gill	Louis		2d Cook/Bkr	Mer. Marine	Unknown		USCG Rcd	MIA PD	Unknown
John L. Motley	Gillette	Robert	M	2d Asst Engr	Mer. Marine	Unknown		USCG Rcd	WIA DH	Unknown
John L. Motley	Graham	C	A	PFC	US Army	Unknown		USCG Rcd		
John L. Motley	Harper	Thomas	Edward	Cox	USN	244 29 65	9/13/43	RG 38, NA	Repat	Unlikely
John L. Motley	Hawks	C	W	PFC	US Army	Unknown		USCG Rcd		
John L. Motley	Hayes	D		PFC	US Army	Unknown		USCG Rcd		
John L. Motley	Healy	Patrick	Joseph	S1c	V-6, USNR	647 17 42	9/13/43	RG 38, NA	MIA	
John L. Motley	Heeman	Harry	J	Ch Engr	Mer. Marine	Unknown		USCG Rcd	MIA PD	Unknown
John L. Motley	Hills	Henry	Clifford	S1c	V-6, USNR	630 85 16	9/27/43	RG 38, NA	MIA - Not Aboard???	
John L. Motley	Holland	Donald	H	A.B.	Mer. Marine	Unknown		USCG Rcd	WIA DH	Unknown
John L. Motley	Howard	Edwin	D	Deck Cadet	Mer. Marine	Unknown		USCG Rcd	DFW	Unknown
John L. Motley	Husband	Alfred	Stanley	S1c	USN	311 82 49	9/13/43	RG 38, NA	MIA	
John L. Motley	Hutton	H	P	SGT	US Army	Unknown		USCG Rcd		
John L. Motley	Iannantouni	Joseph	P	3d Cook	Mer. Marine	Unknown		USCG Rcd	MIA PD	Unknown
John L. Motley	Jackson	Osmond		2d Cook/Bkr	Mer. Marine	Unknown		USCG Rcd	Repat	Unknown
John L. Motley	Jones	H	W	PFC	US Army	Unknown		USCG Rcd		
John L. Motley	Jouett	R	L	PVT	US Army	Unknown		USCG Rcd		
John L. Motley	Koetzle	W	J	PVT	US Army	Unknown		USCG Rcd		
John L. Motley	Krol	W	J	PVT	US Army	Unknown		USCG Rcd		
John L. Motley	Kuhn	Merle		T/4	US Army	Unknown		USCG Rcd		
John L. Motley	Kundsicz	Sygmunt		Oiler	Mer. Marine	Unknown		USCG Rcd	MIA PD	Unknown

Listing of Personnel Present in Ho of Bari, Italy on December 2, 1943

John L. Motley	Lifton	Jay	F	Engr Cadet	Mer. Marine	Unknown		USCG Rcd	WIA DH	Unknown
John L. Motley	Lounsbury	Ivan	Burton	GM3c	V-6, USNR	648 32 43	9/13/43	RG 38, NA	WIA DH	
John L. Motley	Lowry	Albert	A	A.B.	Mer. Marine	Unknown		USCG Rcd	MIA PD	Unknown
John L. Motley	Martens	Paul		Ch Steward	Mer. Marine	Unknown		USCG Rcd	MIA PD	Unknown
John L. Motley	Martin	Gerald	Lester	S1c	V-6, USNR	622 73 47	9/13/43	RG 38, NA	Repat	
John L. Motley	Mastrostefano	Menilo	A	2d Cook/Bkr	Mer. Marine	Unknown		USCG Rcd	Repat	Unknown
John L. Motley	Mauricio	Eugnio		Fireman/WT	Mer. Marine	Unknown		USCG Rcd	WIA DH	Unknown
John L. Motley	Mc Grath	Edward	Anthony	GM3c	O-1, USNR	406 84 36	9/13/43	RG 38, NA	MIA	
John L. Motley	McGinnis	E	C	CPL	US Army	Unknown		USCG Rcd		
John L. Motley	Misiononilla	Louis	J	Messman	Mer. Marine	Unknown		USCG Rcd	KIA	Unknown
John L. Motley	Morrissey	John Jr.	Joseph	S1c(SM)	USN	202 73 34	9/17/43	RG 38, NA	MIA	
John L. Motley	Nasczniec	Frank	P	Maintenanc	Mer. Marine	Unknown		USCG Rcd	Repat	Unknown
John L. Motley	Niles	Graydon	B	Wiper	Mer. Marine	Unknown		USCG Rcd	MIA PD	Unknown
John L. Motley	Nugent	Thomas	Patrick	S1c	M-1, USNR	203 14 71	9/13/43	RG 38, NA	Repat	
John L. Motley	O'Brien	Patrick		Ch Mate	Mer. Marine	Unknown		USCG Rcd	KIA	Unknown
John L. Motley	Okolski	Stephen	Walter	S1c(SV)	V-6, USNR	801 43 69	9/13/43	RG 38, NA	WIA DH	
John L. Motley	Palfrey	Deane	Greer	Cox	USN	356 60 16	9/13/43	RG 38, NA		
John L. Motley	Pilecki	Wallace	James	S1c(SV)	V-6, USNR	809 08 03	9/13/43	RG 38, NA	WIA DH	
John L. Motley	Pizzo	George	Dom	S1c(SV)	USN	808 61 41	9/13/43	RG 38, NA	WIA DH	
John L. Motley	Popielarczyk	Joseph	Anthony	S1c(SV)	V-6, USNR	801 39 20	9/13/43	RG 38, NA	MIA	
John L. Motley	Reedy	J	R	PVT	US Army	Unknown		USCG Rcd		
John L. Motley	Reel	F	W	CPL	US Army	Unknown		USCG Rcd		
John L. Motley	Revelo	Marco	Sato	A.B.	Mer. Marine	Unknown		USCG Rcd	MIA PD	Unknown
John L. Motley	Rokoszak	Bernard	Walter	GM3c	V-6, USNR	809 07 89	9/13/43	RG 38, NA	MIA	
John L. Motley	Rokoszak	Charles	Joseph	S1c(SV)	V-6, USNR	809 07 99	9/13/43	RG 38, NA	WIA DH	
John L. Motley	Sadowy	Philip		3d Mate	Mer. Marine	Unknown		USCG Rcd	WIA DH	Unknown
John L. Motley	Scallion	Gerald	Edward	S1c(I)	USN	807 29 89	9/13/43	RG 38, NA		
John L. Motley	Schneider	Louis		CPT	US Army	Unknown		USCG Rcd		
John L. Motley	Scottas	Adam	Thomas	A.B.	Mer. Marine	Unknown		USCG Rcd	WIA	Unknown
John L. Motley	Seiling	Horace	R	O.S.	Mer. Marine	Unknown		USCG Rcd	MIA PD	Unknown
John L. Motley	Servay	Andrew		Messman	Mer. Marine	Unknown		USCG Rcd	MIA PD	Unknown
John L. Motley	Shearer	Edward	H	3d Asst Engr	Mer. Marine	Unknown		USCG Rcd	MIA PD	Unknown
John L. Motley	Sherwood	Reuel II	E	Ens	D-V(s)USNR		9/13/43	RG 38, NA	WIA DH	
John L. Motley	Shipley	F	E C	PFC	US Army	Unknown		USCG Rcd		
John L. Motley	Smith	Carl		Deck Engr	Mer. Marine	Unknown		USCG Rcd	Repat	Unknown

Listing of Personnel Present in H.C. at Bari, Italy on December 2, 1943

John L. Motley	Sobieski	S	B	SGT	US Army	Unknown		USCG Rcd		
John L. Motley	Southwick	Enos		2LT	US Army	Unknown		USCG Rcd		
John L. Motley	Spatharos	Emanuel		Fireman/WT	Mer. Marine	Unknown		USCG Rcd	WIA DH	Unknown
John L. Motley	Stevens	George	Riley	S1c	V-6, USNR	761 78 36	9/13/43	RG 38, NA	MIA	
John L. Motley	Stone	Phillip Jr.	Henry	S1c	V-6, USNR	203 64 54	9/13/43	RG 38, NA	WIA DH	
John L. Motley	Strangulis	Martin		Ch Cook	Mer. Marine	Unknown		USCG Rcd	WIA	Unknown
John L. Motley	Sugg	R	O	PVT	US Army	Unknown		USCG Rcd		
John L. Motley	Taboada	Edwardo		A.B.	Mer. Marine	Unknown		USCG Rcd	WIA DH	Unknown
John L. Motley	Tardanico	Daniel		S1c	V-6, USNR	809 07 92	9/13/43	RG 38, NA	MIA	
John L. Motley	Theriault	Raymond	Joseph	S1c	V-6, USNR	761 83 08	9/13/43	RG 38, NA	Repat	
John L. Motley	Thurmond	John	L	Clerk-Typist	Mer. Marine	Unknown		USCG Rcd	MIA PD	Unknown
John L. Motley	Trapasso	Thomas	Joseph	S1c	V-6, USNR	761 77 79	9/13/43	RG 38, NA	MIA	
John L. Motley	Tsimenis	Constantine		Master	Mer. Marine	Unknown		USCG Rcd	MIA PD	Unknown
John L. Motley	Waseck	Walter	William	GM3c	V-6, USNR	647 16 45	9/13/43	RG 38, NA	MIA	
John L. Motley	Williams	E	E	T/S	US Army	Unknown		USCG Rcd		
John L. Motley	Wilson	D	E	PVT	US Army	Unknown		USCG Rcd		
John L. Motley	Wittland	Harold	Lowell	S1c	V-6, USNR	668 63 73	9/13/43	RG 38, NA	WIA DH	
John L. Motley	Wozniak	Theodore		T/S	US Army	Unknown		USCG Rcd		
John L. Motley	Yewell	Fulton	E	2d mate	Mer. Marine	Unknown		USCG Rcd	MIA	Unknown
John L. Motley	Zahorsky	John		SM3c	V-6, USNR	650 48 50	9/13/43	RG 38, NA	MIA	
John L. Motley	Zemola	A	G	PVT	US Army	Unknown		USCG Rcd		
Joseph Wheeler	Aplinian	Edward		S1c	USNR	861 63 83		RG 38, NA	MIA	
Joseph Wheeler	Babbitt, Jr.	John	J	FM.WT	Mer. Marine	2411741	17	USCG Rcd	MIA PD	
Joseph Wheeler	Baggott	Edwin	B	A.B.	Mer. Marine	2333188	19	USCG Rcd	MIA PD	
Joseph Wheeler	Bain	Donald	Ian	S1c	USNR	801 21 49		RG 38, NA	MIA	
Joseph Wheeler	Barnard	William	R	A.B.	Mer. Marine	2117875	31	USCG Rcd	MIA PD	
Joseph Wheeler	Betten	Otto	J	Ch Engr	Mer. Marine	108 177	28	USCG Rcd	MIA PD	
Joseph Wheeler	Black	Troy	B	2d Cook/Bkr	Mer. Marine	2332684	19	USCG Rcd	Repat	
Joseph Wheeler	Blome	Cornelius	F	Asst Cook	Mer. Marine	2267888	22	USCG Rcd	MIA PD	
Joseph Wheeler	Brockway	George	W	Messman	Mer. Marine	2405680	25	USCG Rcd	Repat	
Joseph Wheeler	Bunch	George	D	Deck Maint	Mer. Marine	2288310	23	USCG Rcd	Repat	
Joseph Wheeler	Childress	Clarence	E	3d Asst Engr	Mer. Marine	253860	39	USCG Rcd	MIA PD	
Joseph Wheeler	Clyburn	Frank	Gregg	S2c	USNR	829 23 79		RG 38, NA	MIA	
Joseph Wheeler	Cooke	John	H	1st Asst Engr	Mer. Marine	2240816	43	USCG Rcd	MIA PD	
Joseph Wheeler	Cowan	John	Dudley	S1c	USNR	833 57 43		RG 38, NA	MIA	

Listing of Personnel Present in Hull at Bari, Italy on December 2, 1943

Joseph Wheeler	Devine	Carl	Buial	S1c	USNR	826 75 17		RG 38, NA	MIA		
Joseph Wheeler	Dragan	Jpseph	Michael	GM3c	USNR	642 14 84		RG 38, NA	MIA		
Joseph Wheeler	Drexler	John	Paul	S1c	USNR	817 54 08		RG 38, NA	MIA		
Joseph Wheeler	Falsh	Dalck		2d Asst Engr	Mer. Marine	2172 886	29	USCG Rcd	Repat		
Joseph Wheeler	Gardner	Eugene	J	Oiler	Mer. Marine	2379221	17	USCG Rcd	MIA PD		
Joseph Wheeler	Gamer	Ralph	Andrew	S1c	USNR	829 31 08		RG 38, NA	MIA		
Joseph Wheeler	Gordon	John	Frederick	S1c	USNR	809 69 85		RG 38, NA	MIA		
Joseph Wheeler	Graney	William Jr.	Cahill	S1c	USNR	801 73 10		RG 38, NA	MIA		
Joseph Wheeler	Grech	Paul	V	Ch. Cook	Mer. Marine	2158087	33	USCG Rcd	MIA PD		
Joseph Wheeler	Greene	James	William	S1c	USNR	832 72 94		RG 38, NA	MIA		
Joseph Wheeler	Gumbleton	George	Bernard	SM3c	USNR	607 47 49		RG 38, NA	Repat	Unlikely	
Joseph Wheeler	Hickey	Gerald	F	A.B.	Mer. Marine	2187229	30	USCG Rcd	MIA PD		
Joseph Wheeler	Holyoak	Arthur		O.S.	Mer. Marine	2381597	27	USCG Rcd	MIA PD		
Joseph Wheeler	Hooks	Joseph	F	Oiler	Mer. Marine	2356847	20	USCG Rcd	MIA PD		
Joseph Wheeler	Hubbard	Robert	Lee	S1c	USNR	826 49 84		RG 38, NA	MIA		
Joseph Wheeler	Hunter	John	William	S1c	USNR	601 32 16		RG 38, NA	Repat	Unlikely	
Joseph Wheeler	Jarrell	Edgar	Glenn	S1c	USNR	829 87 28		RG 38, NA	Repat	Unlikely	
Joseph Wheeler	Johnson	Mark	W	Jr. Asst Purser	Mer. Marine	2283367	27	USCG Rcd	MIA PD		
Joseph Wheeler	Lesniak	Joseph		A.B.	Mer. Marine	2282010D1	25	USCG Rcd	MIA PD		
Joseph Wheeler	List	Norman	Thomas	S1c	USNR	313 01 43		RG 38, NA	MIA		
Joseph Wheeler	Lundy	Edward	Joseph	S1c	USNR	600 79 73		RG 38, NA	Repat	Unlikely	
Joseph Wheeler	Maher	Robert	J	Utility	Mer. Marine	2444897	18	USCG Rcd	Repat		
Joseph Wheeler	McAlpine	George	W	Utility	Mer. Marine	2405820	32	USCG Rcd	Repat		
Joseph Wheeler	McCarthy	Frederick Jr.		S1c	USNR	810 46 61		RG 38, NA	Repat	Unlikely	
Joseph Wheeler	McFarlane	Roy	IR	FM.WT	Mer. Marine	2418065	20	USCG Rcd	MIA PD		
Joseph Wheeler	McGuinniss	John	Joseph	S1c	USNR	810 45 21		RG 38, NA	Repat	Unlikely	
Joseph Wheeler	McIntyre	Delmont	Verrill	S1c	USNR	205 88 53		RG 38, NA	Repat	Unlikely	
Joseph Wheeler	McQueen	Robert	P	O.S.	Mer. Marine	2159962	28	USCG Rcd	Repat		
Joseph Wheeler	Millam	Charles	Britton	S2c	USNR	575 28 65		RG 38, NA	Repat	Unlikely	
Joseph Wheeler	Miller	Lyndahl	Andrew	Cox	USNR	627 24 38		RG 38, NA	MIA		
Joseph Wheeler	Morris	Carleton	D	Radio Opr	Mer. Marine	23484	42	USCG Rcd	MIA PD		
Joseph Wheeler	Morrissey	Patrick		Master	Mer. Marine	165 968	61	USCG Rcd	MIA PD		
Joseph Wheeler	Newkirk	Roy	J	1st Mate	Mer. Marine	2101988D1	29	USCG Rcd	Repat		
Joseph Wheeler	Nobles	Eugene		Bosun	Mer. Marine	297289	31	USCG Rcd	MIA PD		
Joseph Wheeler	Orange	Walter	C	Wiper	Mer. Marine	2406666	33	USCG Rcd	Repat		

Listing of Personnel Present in Harbor at Bari, Italy on December 2, 1943

Joseph Wheeler	Page	Don	D	Oiler	Mer. Marine	Z402005	22	USCG Rcd	MIA PD	
Joseph Wheeler	Rodenas	Toribio		Deck Engr	Mer. Marine	Z99770	36	USCG Rcd	MIA PD	
Joseph Wheeler	Rorie, Jr.	John	B	O.S.	Mer. Marine	Z380477	21	USCG Rcd	MIA PD	
Joseph Wheeler	Rose	Richard	W	2d Radio Op	Mer. Marine	Z124544	25	USCG Rcd	Repat	
Joseph Wheeler	Ross	Paul	M	Utility	Mer. Marine	Z360316D1	42	USCG Rcd	Repat	
Joseph Wheeler	Rudnicki	Leonard	Anthony	S1c	USNR	805 48 75		RG 38, NA	Repat	Unlikely
Joseph Wheeler	Ryan	William	Joseph	S1c	USNR	761 93 29		RG 38, NA	MIA	
Joseph Wheeler	Schlubeck	Francis	B	Messman	Mer. Marine	Z405260	21	USCG Rcd	Repat	
Joseph Wheeler	Sears	Daniel	W	3d Mate	Mer. Marine	Z8371	25	USCG Rcd	MIA PD	
Joseph Wheeler	Sebastian	George	S	O.S.	Mer. Marine	Z380514	19	USCG Rcd	Repat	
Joseph Wheeler	Sheldon	William	D	2d Mate	Mer. Marine	Z312580	53	USCG Rcd	MIA PD	
Joseph Wheeler	Swisher	Bernard	E	Messman	Mer. Marine	Z445023	18	USCG Rcd	MIA pd	
Joseph Wheeler	Tait	William	M	O.S.	Mer. Marine	Z337018	20	USCG Rcd	MIA PD	
Joseph Wheeler	Thomas	John Jr.	Perry	S1c	USNR	256 43 67		RG 38, NA	MIA	
Joseph Wheeler	VanHorn	Harry	Gustav	GM3	USNR	650 47 34		RG 38, NA	Repat	Unlikely
Joseph Wheeler	Walsh	John	P	Ch. Steward	Mer. Marine	Z235715	27	USCG Rcd	Repat	
Joseph Wheeler	Weiss	William		FM.WT	Mer. Marine	Z272813	24	USCG Rcd	MIA PD	
Joseph Wheeler	Willig	John	Richard	RM3c	USNR	647 05 85		RG 38, NA	Repat	Unlikely
Joseph Wheeler	Yambrisak	George		Wiper	Mer. Marine	Z322598	22	USCG Rcd	Repat	
Lyman Abbott	Bijaczyk	Joseph	Edward	S1c	V-6.USNR	651 90 76		RG 38, NA	Repat	Yes
Lyman Abbott	Adamovicz	Stanley		Bosun	Mer. Marine	Z 260 668 D1	24	USCG Rcd	WIA DH	Possible
Lyman Abbott	Alvarez	Louis		S1c	V-6.USNR	707 77 81		RG 38, NA	Repat	Yes
Lyman Abbott	Armstrong	William	J	Ch Engr	Mer. Marine	Z28 935	54	USCG Rcd	WIA RS	Possible
Lyman Abbott	Baist	George	H	Cadet Engr	Mer. Marine	Z 362 052	19	USCG Rcd	WIA RS	Possible
Lyman Abbott	Baker	Earl		Oiler	Mer. Marine	Z 141 288	45	USCG Rcd		
Lyman Abbott	Belogh	Alexander	James	S1c	V-6.USNR	244 33 86		RG 38, NA	Repat	Yes
Lyman Abbott	Belobraydich	Victor	L	3d Cook	Mer. Marine	Z 336 428	36	USCG Rcd	WIA RS	Yes
Lyman Abbott	Binning	James	E	Jr Asst Purser	Mer. Marine	Z 357 768	31	USCG Rcd		
Lyman Abbott	Brown	Michael		2LT	USA	1585981		RG 38, NA	KIA	NA
Lyman Abbott	Brown	Michael		CPT	US Army	O-1585981		USCG Rcd	KIA	
Lyman Abbott	Burt	Leo	E	A.B.	Mer. Marine	Z338 787	23	USCG Rcd	WIA	Possible
Lyman Abbott	Chason	Robert	L	Fireman/WT	Mer. Marine	Z 359 229	24	USCG Rcd	WIA RS	Possible
Lyman Abbott	Clegg	Harold		O.S.	Mer. Marine	Z 358 781	22	USCG Rcd	WIA RS	Possible
Lyman Abbott	Cook	Jack	Buris	S2c	V-6.USNR	829 76 66		RG 38, NA	Repat	Yes
Lyman Abbott	Crews	Clarence	T	A.B.	Mer. Marine	Z 100 383	35	USCG Rcd		

Listing of Personnel Present in Ho at Bari, Italy on December 2, 1943

Lyman Abbott	Crook	Jonas	B	Oiler	Mer. Marine	Z 380 222D1	20	USCG Rcd	WIA RS	Possible	
Lyman Abbott	Dahlstrom	Carl	P.R.	Master	Mer. Marine			USCG Rcd	Retired		
Lyman Abbott	DeVore	Clyde	K	O.S.	Mer. Marine	Z 412 795	31	USCG Rcd	WIA RS	Yes	
Lyman Abbott	Dinan	John	Joseph	RM3c	V-6, USNR	707 82 73		RG 38, NA	Repat	Yes	
Lyman Abbott	Ebert	Charles	Louis	S1c	V-6, USNR	608 25 11		RG 38, NA	Repat	Yes	
Lyman Abbott	Fairman	James		Oiler	Mer. Marine	Z 99 159	37	USCG Rcd			
Lyman Abbott	Fraticeilli	Antonio	A	O.S.	Mer. Marine	Z 265 033	23	USCG Rcd	WIA	Possible	
Lyman Abbott	Futch	Charles Jr.	Richard	S1c	USN	269 06 06		RG 38, NA	Repat	Yes	
Lyman Abbott	Gilbert	Paul	V	Fireman/WT	Mer. Marine	Z 91 697	51	USCG Rcd	WIA RS		
Lyman Abbott	Goff	London	J	Messman	Mer. Marine	Z 249 255	23	USCG Rcd	WIA RS	Yes	
Lyman Abbott	Grice	Paul		Ch Cook	Mer. Marine	Z 36 136	41	USCG Rcd	WIA	Yes	
Lyman Abbott	Grotevant	Rexford	A	1st mate	Mer. Marine	Z 360 427	42	USCG Rcd	WIA	Unknown	
Lyman Abbott	Hamlin	James	Austin	Cox	USN	263 52 21		RG 38, NA	Repat	Yes	
Lyman Abbott	Hansen	Carl	W	Wiper	Mer. Marine	Z 242 847	37	USCG Rcd	WIA RS	Possible	
Lyman Abbott	Harstick	Irvin	E	Utility	Mer. Marine	Z 377 705	19	USCG Rcd	WIA	Yes	
Lyman Abbott	Helton	Coy	E	Utility	Mer. Marine	Z 383 614	20	USCG Rcd	WIA RS	Yes	
Lyman Abbott	Henson	Jack	Allen	SM3c	V-6, USNR	630 76 71		RG 38, NA	Repat	Yes	
Lyman Abbott	Hodak, Jr.	Peter	O	A.B.	Mer. Marine	Z 357 996	18	USCG Rcd	WIA	Possible	
Lyman Abbott	Hurst	Sidney		Messman	Mer. Marine	Z 333 435	31	USCG Rcd	WIA RS	Unknown	
Lyman Abbott	Krause	Leo	Lewis	GM2	V-6, USNR	651 02 48		RG 38, NA	WIA Repat	Yes	
Lyman Abbott	Ledoux	Rosario	P	1st Asst Engr	Mer. Marine	Z 318 403	37	USCG Rcd	WIA		
Lyman Abbott	Leesnitzer	Elmer		Deck Engr	Mer. Marine	Z 126 144	44	USCG Rcd	WIA RS	Yes	
Lyman Abbott	Libhart	Clifford	Glenn	GM3c	V-6, USNR	651 02 70		RG 38, NA	Repat	Yes	
Lyman Abbott	Link	Bernard	G	O.S.	Mer. Marine	Z 247 589	21	USCG Rcd	WIA RS	Yes	
Lyman Abbott	Lishman	Gordon	H	Utility	Mer. Marine	Z 192 665	25	USCG Rcd	WIA	Yes	
Lyman Abbott	Lowry	Len	O	A.B.	Mer. Marine	Z 396414	27	USCG Rcd	WIA RS	Yes	
Lyman Abbott	Lustri	Alfred	Armoned	S1c	V-6, USNR	710 67 97		RG 38, NA	KIA	Yes	
Lyman Abbott	Luxton	Huey	Wade	S2c	V-6, USNR	833 50 22		RG 38, NA	Repat	Yes	
Lyman Abbott	Maury	George	W	2d Asst Engr	Mer. Marine	BK 139 934	33	USCG Rcd	WIA RS	Yes	
Lyman Abbott	Meissner	Donald	Kinney	S2c	V-6, USNR	605 25 06		RG 38, NA	Repat	Yes	
Lyman Abbott	Mikusauskas	Anthony	V	3d Mate	Mer. Marine	Z 117 385	27	USCG Rcd	WIA	Unknown	
Lyman Abbott	Miller	Paul	Frederick	S2c	V-6, USNR	653 59 51		RG 38, NA	Repat	Yes	
Lyman Abbott	Mitchell	Henry	William	S2c	USN	826 21 07		RG 38, NA	Repat	Yes	
Lyman Abbott	Newhauser	Michael	Fred	S2c	V-6, USNR	710 69 69		RG 38, NA	Repat	Yes	
Lyman Abbott	Nicholls	Frank	H	3d Asst Engr	Mer. Marine	009 080	25	USCG Rcd	WIA RS	Yes	

Listing of Personnel Present in Hospital at Bari, Italy on December 2, 1943

Lyman Abbott	Nielsen	John		S2c	V-6, USNR	710 69 57		RG 38, NA	Repat	Yes	
Lyman Abbott	Niwenhous	Charles	F	Cadet Deck	Mer. Marine	270 519	19	USCG Rcd			
Lyman Abbott	Otembra, Jr.	Frank	J	2d mate	Mer. Marine	Z 42 641	25	USCG Rcd	WIA DH	NA	
Lyman Abbott	Raymond	Donald	Edward	S1c	V-6, USNR	305 77 11	8/20/43	RG 38, NA	WIA Repat	Yes	
Lyman Abbott	Riley	Arthur	S	Wiper	Mer. Marine	Z 70 168	30	USCG Rcd	WIA	Possible	
Lyman Abbott	Roark	James	Robert	GM3c	V-6, USNR	622 05 89		RG 38, NA	Repat	Yes	
Lyman Abbott	Salkay	Zoltan		Radio Opr	Mer. Marine	E 441 663	30	USCG Rcd	WIA RS	Yes	
Lyman Abbott	Scarlett	Robert	Horace	S1c	V-3, USNR	640 17 22	8/19/43	RG 38, NA	Repat	Yes	
Lyman Abbott	Scholl	Lloyd	Grover	S1c	V-6, USNR	650 41 81		RG 38, NA	Repat	Yes	
Lyman Abbott	Sells	Earl	Howard	S1c	V-6, USNR	614 73 18		RG 38, NA	WIA Repat	Yes	
Lyman Abbott	Thomas	Ralph	J	Maint	Mer. Marine	Z 149 800	32	USCG Rcd	WIA RS	Yes	
Lyman Abbott	Tischauer	Gene		Messman	Mer. Marine	Z 333 437	27	USCG Rcd	WIA RS	Yes	
Lyman Abbott	Townesley	Everett	O	Fireman/WT	Mer. Marine	Z 101 049	38	USCG Rcd	WIA RS	Unlikely	
Lyman Abbott	Tucker	Robert		A.B.	Mer. Marine	Z 375 718	21	USCG Rcd	WIA		
Lyman Abbott	Walker	Murdock		Ens	D-V(S)USNR		8/10/43	RG 38, NA	Repat	Yes	
Lyman Abbott	Walker	Robert	G	2d Cook/Bo	Mer. Marine	Z 380 251	33	USCG Rcd	WIA RS	Yes	
Lyman Abbott	Wells	Russell	Ross	GM3c	V-6, USNR	329 12 30		RG 38, NA	Repat	Yes	
Lyman Abbott	White	James	C	Ch Steward	Mer. Marine	Z 306 616	38	USCG Rcd		Yes	
Lyman Abbott	Wilcox	Francis	Edgar	S2c	V-6, USNR	245 29 98		RG 38, NA	Repat	Yes	
Lyman Abbott	Wisniewski	Stanley	Adam	S2c	V-6, USNR	245 43 86		RG 38, NA	Repat	Yes	
Lyman Abbott	Yorecka	Milton		S2c	V-6, USNR	800 04 11		RG 38, NA	Repat	Yes	
Lyman Abbott	Ziminski	Walter	Francis	S2c	V-6, USNR	609 06 25		RG 38, NA	Repat	Yes	
On the Dock	Johnson	Charles		CPL	US Army	371 3833		Phone Call	Died 1979	Yes	Claim Open
Samuel J. Tilden	Adams	Claude	Jepthe Jr	GM3c	V-3, USNR	656 18 06	6/23/43	RG 38, NA	Repat	Possible	
Samuel J. Tilden	Allison	Orin	C	Fireman/WT	Mer. Marine	Z 302 265		USCG Rcd	MIA PD	NA	
Samuel J. Tilden	Alvarado	Delfin		2d Asst Engr	Mer. Marine	Z 55 700		USCG Rcd	MIA PD	NA	
Samuel J. Tilden	Anderson	J	D	Ens	D-V(S), USNR		6/23/43	RG 38, NA	Repat	Possible	
Samuel J. Tilden	Aponte	Juan	E	1st Asst Engr	Mer. Marine	Z 90 017		USCG Rcd	MIA PD	NA	
Samuel J. Tilden	Appleton	Earl	R	3d Mate	Mer. Marine	276 109		USCG Rcd	Repat	Probable	
Samuel J. Tilden	Arkebower	Byron	T	Ch Engr	Mer. Marine	107 454		USCG Rcd	WIA Repat	Probable	
Samuel J. Tilden	Barrett	Robert	Miles	SM3c	USN	386 20 27	7/7/43	RG 38, NA	Repat	Possible	
Samuel J. Tilden	Barton	George	B	O.S.	Mer. Marine	Z 356 442		USCG Rcd	WIA	Probable	
Samuel J. Tilden	Benedetto	Vito	Joseph	Messman	Mer. Marine	Z 237 893		USCG Rcd	Repat	Probable	
Samuel J. Tilden	Blair	Joseph	L	Master	Mer. Marine			USCG Rcd	Repat	Probable	
Samuel J. Tilden	Boczek	John	J	Fireman/WT	Mer. Marine	Z 355 356		USCG Rcd	MIA PD	NA	

Listing of Personnel Present in Hq. at Bari, Italy on December 2, 1943

Samuel J. Tilden	Brown	Fred	W	Messman	Mer. Marine	Z 7 702		USCG Rcd	MIA PD	
Samuel J. Tilden	Butts	Harold	J	O.S.	Mer. Marine	Z 356 539		USCG Rcd	Repat	Probable
Samuel J. Tilden	Caills	James	M	Ch Mate	Mer. Marine	031 577		USCG Rcd	Repat	Probable
Samuel J. Tilden	Carafotes	Charles		S1c	V-6, USNR	761 87 55	7/7/43	RG 38, NA	WIA Repat	Possible
Samuel J. Tilden	Chernich	Peter	A	Jr. Engr	Mer. Marine	Z 407 179		USCG Rcd	MIA PD	NA
Samuel J. Tilden	Clurman	Samuel		A.B.	Mer. Marine	Z 65 868		USCG Rcd	Repat	Probable
Samuel J. Tilden	Decker	George	Lewis	Unk	USN 1	800 31 18		USCG Rcd	Unk	Possible
Samuel J. Tilden	Delegante	Alfred	Francis	S1c - PAX	USN 1	810 76 98		USCG Rcd	Unk	Possible
Samuel J. Tilden	Dial, Jr.	Virgil	E	2d Cook	Mer. Marine	Z 357 832		USCG Rcd	Repat	Probable
Samuel J. Tilden	DIGIroloma	Stephen	D	Oiler	Mer. Marine	Z 162 482		USCG Rcd	WIA Repat	Probable
Samuel J. Tilden	Donnelly	Robert	F	Engr Cadet	Mer. Marine	Z 333 542		USCG Rcd	Repat	Probable
Samuel J. Tilden	Fellciano	Armando		Utility man	Mer. Marine	Z 401 001		USCG Rcd	Not at Bari	NO
Samuel J. Tilden	Ferenc	Josef		A.B.	Mer. Marine	Z 238 286		USCG Rcd	Repat	Probable
Samuel J. Tilden	Files	Robert	A	2LT	US Army	O-1586573		USCG Rcd	Unk	Possible
Samuel J. Tilden	Gallant	Harry	Robert	SM3c	V-6, USNR	377 94 70	7/7/43	RG 38, NA	Repat	Possible
Samuel J. Tilden	Gonzalez	Antonio		Messman	Mer. Marine	Z 401 866		USCG Rcd	Not at Bari	NO
Samuel J. Tilden	Hendy	Frederick	A	Basun	Mer. Marine	Z 218 590		USCG Rcd	MIA PD	NA
Samuel J. Tilden	Hogen	Richard	E	Assf Cook	Mer. Marine	Z 357 777		USCG Rcd	WIA Repat	Probable
Samuel J. Tilden	Howard	Albert	E	O.S.	Mer. Marine	Z 249 631		USCG Rcd	Repat	Probable
Samuel J. Tilden	Humpheries	George	Badger	GM3c	V-3, USNR	657 50 06	6/23/43	RG 38, NA	Repat	Possible
Samuel J. Tilden	Hupy	Lester	B	Steward	Mer. Marine	Z 293 277		USCG Rcd	Repat	Probable
Samuel J. Tilden	Jorgenson	Robert	O	O.S.	Mer. Marine	Z 355 793		USCG Rcd	WIA DH	NA
Samuel J. Tilden	Kemp, Jr.	Albert	E	2d Mate	Mer. Marine	Z 170 693		USCG Rcd	WIA Repat	Probable
Samuel J. Tilden	Kenney	Gordon	P	Oiler	Mer. Marine	Z 341 465		USCG Rcd	WIA Repat	Probable
Samuel J. Tilden	Keys	William	Howard	S1c	USN	256 79 59	7/7/43	RG 38, NA	Repat	Possible
Samuel J. Tilden	Kascal	Severn	C	Wiper	Mer. Marine	Z 336 304		USCG Rcd	WIA Repat	Probable
Samuel J. Tilden	Krause	Frank	M	O.S.	Mer. Marine	Z 384 018		USCG Rcd	Repat	Probable
Samuel J. Tilden	Krupa	Henry	J	Fireman/WT	Mer. Marine	Z 273 149		USCG Rcd	MIA PD	NA
Samuel J. Tilden	Langley	Eddie	Jackson	S1c	V-6, USNR	656 66 95	6/23/43	RG 38, NA	Repat	Possible
Samuel J. Tilden	Leiner	Alexander		Carpenter	Mer. Marine	Z 303 191D1		USCG Rcd	Repat	Probable
Samuel J. Tilden	Lund	John	R	Messman	Mer. Marine	Z 268 917		USCG Rcd	Repat	Probable
Samuel J. Tilden	Madill	J	Stanley	Jr Assf Purser	Mer. Marine	255 120		USCG Rcd	Repat	Probable
Samuel J. Tilden	Martin	Edward	Augustus	S1c	V-6, USNR	205 39 23	7/7/43	RG 38, NA	Repat	Possible
Samuel J. Tilden	Martin	Winfel	Walter	S1c	V-6, USNR	617 75 42	6/23/43	RG 38, NA	Repat	Possible
Samuel J. Tilden	Martinez	Francisco		Wiper	Mer. Marine	Z 247 337		USCG Rcd	Repat	Probable

Listing of Personnel Present in Ho. at Bari, Italy on December 2, 1943

Samuel J. Tilden	McCoskey	Maurice	P	Deck Engr	Mer. Marine	Z 103 993	Left 7/43	USCG Rcd	Not at Bari	NO	
Samuel J. Tilden	Meilio	Angelo		Oiler	Mer. Marine	Z 160 541		USCG Rcd	Not at Bari	NO	
Samuel J. Tilden	Mitchell	Thomas	Howard	GM3c	USN	272 73 32	7/7/43	RG 38, NA	Repat	Possible	
Samuel J. Tilden	Morse	Winston	Elbert	S1c	V-6, USNR	823 31 35	7/7/43	RG 38, NA	Repat	Possible	
Samuel J. Tilden	Murphy	Joseph	W	Messman	Mer. Marine	Z 389 571		USCG Rcd	WIA Repat	Probable	
Samuel J. Tilden	Nash	Albert		O.S.	Mer. Marine	Z 269 526		USCG Rcd	WIA Repat	Probable	
Samuel J. Tilden	Nelson	Raymond	Edward	GM3c	USN	386 20 27	7/7/43	RG 38, NA	Repat	Possible	
Samuel J. Tilden	Petraski	Edward	L	Radio Opr	Mer. Marine	Z 390 721		USCG Rcd	Repat	Probable	
Samuel J. Tilden	Queen	D	B	S1c	V-6, USNR	557 40 61	7/7/43	RG 38, NA	Repat	Possible	
Samuel J. Tilden	Romey	Morris	Joseph	RM3c	V-6, USNR	662 94 63	7/21/43	RG 38, NA	Repat	Possible	
Samuel J. Tilden	Suluk	Roman		Ch Cook	Mer. Marine	Z 407 291		USCG Rcd	WIA Repat	Probable	
Samuel J. Tilden	Shipman	Odell		S1c	V-6, USNR	677 09 97	7/7/43	RG 38, NA	WIA Repat	Possible	
Samuel J. Tilden	Shultz	Ralph	Edgar	S1c	V-6, USNR	552 61 07	6/23/43	RG 38, NA	Repat	Possible	
Samuel J. Tilden	Stokes	William	Donald	S1c	V-6, USNR	668 23 34	6/23/43	RG 38, NA	Repat	Possible	
Samuel J. Tilden	Tardif	Joseph	J	O.S.	Mer. Marine	Z 283 161		USCG Rcd	Not at Bari	NO	
Samuel J. Tilden	Termotto	Peter	Anthony	S1c	V-6, USNR	710 26 27	6/23/43	RG 38, NA	Repat	Possible	
Samuel J. Tilden	Tone	Francis	B	Engr Cadet	Mer. Marine	274 650		USCG Rcd	MIA PD	NA	
Samuel J. Tilden	Turner	James	Hartford	S1c	V-6, USNR	634 53 89	7/7/43	RG 38, NA	Repat	Possible	
Samuel J. Tilden	Van Note	Robert	Samuel	S1c	V-6, USNR	826 23 91	6/23/43	RG 38, NA	Repat	Possible	
Samuel J. Tilden	Viereck	Philip	George	S1c	V-6, USNR	817 32 02	6/23/43	RG 38, NA	Repat	Possible	
Samuel J. Tilden	Wattenmeyer	George	Milland	S1c	USN	244 33 17	7/7/43	RG 38, NA	Repat	Possible	
Samuel J. Tilden	Waters	William	Walter	S1c	V-6, USNR	605 69 18	6/23/43	RG 38, NA	Repat	Possible	
Samuel J. Tilden	Welmer	John		Deck Engr	Mer. Marine	Z 116 673		USCG Rcd	WIA Repat	Probable	
Samuel J. Tilden	White	Benjamin	Charles	S1c	V-6, USNR	821 51 70	6/23/43	RG 38, NA	Repat	Possible	
Samuel J. Tilden	Whitley	John	Fillmore Jr	S1c	V-6, USNR	826 23 12	6/23/43	RG 38, NA	Repat	Possible	
Samuel J. Tilden	Witkowski	Leonard		S1c	V-6, USNR	805 25 77	7/7/43	RG 38, NA	WIA Repat	Possible	
Samuel J. Tilden	Young	Lawrence	William	S1c	V-6, USNR	612 62 87	7/7/43	RG 38, NA	Repat	Possible	

Key to Bari, Italy List Abbreviations

DFW - Died from Wounds

DH - Died in Hospital

Exposed? - Refers to confirmed mustard burns (Yes, No, Unlikely, Possible, or Probable)

KIA - Killed in Action

MIA - Missing in Action

NA - National Archives

PD - Presumed Dead

Repat - Repatriated to the United States

RG - Record Group

RS - Returned to ship

USCG Rcd - US Coast Guard Records

WIA - Wounded in Action

Note: Some U.S. Navy Armed Guards were reassigned to other ships for duty.

Notes of Explanation on the

List of Personnel at Bari, Italy During the Raid on December 2, 1943

1. This data was assembled mainly from files from the National Archives and the U.S. Coast Guard. No lists of passengers aboard or others present in the harbor that night have been located. Research yielded lists for Navy gunnery (U.S. Navy Armed Guards) personnel and Merchant Marine sailors aboard the ships and these personnel were added to the list. A list of Army personnel was located in the records for the S.S. *John L. Motley*, but whether these personnel were aboard at the time of the attack is not clear. The names are in this listing, but do not contain identifying service numbers. Identity of a few of the cargo security officers has been found and they are also listed. The source file is a Microsoft EXCEL spreadsheet.

2. The list is as accurate as can be assembled at the present time. It may omit personnel or might contain names of a few who were not in the harbor that night. One of the major problems with this incident is that at least three of the ships carried high explosives and exploded after being bombed. Consequently, there were huge numbers of casualties in the harbor resulting in utter chaos. Adding to that situation was the fact that one of the ships carried a SECRET cargo of mustard gas bombs. Casualties were taken to any one of four U.S. or Allied hospitals. There were few or no survivors from some of the vessels depending on their crew's and the U.S. Navy Armed Guards' shore leave status at the time of the attack. Hospital records for the Allied hospitals are not available and the single U.S. hospital's files have not yet been located. According to a book about the incident, hospital records at British hospitals were changed to remove references to mustard gas by order of Sir Winston Churchill.

3. It should be noted that the column headings are only on the first page, but are generally self-explanatory. The one anomaly is that under the column headed "Date Attached," one of two pieces of data might be found. In the case of the U.S. Navy Armed Guard gun crews the date they were attached to the ship is listed (if available). For the Merchant Marine sailors, their age at the time is given. The last page is a key to abbreviations used in the list. Service numbers were included for each military person (if found in documentation), but for the Merchant Marine sailors, their certificate of identification number is in the service number column. Social Security Account Numbers (SSAN) for the Merchant Marine were extracted from Shipping Articles. In three cases, the fact that personnel were discharged from the ship prior to arrival at Bari is reflected (*SS John Harvey*).

4. This list was assembled by Colonel Fred Kolbrener and Mrs. Cynthia Hansen, Information Resource Management Office, Office of the Under Secretary of Defense for Personnel and Readiness. They may be reached at (703) 696-8710 if you require any more information.

JRM

103D CONGRESS
2d Session

HOUSE OF REPRESENTATIVES

REPORT
103-701

NATIONAL DEFENSE AUTHORIZATION
ACT FOR FISCAL YEAR 1995

CONFERENCE REPORT

TO ACCOMPANY

S. 2182



AUGUST 12, 1994.—Ordered to be printed

*Final Legislation Mustard is as
Sense of Congress on Commendation
(Original HR 1055 Mr. Goss)*

2-A

icer or employee, or an employee of a con-
 ay be, at the end of the fiscal year.
 of cases in which an appeal was made from
 r any or revoke a security clearance
 u. in which the appeal resulted in the
 n of the security clearance.

**USE OF LOW-ENRICHED URANIUM AS FUEL FOR
 NAVAL REACTORS.**

REPORT.—Not later than June 1, 1995,
 shall submit to the Committees on Armed
 and House of Representatives a report on the
 uranium (instead of highly-enriched uranium)
 reactors.

REPORT.—The report shall include an assess-

ages and disadvantages of the use of low-en-
 riched uranium) as fuel for
 reactors.

such use on the following:

g performance, ship displacement, and re-
 cluding the full range of plausible trade-
 offing performance, ship displacement, and
 that may result from such use.

tion costs and operating costs.

fuel cycles.

of the United States for the nonprolifera-
 tion weapons, including the proposal of the
 global ban on the production of fissile mate-

rials of such use for current and future
 nuclear-powered naval vessels.

ity and effectiveness of safeguards under
 highly-enriched uranium in relation to the
 costs of safeguards under naval fuel cy-
 cles of low-enriched uranium.

heft or diversion of low-enriched uranium
 for low-enriched uranium in relation to
 diversion of highly-enriched uranium under
 highly-enriched uranium.

avings that might be achieved, and the
 costs that might be incurred, as a result of
 using low-enriched uranium instead of highly-enriched ura-
 nium nuclear reactors.

ual information that the Secretary of the
 appropriate.

**Subtitle F—Congressional Findings, Poli-
 cies, Commendations, and Commemora-
 tions**

**SEC. 1051. SENSE OF CONGRESS CONCERNING COMMENDATION OF IN-
 DIVIDUALS EXPOSED TO MUSTARD AGENTS DURING
 WORLD WAR II TESTING ACTIVITIES.**

(a) **SENSE OF CONGRESS.**—It is the sense of Congress that the
 Secretary of Defense should issue to each individual described in
 subsection (b) a commendation in honorary recognition of the indi-
 vidual's special service, loyalty, and contribution to the United
 States.

(b) **COVERED INDIVIDUALS.**—Individuals referred to in sub-
 section (a) are those individuals who, as members of the Armed
 Forces or employees of the Department of War during World War II,
 were exposed (without their knowledge or consent) to mustard
 agents in connection with testing performed by the Department of
 War during that war.

(c) **NOTIFICATION OF EXPOSURE.**—The Secretary of Defense shall
 notify each surviving individual described in subsection (b) of—

(1) the exposure described in subsection (b);

(2) the possible health effects of the exposure that are
 known to the Secretary; and

(3) the likely options available to the individual for medical
 treatment for any adverse health effects resulting from the expo-
 sure.

(d) **FURNISHING OF INFORMATION TO SECRETARY OF VETERANS
 AFFAIRS.**—The Secretary of Defense shall provide to the Secretary of
 Veterans Affairs any information of the Department of Defense re-
 garding the exposure described in subsection (b), including the
 names of the individuals described in subsection (b).

**SEC. 1052. USS INDIANAPOLIS (CA-35): GALLANTRY, SACRIFICE AND A
 DECISIVE MISSION TO END WW II.**

(a) **FINDINGS.**—Congress makes the following findings:

(1) The USS INDIANAPOLIS served the people of the Unit-
 ed States with valor and distinction throughout World War II
 in action against enemy forces in the Pacific Theater of Oper-
 ations from 7 December 1941 to 29 July 1945.

(2) The fast and powerful heavy cruiser with its courageous
 and capable crew, compiled an impressive combat record dur-
 ing her victorious forays across the battle-torn reaches of the
 Pacific, receiving in the process ten hard-earned Battle Stars
 from the Aleutians to Okinawa.

(3) This mighty ship repeatedly proved herself a swift,
 hard-hitting weapon of our Pacific Fleet, rendering invaluable
 service in anti-shipping, shore bombardments, anti-air and in-
 vasion support roles, and serving with honor and great distinc-
 tion as Fifth Fleet Flagship under Admiral Raymond Spruance,
 USN, and Third Fleet Flagship under Admiral William F. Hal-
 sey, USN.

(4) This gallant ship, owing to her superior speed and
 record of accomplishment, transported the world's first oper-

Original HR1055

of 2 items

CQ'S WASHINGTON ALERT 02/08/94

HR1055

Goss (R-FL)
Introduced in House

02/23/93

(60 lines)

To direct the Secretary of Defense to issue a commendation to each individual exposed to mustard agents during World War II, and for other purposes.

Special typefaces used in this bill version:

// \\ Italic
!! !! Bold roman

Item Key: 2062

103D CONGRESS
1ST SESSION

H. R. 1055

To direct the Secretary of Defense to issue a commendation to each individual exposed to mustard agents during World War II, and for other purposes.

=====

IN THE HOUSE OF REPRESENTATIVES

February 23, 1993

Mr. GOSS (for himself, Mr. FRANK of Massachusetts, Mr. BROWDER, and Mr. BILIRAKIS) introduced the following bill; which was referred to the Committee on Armed Services

=====

A BILL

To direct the Secretary of Defense to issue a commendation to each individual exposed to mustard agents during World War II, and for other purposes.

//Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,\\

!!SECTION 1. ISSUANCE OF COMMENDATION TO INDIVIDUALS EXPOSED TO MUSTARD AGENTS DURING WORLD WAR II. !!

(a) IN GENERAL.--The Secretary of Defense shall issue to each individual described in subsection (b) a commendation in honorary recognition of the individual's special service, loyalty, and contribution to the United States.

(b) COVERED INDIVIDUALS.--An individual referred to in section (a) is an individual who, as a member of the armed forces or an employee of the Department of War, was exposed to mustard agents in connection with testing performed by the Department of War during World War II.

11SEC. 2. NOTIFICATION OF EXPOSURE. 11

The Secretary of Defense shall notify each individual described in section 1 of the exposure described in such section, the possible health effects of the exposure, and the likely options available to the individual for medical treatment for health effects resulting from the exposure.

11SEC. 3. AVAILABILITY OF INFORMATION. 11

The Secretary of Defense shall make available to the Secretary of Veterans Affairs any information of the Department of Defense regarding the exposure described in section 1, including the names of the individuals subjected to the exposure.

2 of 2 items

CQ's WASHINGTON ALERT 02/08/94

HR3743

Frost (D-TX)
Introduced in House

01/26/94

(346 lines)

To provide for payments to individuals who were the subjects of radiation experiments conducted by the Federal Government.

Special typefaces used in this bill version:

// \ \ Italic
|| || Bold roman

Item Key: 9832

103D CONGRESS
2D SESSION

H. R. 3743

To provide for payments to individuals who were the subjects of radiation experiments conducted by the Federal Government.

=====

IN THE HOUSE OF REPRESENTATIVES

January 26, 1994

Mr. FROST introduced the following bill; which was referred to the Committee on the Judiciary

A BILL

To provide for payments to individuals who were the subjects of radiation experiments conducted by the Federal Government.

//Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,\\

!!SECTION 1. SHORT TITLE.!!

This Act may be cited as the "Radiation Experimentation Compensation Act of 1994".

!!SEC. 2. FINDINGS, PURPOSE, AND APOLOGY.!!

(a) FINDINGS.--The Congress finds that--

(1) since the 1940's, the Federal Government has intentionally conducted secret radiation experiments in the United States without the informed consent or knowledge of the individuals on whom the experiments were performed;

(2) such radiation experiments included, but were not limited to, experiments involving injections of plutonium, ingestion of irradiated food, exposure to atmospheric radiation, and the prescription of radioactive medication to pregnant women;

(3) the Federal Government performed such experiments not in order to achieve medical or health benefits for the individuals used in the tests, but for research purposes, to allow Federal Government scientists and health specialists to study the effects of radiation on the human body;

(4) at the time of such experiments and in the years following the experiments, the Federal Government failed to inform the individuals tested, or their families, about the nature and effects of the tests;

(5) the Federal Government has harmed the subjects of such radiation experiments;

(6) the Congress presumes that the exposure to radiation of the subjects of such experiments has generated an excess of cancers and other debilitating diseases and health problems for such subjects;

(7) the Federal Government should recognize that the lives and health of the innocent individuals who were the subjects of such experiments were put at risk by the individuals' unknowing and involuntary participation in radiation experiments; and

(8) the Federal Government should assume responsibility for the harm caused by its actions regarding the experiments.

(b) PURPOSE.--It is the purpose of this Act to establish a procedure to make partial restitution to the individuals described in subsection (a) for the burdens they have borne for the Nation as a whole, although monetary compensation can never fully compensate them.

(c) APOLOGY.--The Congress apologizes on behalf of the Nation to the individuals described in subsection (a) and their families for the hardships they have endured because of the experiments described in subsection (a).

!!SEC. 3. TRUST FUND.!!

(a) ESTABLISHMENT.--There is established in the Treasury of the United States a trust fund to be known as the "Radiation Experimentation Compensation Trust Fund" (in this Act referred to as the "Fund"), which shall be administered by the Secretary of the Treasury.

(b) INVESTMENT OF AMOUNTS IN FUND.--Amounts in the Fund shall be invested in accordance with section 9702 of title 31, United States Code, and any interest on, and proceeds from, any such investment shall be credited to and become a part of the Fund.

(c) AVAILABILITY OF FUND.--Amounts in the Fund shall be available only for disbursement by the Attorney General under section 5.

(d) TERMINATION.--

(1) TIME OF TERMINATION.--The Fund shall terminate not later than the earlier of--

(A) the date on which the amount authorized to be appropriated to the Fund by subsection (e), and any income earned on such amount, have been expended from the Fund; or

(B) 22 years after the date of the enactment of this Act.

(2) AMOUNTS REMAINING IN FUND.--At the end of the 22-year period referred to in paragraph (1)(B), if all of the amounts in the Fund have not been expended, investments of amounts in the Fund shall be liquidated, the receipts of such liquidation shall be deposited in the Fund, and all funds remaining in the Fund shall be deposited in the miscellaneous receipts account in the Treasury.

(e) AUTHORIZATION OF APPROPRIATIONS.--There are authorized to be appropriated to the Fund \$100,000,000. Any amount appropriated pursuant to this subsection is authorized to remain available until expended.

!!SEC. 4. CLAIMS ELIGIBLE FOR PAYMENT.!!

(a) IN GENERAL.--Any individual who, without the individual's informed consent, was intentionally exposed to radiation as a subject in an experiment of the Federal Government at any time during the period beginning on January 1, 1940, and ending on December 31, 1974, shall receive \$50,000 if--

(1) a claim for such payment is filed with the Attorney General by or on behalf of such individual; and

(2) the Attorney General determines, in accordance with

section 5(b), that the claim meets the requirements of this Act.

(b) DEFINITIONS.--For purposes of this section:

(1) The term "experiment" means a test or other action that is conducted primarily for research purposes to determine the effect of exposure to radiation on the human body.

(2) The term "exposed to radiation" means caused to come into contact with any radioactive substance or material by means including, but not limited to, injection, ingestion, inhalation, or prescription of, or skin exposure to, any radioactive substance or material.

(3) The term "Federal Government" means--

(A) the legislative, judicial, or executive branch of the government of the United States, or any agency or instrumentality of such a branch;

(B) any person or entity whose actions regarding an experiment under which humans were exposed to radiation were funded in any manner, approved, authorized, supervised, or contracted for, by an entity referred to in subparagraph (A); or

(C) any person or entity that was funded in any manner, approved, authorized, supervised, or contracted with, wholly or partially, by an entity referred to in subparagraph (A) during a time period in which an entity referred to in subparagraph (A) had knowledge that such person or entity was conducting any experiment under which humans were exposed to radiation.

(4) The term "informed consent" means consent by an individual (or the individual's parent or legal guardian, in the case of an individual who was a minor or was incompetent at the relevant time), to the individual's participation in an experiment, after a full disclosure of the nature and purpose of the experiment and its possible consequences that was sufficient to allow the individual (or the individual's parent or legal guardian, in the case of an individual who was a minor or was incompetent at the relevant time) to intelligently exercise judgment to decide whether the individual should participate in the experiment.

!!SEC. 5. DETERMINATION AND PAYMENT OF CLAIMS.!!

(a) ESTABLISHMENT OF FILING PROCEDURES.--The Attorney General shall establish procedures under which individuals may submit claims for payments under this Act.

(b) DETERMINATION OF CLAIMS.--For each claim filed under this Act, the Attorney General shall determine whether the claim meets the requirements of section 4(a).

(c) PAYMENT OF CLAIMS.--

(1) IN GENERAL.--The Attorney General shall pay, from amounts available in the Fund, each claim that the Attorney General determines meets the requirements of this Act.

(2) OFFSET OF PAYMENT.--

(A) OFFSET OF PAYMENT MADE UNDER THIS ACT.--A payment under this Act to or on behalf of an individual described in section 4(a) shall be offset by the amount of any payment made to or on behalf of the individual pursuant to a final award or settlement on a claim (other than a claim for worker's compensation) against any person, that is based on the individual's participation in an experiment that is the basis for the payment under this Act, including any payment under the Radiation Exposure Compensation Act (42 U.S.C. 2210 note).

(B) OFFSET OF PAYMENT MADE UNDER RADIATION EXPOSURE COMPENSATION ACT.--For purposes of section 6(c)(2) of the Radiation Exposure Compensation Act (42 U.S.C. 2210 note), a payment made under this Act shall be considered to be a final award or settlement on a claim described in subparagraphs (A) and (B) of such section.

(3) RIGHT OF SUBROGATION.--Upon payment of a claim under this section, the Federal Government is subrogated, for the amount of the payment, to a right or claim that the individual to whom the payment was made may have against any person on account of participation in an experiment that is the basis for the payment made under this Act.

(4) PAYMENTS IN CASE OF DECEASED PERSONS.--

(A) IN GENERAL.--In the case of an individual who is deceased at the time of payment under this section, such payment may be made only as follows:

(i) If the individual is survived by a spouse who is living at the time of payment, such payment shall be made to such surviving spouse.

(ii) If the individual is not survived by a spouse described in clause (i), such payment shall be made in equal shares to the children of the individual who are living at the time of payment.

(iii) If the individual is not survived by a person described in clause (i) or (ii), such payment shall be made in equal shares to the parents of the individual who are living at the time of payment.

(iv) If the individual is not survived by a person described in any of clauses (i) through (iii), such payment shall be made in equal shares to the grandchildren of the individual who are living at the time of payment.

(v) If the individual is not survived by a person described in any of clauses (i) through (iv), such payment shall be made in equal shares to the siblings of the individual who are living at the time of payment.

(vi) If the individual is not survived by a person described in any of clauses (i) through (v), then such payment shall be made in equal shares to the grandparents of the individual who are living at the time of payment.

(B) FILING OF CLAIM BY SURVIVOR.--If an individual eligible for payment under this Act dies before filing a claim under this Act, a survivor of the individual who may

receive payment under subparagraph (A) may file a claim for such payment on the individual's behalf.

(C) DEFINITIONS.--For purposes of this paragraph:

(i) The term "child" includes a recognized natural child, a stepchild who lived with an individual in a regular parent-child relationship, and an adopted child.

(ii) The term "grandchild of the individual" means a child of a child of the individual.

(iii) The term "grandparent of the individual" means a parent of a parent of the individual.

(iv) The term "parent" includes fathers and mothers through adoption.

(v) The term "sibling of the individual" means a child of the parent or parents of the individual.

(vi) The term "spouse" means a person who was married to the relevant individual for at least the 12 months immediately preceding the death of the individual.

(d) ACTION ON CLAIMS.--Within 18 months after the filing of any claim under this Act--

(1) the Attorney General shall make the determination required by subsection (b) regarding the claim; and

(2) if the claim is determined to meet the requirements of section 4(a), the Attorney General shall make the payment required by subsection (c)(1).

(e) SETTLEMENT IN FULL OF CLAIMS AGAINST UNITED STATES.--

Payment under this Act, when accepted by an individual, or the individual's survivors, shall be in full satisfaction of all claims of or on behalf of the individual against the United States that arise out of the participation in the experiment that is the basis for the payment made under this Act.

(f) ADMINISTRATIVE COSTS NOT DEDUCTED FROM PAYMENT.--No costs incurred by the Attorney General in carrying out this Act may be paid from, set off against, or otherwise deducted from any payment made under subsection (c)(1).

(g) TERMINATION OF DUTIES OF ATTORNEY GENERAL.--The duties of the Attorney General under this section shall cease when the Fund terminates.

(h) TREATMENT OF PAYMENTS UNDER OTHER LAWS.--A payment under subsection (c)(1) to an individual--

(1) shall be treated for purposes of the internal revenue laws of the United States as damages for human suffering; and

(2) shall not be considered as income or resources for purposes of determining the individual's eligibility to receive benefits described in section 3803(c)(2)(C) of title 31, United States Code, or the amount of such benefits.

(i) USE OF EXISTING RESOURCES.--The Attorney General should, to the extent available, use funds and resources available to the

Attorney General to carry out the Attorney General's functions under this Act.

(j) REGULATORY AUTHORITY.--The Attorney General may issue regulations necessary to carry out this Act.

(k) ISSUANCE OF REGULATIONS AND PROCEDURES.--The initial regulations and procedures to carry out this Act shall be issued not later than 120 days after the date of the enactment of this Act.

(l) JUDICIAL REVIEW.--An individual whose claim for compensation under this Act is denied may seek initial judicial review solely in a district court of the United States. The court shall review the denial on the administrative record and shall hold unlawful and set aside the denial if it is arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law. Such an individual may appeal the decision of the district court to the appropriate higher Federal courts.

!!SEC. 6. CLAIMS NOT ASSIGNABLE OR TRANSFERABLE.!!

No claim under this Act shall be assignable or transferable.

!!SEC. 7. LIMITATION ON CLAIMS.!!

An individual, or the individual's survivors, may not receive payment under section 5(c)(1) unless a claim by or on behalf of the individual is filed under this Act within 20 years after the date of the enactment of this Act.

!!SEC. 8. ATTORNEY OR AGENT FEES.!!

The agent, attorney, or other representative of an individual or of an individual's survivor may not receive, for services rendered in connection with a claim made under this Act, an amount equal to more than 10 percent of the payment made under this Act on such claim. Any person who violates this section shall be guilty of an infraction and shall be subject to a fine in the amount provided in title 18, United States Code.

!!SEC. 9. CERTAIN CLAIMS NOT AFFECTED BY PAYMENT.!!

A payment made under section 5(c)(1) shall not be considered a form of compensation, or reimbursement for a loss, for purposes of imposing liability on the individual who receives the payment to repay any insurance carrier for insurance payments, or to repay any person on account of worker's compensation payments. A payment under this Act shall not affect any claim against an insurance carrier with respect to insurance, or against any person with respect to worker's compensation.

!!SEC. 10. BUDGET COMPLIANCE.!!

No authority under this Act to enter into contracts or to make

ments shall be effective in any fiscal year except to such extent
in such amounts as are provided in advance in appropriations
ACTS.

1 of 2 items

CQ's WASHINGTON ALERT 02/08/94

HR1055 Goss (R-FL)

A bill to direct the secretary of Defense to issue a commendation to each individual exposed to mustard agents during World War II, and for other purposes.

(BILLTRACK; CRS date 03/15/93; No digest, Index terms only)

Item Key: 1861

INTRODUCED: 02/23/93

OFFICIAL TITLE: A bill to direct the secretary of Defense to issue a commendation to each individual exposed to mustard agents during World War II, and for other purposes.

CRS SUBJECT INDEX TERMS:

Armed forces
Chemical weapons
Federal employees
Government paperwork
Health education
Medical care
Military medals, decorations, etc.
Veterans
Veterans' medical care
World War II

2 of 2 items

CQ's WASHINGTON ALERT 02/08/94

HR3743 Frost (D-TX)

A bill to provide for payments to individuals who were the subjects of radiation experiments conducted by the federal government.

(BILLTRACK; No digest information available)

Item Key: 6781

INTRODUCED: 01/26/94

OFFICIAL TITLE: A bill to provide for payments to individuals who were the subjects of radiation experiments conducted by the federal government.

PORTER GOSS
14TH DISTRICT, FLORIDA

330 CANNON BUILDING
WASHINGTON, DC 20515-0913
(202) 225-2836

COMMITTEES:
RULES
STANDARDS OF OFFICIAL CONDUCT

94 SEP 6 AM 9:23

Congress of the United States
House of Representatives
Washington, DC 20515-0914

DISTRICT OFFICES
2000 MAIN STREET
SUITE 303
TY MYERS, FL 33901
(813) 332-4877

3301 TAMiami TRAIL EAST
BUILDING F, SUITE 212
NAPLES, FL 33982
(813) 774-8080

PUNTA GORDA
(813) 439-0051

September 1, 1994

The Honorable William Perry
Secretary
Department of Defense
Office of the Secretary
Room 3E880
The Pentagon, 20301-1000

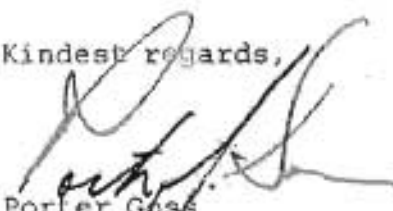
Dear Secretary Perry:

I am delighted that the House and Senate have included in the 1995 Defense Authorization bill (S. 2182) a small Sense of Congress provision based on HR 1055, legislation I introduced to provide commendation for victims of secret World War II mustard gas testing on military personnel. As you know, the DoD Authorization bill has made its way through the legislative process and now awaits the President's signature.

I write to urge you to follow through in providing recognition for the veterans of World War II who were used by their government as human guinea pigs 50 years ago. As you know, your department and the VA have been working to seek to identify and contact these veterans -- and I am grateful for all the cooperation in this effort. I enclose for your review the relevant section of S. 2182 and a recent letter of support from your department for the provisions of HR 1055.

It is my hope that a commendation issued by you as Secretary of Defense will begin to address the sense of betrayal and isolation that many of these men and their families still feel. My staff and I stand ready to assist you in any way we can to expedite this process.

Kindest regards,


Porter Goss
Member of Congress

PG:tea
enclosures

17848



DEPARTMENT OF DEFENSE
OFFICE OF GENERAL COUNSEL
WASHINGTON, D.C. 20301-1600

15 APR 1994

The Honorable Ronald V. Dellums
Chairman, Committee on Armed Services
House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

This responds to your request for the views of the Department of Defense on H.R. 1055, 103d Congress, a bill "To direct the Secretary of Defense to issue a commendation to each individual exposed to mustard agents during World War II, and for other purposes."

H.R. 1055 would require the Secretary of Defense to issue a commendation to individuals exposed to mustard agents during World War II, and to notify these individuals of their exposure, the possible health effects of the exposure, and the options available to them for medical treatment for health effects resulting from the exposure. Further, if the bill were enacted the Secretary of Defense would be required to make available to the Secretary of Veterans Affairs any information regarding exposure to include the names of the individuals.

We fully support H.R. 1055. We do caution, however, that given the many years that have passed since some of these activities were carried out, and the format and dispersion of the records, it may not be possible for us fully to identify and notify all participants. In spite of the above obstacles, the Department of Defense is committed to doing everything possible to support the bill's provisions. We continue to pursue the review of records and we are determined to make as complete and thorough a review as possible and to share our findings with the Department of Veterans Affairs.

The Office of Management and Budget advises that, from the standpoint of the Administration's program, there is no objection to the presentation of this report for the consideration of the Committee.

Sincerely,

A handwritten signature in black ink, appearing to read "S. W. Preston".

Stephen W. Preston
Acting General Counsel



PERSONNEL AND
READINESS

OFFICE OF THE UNDER SECRETARY OF DEFENSE
4000 DEFENSE PENTAGON
WASHINGTON, D.C. 20301-4000



DRAFT

Honorable Porter Goss
House of Representatives
Washington, D. C. 20515

Dear Mr. Goss:

Thank you for your letter of September 1, 1994, to Secretary Perry. It is the intention of the Department of Defense to fully honor our commitment to the veterans who patriotically served their country above and beyond the call of duty by participating in World War II chemical weapons tests using mustard gas and lewisite.

As you know from our past testimony and correspondence regarding the legislation you introduced, we are diligently working to identify the veterans that participated in these experiments. We have been able to identify an additional eight thousand names since our letter to you in April. Not all of these are confirmed exposures, and the majority are not World War II mustard gas test subjects. However, about 500 of them are from the 1943 Bari Harbor disaster.

We have already begun to share this latest information with the Department of Veterans Affairs (VA). We are trying to collect information that will assist us in locating, notifying and appropriately commending individuals whose exposures are verified or highly probable.

The Department of Defense is committed to doing everything we can to support the provisions of S. 2182. Due to the lapse in time and wide dispersion of the records, identification and verification of the test participants is an arduous task, making it nearly impossible for us to identify and locate everyone. We intend to pursue our review of the records and to provide all pertinent findings to the VA. We share the sense of Congress that these American veterans have contributed special service and displayed special loyalty to the United States and are worthy of recognition.

Sincerely,

Jeanne B. Fites
Deputy Under Secretary of Defense
Requirements and Resources

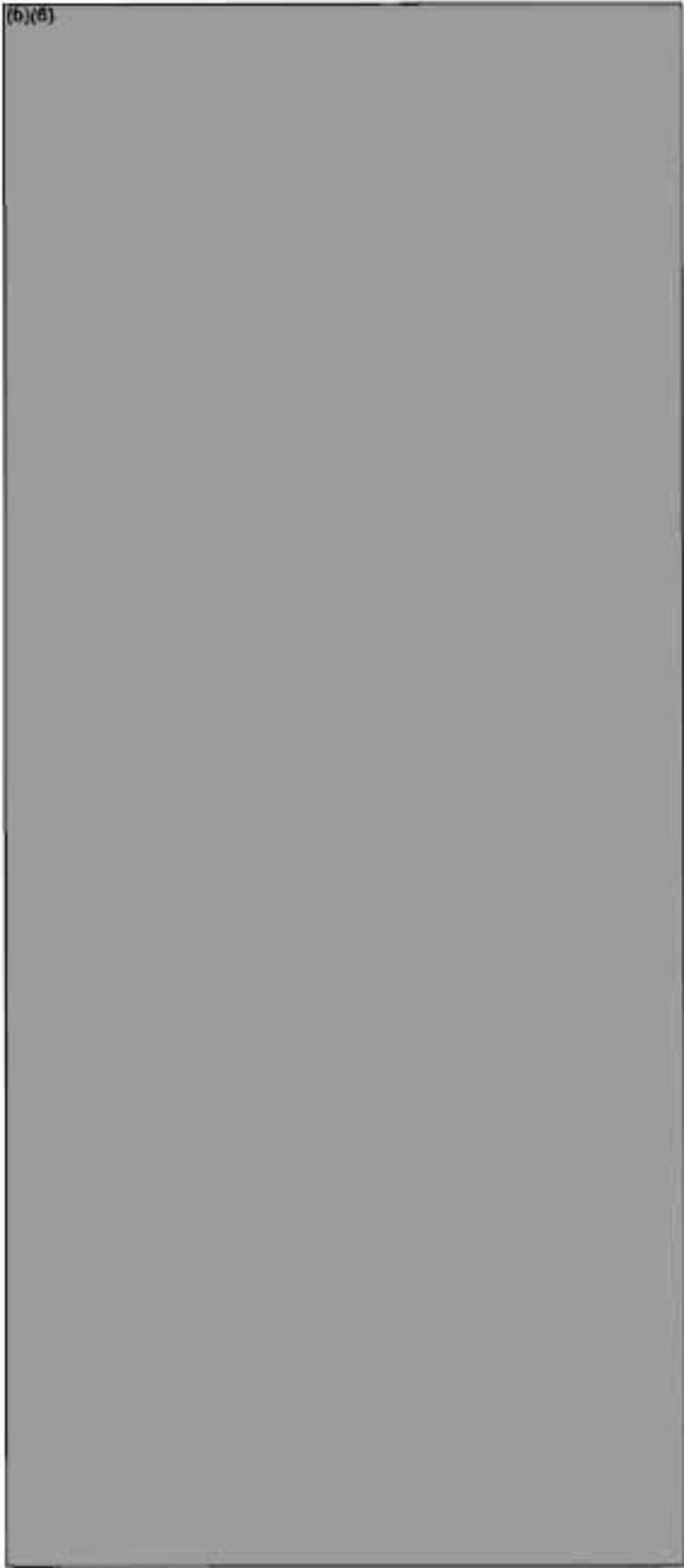
DRAFT



70

Constituent Report

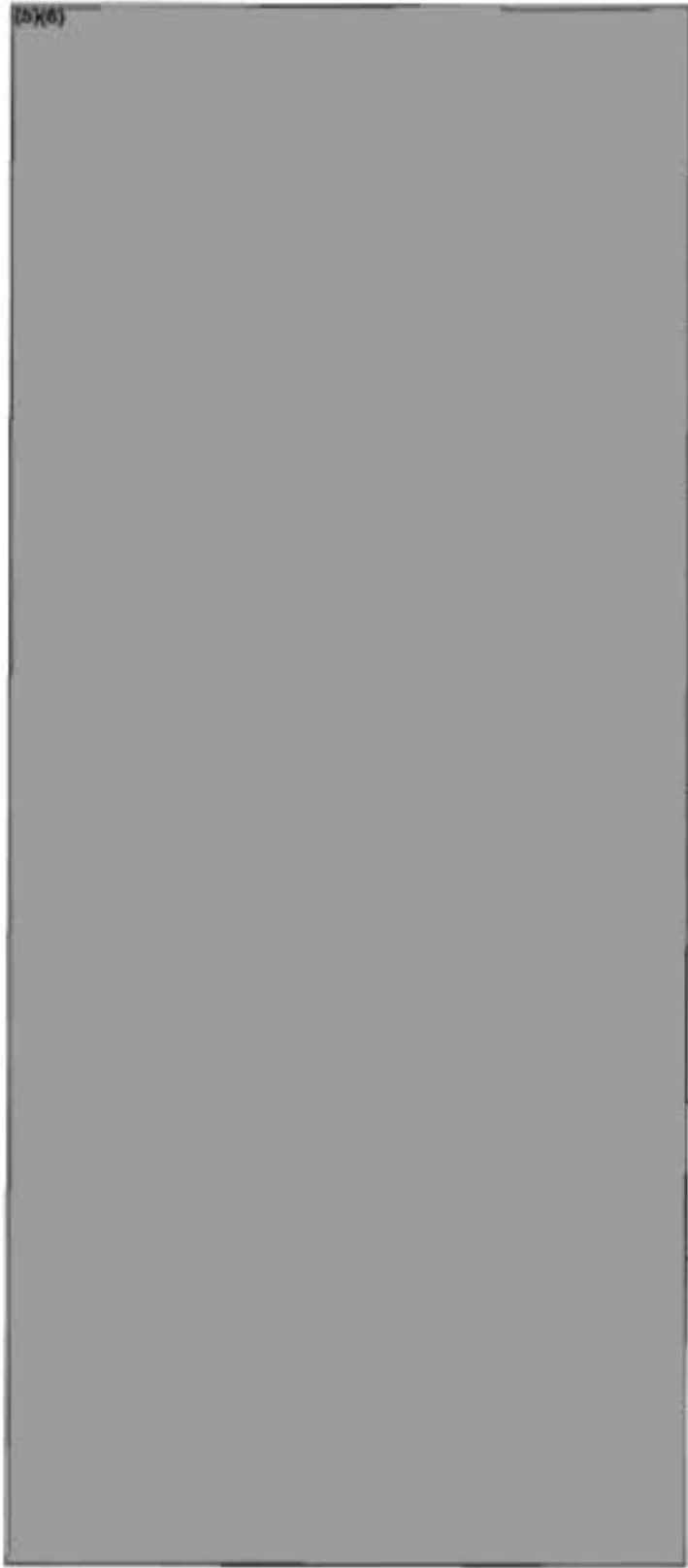
(b)(6)



Lined writing area with horizontal dashed lines.

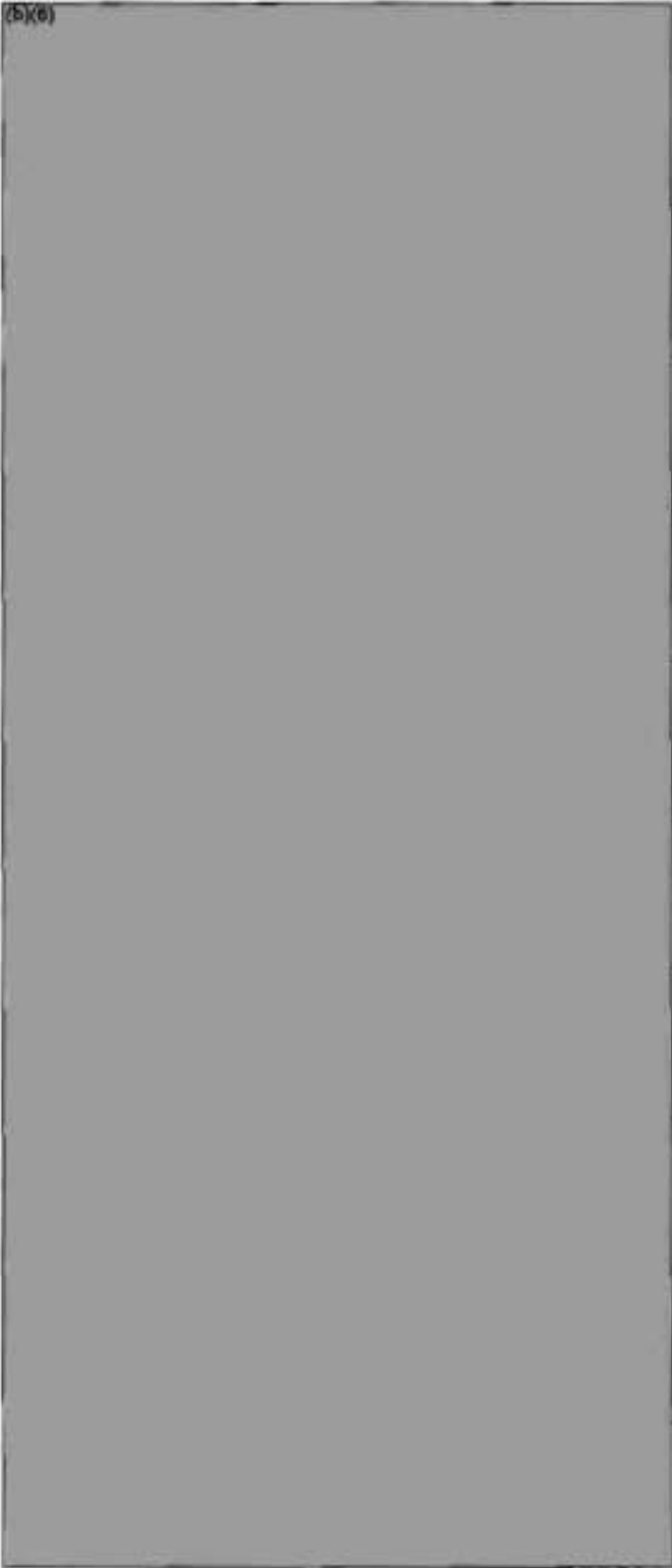
Constituent Report

(b)(6)



Constituent Report

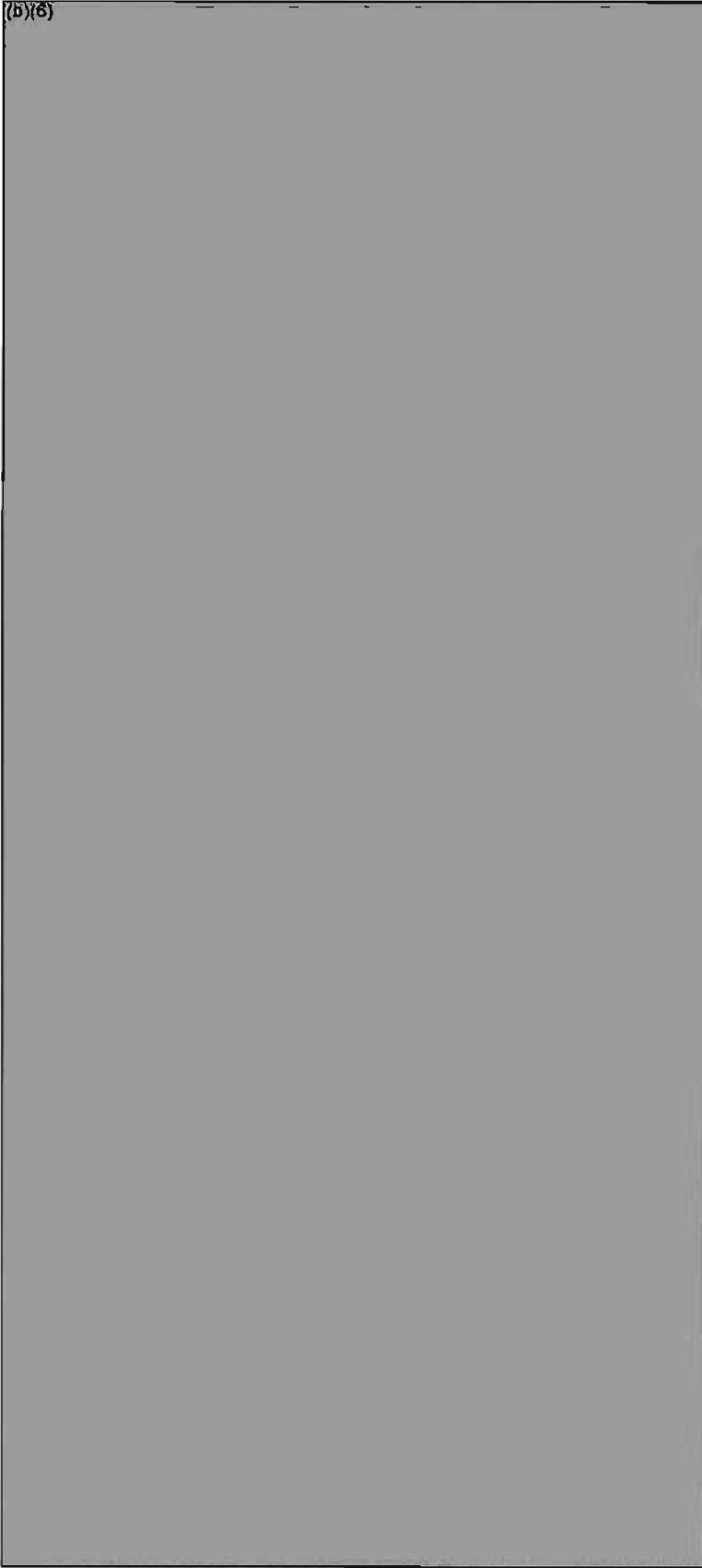
(b)(6)



A series of horizontal dashed lines are positioned to the right of the redacted area, serving as a guide for writing in the constituent report.

Constituent Report

(b)(6)



A series of horizontal dashed lines are positioned on the right side of the page, extending from the right edge of the redacted area to the right margin. There are approximately 12 such lines, spaced evenly down the page.

Constituent Report

(b)(6)



A series of horizontal dashed lines extending across the right side of the page, providing a template for handwritten notes or a list.

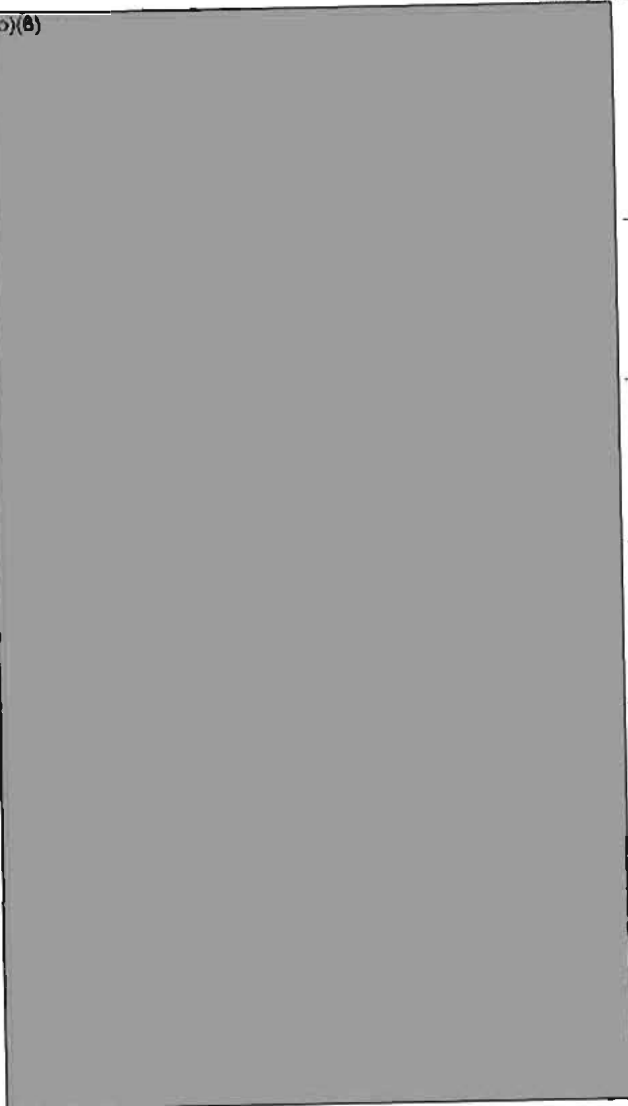
Constituent Report

(b)(6)



Constituent Report

(b)(8)



September 21, 1994

**U.S. Army Drug Testing Programs
Involving
Human Subjects
1950-1979**

BACKGROUND: Since the 1800s the U.S. military has been involved in many programs that tested drugs and vaccines in human subjects. Since the 1950s the military participated in the following studies:

- Venezulean Equine Encephalitis vaccine development
- Oral Adenovirus vaccine development
- Sulfamylon development
- Antibacterial drugs
- Malaria Research (1945-1975) * (see below)
- Gamma Globulin
- Acetazolamide
- LSD Research (1955-1967) and other hallucinogenic drugs * (see below)
 - Benzilate (1957-1969) *
 - Scopolamine (1960-1975) *
- Biological defense (1954-1973) - PROJECT WHITE COAT * (see below)

Malaria Research using human subjects, involving prisoners, started during WWII. As a result of this research, Primaquine and chloroquine were discovered. The U.S. Army prison program testing stopped in 1975 and approx. 7,000 prisoners were used (3 deaths). Since 1975 alternative procedures for using non-prisoners have been used.

LSD and other hallucinogenic drug testing involved volunteers who were informed ahead of time that they would be receiving a psychoactive agent (one exception for the LSD testing). Strict medical supervision was provided and no fatalities or serious injuries occurred with over 7,000 volunteers (686 LSD) participating. LSD follow-up medical evaluation of the 686 LSD volunteers started in 1974. As of 1980, 320 individuals elected to participate in this follow-up evaluation: 220 were examined directly and 100 by questionnaire.

PROJECT WHITE COAT was established to determine the vulnerability of man to BW attack using Q fever as a prototype. Recruited personnel, who were classified as conscientious objectors, were given a complete, comprehensive explanation of the program. Volunteers were briefed on individual projects and those who choose to volunteer signed consent forms. 2,200 soldiers were involved.

U.S. BW PROGRAM: Program began in 1942. Offensive aspects stopped in 1969 and by 1973 the U.S. had destroyed ALL of its offensive capabilities. Today only defensive work continues. In 1977 most aspects of the program were declassified. The program was concerned with antipersonnel and anticrop agents and associated delivery capabilities, and to a lesser degree antianimal agents. Testing was conducted in laboratories, closed chambers, open air field (large scale), and used both simulants and pathogens. Open air vulnerability tests did not use human subjects but due to the scale of some tests, humans were exposed to simulants (number unknown).

SGRD-RCQ

18 September 1994

INFORMATION PAPER

SUBJECT: U.S. Army Drug Testing Programs Involving Human Subjects During the 1950's, 1960's, and 1970's

1. ISSUE: Congressman John Conyers, Jr, Chairman, Legislation and National Security Subcommittee has requested of the Department of Defense information for testimony on 28 Sep 94. The Office of The Surgeon General of the Army has been requested to provide information on the subject line noted above.

2. FACTS:

a. BACKGROUND: Biomedical research programs are the oldest research programs in the Armed Forces with their beginnings in the early 1800's. From the 1800's leading up to the 1950's the military was involved in many programs testing drugs and vaccines in human subjects, a short list follows: Small pox vaccinations, gastrointestinal studies, yellow fever studies, the development of an effective antityphoid vaccine, the development of chlorine to purify drinking water, the use of emetine to treat dysentery, the development of a rabies vaccine, the use of Atabrine (quinacrine or mepacrine) was tested as a substitute for quinine in combating malaria, large scale production of Western and Eastern equine encephalitis began and the first cure of typhoid fever with chloramphenicol was reported.

In the 1950's and 1960's the military in particular studied and participated in the development of a safe Venezuelan Equine Encephalitis vaccine and an oral adenovirus vaccine. Sulfamylon, an antibacterial cream was developed for the treatment of pseudomonas infections in burn patients. The extensive involvement in Viet Nam required many studies with antibacterial and antimalarial drugs involving service members in or returning from endemic areas. In the late 60's and earlier 70's studies were conducted using gamma globulin for prevention of hepatitis. In 1976, the use of acetazolamide for Acute Mountain Sickness was validated. During the 1970's in particular, multiple other clinical investigations with the rise of antibiotics (carbenicillin, tetracyclines, etc) and other drugs (antacids and cimetidine for Curling's ulcer) would also take place parallel to that in the civilian community.

Certain studies during the cold war era have captured much attention. Studies with malaria drugs and prisoners took place from 1945 through 1975. Project White Coat began testing products for biological defense from 1954 through 1973, the first U.S. Army Chemical Corps studies with d-lysergic acid diethylamide (LSD) and other hallucinogenic drugs, BE and scopolamine, and commercially available approved drugs began in the early 1950's and continued through 1967 for LSD, 1967 through 1969 for BE, and 1960 through 1975 for scopolamine. The following paragraphs will

describe these three major cold war drug testing programs.

b. **MALARIA RESEARCH:** The U.S. Government sponsored malaria research involving prisoners from 1945 through 1975. The urgent need was created by the Japanese attack on Pearl Harbor. Practically all the world supply of quinine was denied the allies by that event and its consequences. The actual magnitude of the malaria problem in World War II greatly exceeded even the most pessimistic prediction of the time.

In response to this need, the Committee on Medical Research of the Office of Scientific Research and Development, National Research Council, organized and sponsored the initial malaria drug development program. The U.S. Army was one of several cooperating federal agencies. The great success of this effort was realized in the discovery of chloroquine, a drug with rapid and unsurpassed antimalarial activity until the development of resistance in the mid 1960's.

During the world war II and the later 1940's several sites were involved in the testing new compounds. The U.S. Army was primarily involved with Stateville Penitentiary, Illinois. From the onset, the use of prison volunteers was open to public scrutiny as evidenced by an editorial in the New England Journal of medicine in March 1945 and other public observation of the program. The volunteers were white male inmates, 21 to 45 years of age and in good physical health and mental health. They were cognizant of the nature of the experiments and were able to remain under observation for 18 months. Volunteerism was popular and there was an associated air of patriotism. More prisoners volunteered than could be accepted into the program and they were promised no special privileges or reward.

At the end of WWII Illinois Governor Green appointed a civilian committee of health professionals, clergy and businessmen to advise the Department of Public Safety relative to the ethical principles governing conditions under which prisoners might be permitted to serve as subjects for medical experiments. Their report was published in 1948 and reiterated the principles of the Nuremberg Code. The Committee concluded, "An example of human experiments which were ideal because of their conformity with the foregoing ethical rules are the experiments at Stateville."

In the 1950's, renewed interest in malaria research was renewed generated by the Korean War. U.S. Army support for research involving prisoners at Stateville was augmented and led to the discovery of Primaquine which to this day is still a vital component in the anti-malaria drug armamentarium.

In the 1960's the discovery of chloroquine-resistant malaria in Southeast Asia initiated the need for new effective anti-malarial drugs. In addition to Stateville Penitentiary, additional facilities for clinical trials of new drugs were required. In 1963 to 1964 studies were initiated under government contract at Kansas City Jail, University of Missouri, and ~~University of Maryland~~ ~~University of Maryland~~ University of Maryland.

see to
include -
at National

integral part of their contract the essential elements of Army Regulation 70-25) were included. Two additional facilities were used briefly in the early 1970's, Oklahoma State Prison at McAlester, Oklahoma, and the Florida Correctional Institution, (University of Florida College of Medicine). The U.S. Army Investigational-Drug Review Board approved each study and insured that the potential volunteers were informed as to the nature and hazards of their participation in the studies, and that they were allowed the right to withdraw from participation without prejudice. All of the U.S. Army prison programs were stopped in 1975. Alternative procedures for continuing antimalarial drug testing in free living volunteers were subsequently developed by the Walter Reed Army Institute of Research and are active today.

The U.S. Army worked with approximately 7000 prisoners over the period from 1945 to 1975.

classy

We have (been told) that there were three deaths during the early years; one unknown cause, one a prison assassination, and one case of acute leukemia temporally related to participation in the program. Since the U.S. Army has been directly involved there was one additional case that may have been related to malaria infection or his treatment. Briefly, this man was infected with malaria, treated with quinine, responded normally with eradication of parasites from his blood ~~and who suddenly~~ developed renal failure. He died about 3 months later from septicemia secondary to peritoneal dialysis. The pathologic diagnosis was TTP, an obscure disease of unknown etiology.

c. LSD, BENZILATE (B2) AND SCOPOLAMINE STUDIES: The remarkable hallucinogenic properties of lysergic acid diethylamide (LSD) were discovered in Switzerland in 1943. In the 1950's LSD at first glance seemed to possess many properties desirable in the "ideal" chemical warfare agent ~~and a humane~~ weapon temporarily disabling enemy troops so they could be captured unharmed. It was known to be effective in incredibly small amounts and conveniently colorless, odorless, and tasteless. ~~Because of these properties,~~ in addition to the rumored use of LSD or some similar agent by the Soviet bloc nations for the purpose of interrogation and behavioral control (brainwashing), the U.S. Army Chemical Corps and the U.S. Army Intelligence Corps decided to conduct a series of experiments with LSD. These tests began in 1955 and continued through 1967. Volunteer research subjects were solicited from the Army in general and from the Chemical Corps. Mistakes were made involving the process of informed consent in some cases where the subjects were volunteering for research but were not told they were in drug research or if they did know they were in drug research they may not have been told what drugs they were taking. All available evidence indicates that with one exception with the initial intelligence testing, LSD-exposed subjects voluntarily participated in the chemical warfare testing and were informed ahead of time that they would be receiving a psychoactive agent. The question is not whether the subjects volunteered, but whether

they were provided sufficient information to permit an enlightened decision. Strict medical supervision was provided during the testing and prior to the actual receipt of the drugs. Almost all subjects received some degree of psychological screening and 30 to 50 percent of the Army volunteers were turned down during the screening process. The bulk of the testing was carried out at Edgewood Arsenal, Maryland, although other sites such as Ft. Benning, Ft. Bragg, Ft. McClellan and Dugway Proving Ground were used occasionally. Projects were designed to obtain information not only about the possible usefulness of LSD in operations against an enemy force, but also about means that might be taken to defend against the use of LSD to disrupt U.S. forces. By 1967, the necessary data had been obtained and further LSD research was discontinued. The civilian community over these same years was testing LSD on a much larger scale. On 28 July 1975 Acting Secretary of the Army Norman R. Augustine suspended testing of chemical compounds on human volunteers at Edgewood Arsenal.

The other drugs in this program were primarily BE and scopolamine. Scopolamine (BE) is a glycolate ester, and has a different site of action than the LSD/Mescaline/amphetamine group, and is an atropine like acetylcholine antagonist. Scopolamine (hyoscine) is a belladonna alkaloid related to atropine and inhibits the action of acetylcholine. It can be called an antimuscarinic agent.

Other drugs are also shown on a Psychoactive Agents Roster as abbreviations that were sometimes tested in combination with LSD, BE or Scopolamine. They include: VX, pam, SHTP, G-VAST, Progly, CS, mechol, GD, heparin, TMA, NITDIO, DIBENZ, DM, ACTH, SERNYL, DITRAN, ALD, 3443, 223304, ALCOHOL, SOL, 301060, 1476, MAISIL, ESERIN, THORAZ, SECO, PHYSOS, GP, DPP, VALIUM, THIAMI, BTA, NEMBUT, PAMCEL, AMPIPY, PROGLY, LANOXI, AMYLNI, COMPAS, PROLIX, MENTAL, RITALI, CAFFKI, PAMINE, BENACT, 2PAMCL, PAH, SODNIT, LIDOCA, ISUPREL.

There are 54 contracts or reports of contracts, with *twenty five* Universities and chemical companies from 1950-1971. ~~Of these 26~~ were awarded for incapacitating agent research. The agent/drugs used were physical incapacitants such as morphine, demerol, seconal, scopolamine, chlorpromazine, and secobarbital. Mental incapacitants studies included LSD, mescaline, atropine, psilocybin, BE and glycolate compounds.

Over 7000 volunteers participated in many types of research, which included drug research (686 LSD subjects), at Edgewood Arsenal without a single fatality or serious injury.

d. LSD FOLLOW-UP STUDIES: Several LSD follow-up medical evaluation studies took place in the 1970's, beginning with Project 33, in 1974-75. In the meantime, public and congressional interest in chemical warfare testing was stimulated by, among other things, the disclosure of the tragic suicide in 1953 of an Army mathematician shortly after surreptitiously being given LSD by non-military experimenters. In 1975, congressional

investigators requested that measures be taken to locate and evaluate for possible long-term adverse effects all former participants in Army chemical warfare research with LSD. Project 28 and Project 50/50 followed with the number indicating the number of participants in the follow-up study. In 1978 a follow-up office was established and it proceeded to contact all individuals from a comprehensive roster of 686 individuals believed to have received LSD. Of those, 320 (47%) individuals electing to participate were provided travel at government expense to selected Army Medical Centers for evaluation. A 158 page summary report of this medical follow-up program was prepared in 1980.

As a group, the "LSD Subjects" appeared to be relatively stable socially, unusually well educated, and economically successful. The medical and psychiatric findings for those 220 subjects examined directly, as well as that obtained from the additional 100 subjects examined by questionnaires, appeared to generally parallel (both in type and frequency) the findings which could be expected to be found in a comparable segment of the general male population.

e. PROJECT WHITECOAT: Originated in 1954 following a series of meetings between representatives of the General Conference of the Seventh-day Adventist Church and of The Surgeon General of the Army. It continued at Fort Detrick, Maryland until the end of the draft in 1973. [Infectious disease research continues today with volunteer soldiers and civilian subjects.]
Project Whitecoat was originally established to determine the vulnerability of man to attack with biological weapons using Q fever as a prototype. Personnel for Project Whitecoat were recruited from military personnel with a 1-A-O (conscientious objector) classification undergoing Basic and Advanced Individual Training at the Medical Training Center, Fort Sam Houston. These personnel were given a complete and comprehensive explanation of the program including discussion of the risk involved. The following day they were interviewed individually and offered an additional opportunity to ask questions and indicate their desire to participate or not. Many more individuals volunteered than could be accepted. After administrative processing these volunteers were assigned to various noncombatant type duties at Fort Detrick. Volunteers were briefed on individual projects and those whom chose to volunteer signed consent forms. Multiple vaccine and antibiotic studies were conducted on a wide variety of infectious diseases. The entire program was initially monitored by the Commission of Epidemiological Survey of the Armed Forces Epidemiology Board.

Date 12 4
to end
clear
brief
guides
to.

Project Whitecoat involved 2200 soldiers between 1954 and 1973.

Prepared by: MAJ Vander Hawn, DSN 343-2165

The United States began its Biological Warfare (BW) Program in 1942. The offensive aspects of the program were stopped by Presidential Directive in 1969, and by 1973 the U.S. had destroyed all of its BW offensive capabilities. Today only defensive work continues.

The policy of the United States regarding biological warfare between 1941 and 1969 was to first deter its use against the United States and its forces, and secondly, to retaliate if deterrence failed. Fundamental to the development of a deterrent strategy was the need for a thorough study and analysis of our vulnerability to both overt and covert attack, and an examination of the potential range of retaliatory options. From its inception, the program was characterized by continuing in-depth review and participation by the most eminent scientists, medical consultants, industrial experts, and government officials.

Prior to 1977, the BW program was classified up to Top Secret. In 1977, most aspects of the program were declassified, and information related to the program was released to Congress and the public. Congressional hearings were held on this subject, beginning 8 March 1977, and concurrent with the hearings, the Army released an unclassified report titled, "U.S. Army Activity in the U.S. Biological Warfare Programs." The report contains extensive information on the dates and locations of tests, types of agents and simulants used, and rationale for the U.S. biological program.

The BW warfare program was concerned principally with antipersonnel and anticrop agents and associated delivery capabilities, and to a lesser degree antilivestock agents. Biological testing was conducted in laboratories, closed chambers, open air field (large scale), and used both simulants and pathogens. The open air field testing was conducted in the continental U.S. and extra continental and in both public and non-public domains (military installations). The Biological Warfare program also included human volunteers under a codename "Operation Whitecoat."

Antipersonnel agent research covered a wide range of highly infectious pathogenic bacteria, rickettsial, viruses, and fungi, and extremely toxic products of biological origin (toxins). Research efforts were directed toward selecting and preserving the most virulent strains, establishing human dosages, enhancing storability, and survival when released as an aerosol. Technology for large scale production of the most promising agents was developed. Numerous field trials with actual pathogenic agents were conducted at Dugway Proving Ground, Eglin Air Force Base, Fort Detrick, and a farm owned by the University of Wisconsin. The testing agents included Coxiella burnetii, Pasteurella pestis, Brucella suis, Pasteurella tularensis, Brucella melitensis, Clavidium botulinum toxin, Coccidioides, Hog Cholera, and New Castle Disease. Human test subjects were not used as a part of these trials.

Total destruction of antipersonnel BW stocks was accomplished between 10 May 1971 and 1 May 1972. They were destroyed by pasteurization at 160 degrees for one hour and then further sterilized at 280 degrees for three hours. The facilities were completely

decontaminated and turned over to the Food and Drug Administration to become the National Center for Toxicological Research.

Open air vulnerability tests were conducted using BW simulants and certain selected inorganic materials such as fluorescent particles. Hundreds of simulant tests were conducted. Human test subjects were not used; however, due to the scale of some tests, humans were exposed to simulants. The number of humans subjected to exposure is unknown.

The two most commonly used biological simulants were Serratia marcescens (SM) and Bacillus subtilis varian niger, normally referred to as Bacillus globigii (BG). SM was used as a bacterial marker, and is commonly found in water, food and sewage. In 1969 it was recognized as having limited pathogenic capability and was not used for study of experimental infection in man. BG is considered ubiquitous in nature. It can be readily cultured from hay, dust, milk, and water. It was considered by medical authorities to be harmless to man and is still used today in BW defensive programs. Aspergillus fumigatus (AF), a fungus simulant, was used on four occasions in open air tests from 1950-1953 and abandoned when antifungal agents were removed from the BW program. AF is ubiquitous in nature and is considered an opportunist causing aspergillosis in debilitated persons. Urafin dye, lipstick, and talc were also used as antipersonnel agent simulants. The most commonly used fluorescent particle (FP) was an inorganic complex known as zinc cadmium sulfide. The U.S. Army Center for Health Promotion and Preventive Medicine (formerly the Army Environmental Health Agency) recently completed three Health Risk Assessments for three cities involved in FP aerosol testing. In all three cases, the assessments concluded that the level of risk experienced by inhabitants in the test areas was below the 1994 Occupational Safety and Health Administration (OSHA) standards. Additionally, the assessment concluded that the risk of exposed individuals developing cancer is below the accepted level of risk established by the U.S. Environmental Protection Agency for the general population. In August 1994, the Center for Disease Control and Prevention, in an independent review of the study, concluded that zinc cadmium sulfide tests conducted by the Army posed negligible health threats to residents of the test areas.

The vulnerability tests are outlined in the 1977 report, and include simulant testing in both public and nonpublic domains. The first large area vulnerability test was conducted in San Francisco, California, in September 1950, using simulants BG, SM, and fluorescent particles. The first open air sea tests were conducted in the Atlantic Ocean using simulants BG and SM. In 1957 and 1958, the Army conducted its largest vulnerability test, Operation Large Area Coverage (LAC). The testing area covered the United States from the Rockies to the Atlantic, and from Canada to the Gulf of Mexico in four separate testing phases. These tests used the fluorescent particle zinc cadmium sulfide to determine the distance and direction of disbursement. The objective of LAC testing was to determine the logistics and feasibility of contaminating a large area with BW agents. Other large area vulnerability tests were conducted in Minnesota, Missouri, Texas,

Florida, Utah, California, Indiana, Arkansas, Maryland, and along the eastern and western coastlines of the United States.

Anticrop BW research included agent strain selection, evaluation of nutritional requirements, development of optimal growth conditions and harvesting techniques, and prepared agents in a form suitable for dissemination. Extensive field testing was done to assess the effectiveness of agents on crops. Many candidate anticrop BW agents were screened resulting in five standardized BW anticrop agents that included various stem rust of wheat and rye, and rice blast. Human test subjects were not a part of this program. Over 25 anticrop tests were conducted. Total destruction of anticrop agents and decontamination of facilities was accomplished between 19 April 1971 and 15 February 1973.

Antianimal simulant tests were conducted as part of the Biological Warfare Program. The tests examined the vulnerability of animal stockyards to covert BW attacks. The testing involved aerosol deodorant and posed no health risk to humans or the animals. At least six tests were conducted.

It was determined in 1952 that while tests with simulants had demonstrated the vulnerability of the U.S. to biological attack, no scientific data was available to assess human vulnerability to biological agents. A Human Volunteer Testing program was established, and examined the vulnerability of man to biological agents, prevention and treatment of BW casualties, and identification of biological agents.

The 1977 "U.S. Army Activity in the U.S. Biological Warfare Programs" report includes a historical review of the Human Volunteer Testing program. From 1954-1976 the U.S. Army Medical Research Institute of Infectious Disease conducted human BW test studies with more than 2000 volunteers. The program volunteers were assembled from active duty military, research team members, and civilians. Civilian volunteers were selected from personnel who maintained conscientious objector draft status, the majority of which were members of the Seventh Day Adventist Church. Numerous testing protocols included human testing with Coxiella burnetii, Tularemia, Rift Valley Fever, Venezuelan Equine Encephalitis, Pasteurella tularensis, Bacterial Endotoxin, Bolivian Hemorrhagic Fever, Q Fever, Sandfly Fever, Plague vaccine, Yellow Fever, Adenovirus Vaccine, Chikungunya Vaccine, Western and Eastern Equine Encephalitis Vaccine, Rocky Mountain Spotted Fever Vaccine, and Influenza Virus Vaccine. The Report also indicates that 21 classified projects were conducted during this period.

The U.S. Public Health Service closely followed the progress of BW research and development from the very start of the program. The Surgeon General of the Army maintained close liaison with medical personnel right on the scene working within the research and development laboratories. In 1956, the Army Medical Unit was established at Ft. Detrick with the mission to conduct defensive R&D including prophylactic and therapeutic measures, more rapid effective diagnostic and identification procedures and to evaluate the threat of BW to the military from a medical point of view.

The safety and medical aspects of testing with biological material were of overwhelming concern to management from inception of the BW program, primarily because of the many unknown factors, and the potential severe danger to employees as well as the local community. A major safety organization was always established along with the operation organizations. Since many of the early aspects of the safety and medical program were of necessity experimental, it was necessary to confer with and have the approval of the Surgeons General of the military services for much of its operations. U.S. Public Health Service maintained oversight of the program and provided advice on public health.

The concern for safety and medical aspects is further noted by the deliberations of various external advisory committees such as "The U.S. Biological Warfare Committee" (Merck Committee) in 1942, and the Committee on Biological Warfare of The National Military Establishment Research and Development Board (Baldwin) in 1948. With the advent of the requirement to determine the field environment effects such as varying temperature, humidity, terrain, to include structures, sunlight, winds, etc., on BW agents, independent external advisory committees were formed to review, comment upon, and make recommendations concerning test protocols. The committees were "The Ad Hoc Committee on BW Testing" (Scheele Committee - 1955), and "The Interagency Survey Committee on BW Testing" (Price Committee - 1959). The members of these committees were eminent authorities in their fields of biological and medical sciences and were drawn from various universities, federal, and state agencies.

These pioneering efforts subsequently became the foundation for infectious disease safety procedures, techniques and equipment throughout the scientific and industrial communities in the world. Information gained from BW Warfare Program has been of value not only to the military, but also to public health, agriculture, industry, and the fundamental sciences. Today's defensive program continues, and seeks to further develop effective warning and detection devices, protective clothing and equipment, and continues to assess the vulnerability of the U.S. and its force to enemy BW threat.

Prepared by CPT Barnett/X17001



OFFICE OF THE SECRETARY OF THE ARMY
OFFICE OF THE CHIEF OF LEGISLATIVE LIAISON
INVESTIGATIONS AND LEGISLATIVE DIVISION
PENTAGON 2C634



Date: Sep / 19 / 94.

Number of pages: H+ _____

To: Ms. Fites
P & R

Phone: () _____ FAX: () 76691

From: LTC BERNARD P. INGOLD

Subject: BW & Drug Testing Info.

Comments: As requested.

Faxed: Sep / 19 / 94

Job #: _____

Time: _____

By: _____

TELEPHONE : (703) 697-2106 FAX: (703) 614-3035

UNCLAS ED
 U.S. Army Medical Research Institute of Infectious Diseases
 Research Projects Involving Volunteers.

<i>Year and Project Number</i>	<i>TITLE</i>	<i>Number of Volunteers (Non-SDA)**</i>	<i>Hos D</i>
<u>1954-56</u>	Vulnerability of Man to Biologic Agents/Project CD-22/Laboratory and Field Assessment of Infectivity of Q Fever (<i>Coxiella burnetii</i>): Efficacy of Vaccine; Efficacy of Antibiotic Therapy*	91	
<u>1956-57</u>	Analysis of 42 Cases of Laboratory-Acquired Tularemia. * Objectives were: (1) To evaluate clinical and laboratory manifestations of the disease and to attempt to establish criteria for earlier diagnosis. (2) To assess the efficacy of phenolized and/or acetone-extracted tularemia vaccine in the prevention or modification of the disease. (3) To determine the therapeutic efficacy of tetracycline.	42#	
<i>#This is a study of patients conducted during the course of providing medical care. The subjects were not volunteers but had acquired their illness as a occupational exposure. The vaccines had been given for occupational health protection before the patients came under medical care.</i>			
<u>1958</u>			
58-1	Evaluation of a Living Vaccine for Tularemia (LVS)	21	
58-2	Evaluation of Rift Valley Fever Vaccine	3	
<u>1959</u>			
None			
<u>1960</u>			
60-1	Evaluation of Attenuated VEE Virus Vaccine (TC-50)	(16)	
60-2	Evaluation of Attenuated VEE Virus Vaccine (TC-80)	(13)	
<u>1961</u>			
61-1	Assessment of Respiratory Immunization with Tularemia Vaccine (LVS)	17	
61-2	Evaluation of WEE and VEE Titers in Men Immunized with Attenuated VEE Virus Vaccine (TC-80) with Subsequent IM Challenge of 5 with Virulent VEE	(20)	
61-3	Evaluation of Serological Responses to Attenuated VEE Virus Vaccine (TC-80) and WEE and EEE Vaccines	(5)	
61-4	Evaluation of Attenuated VEE Virus Vaccine (TC-80) as Therapy for Various Malignancies and Lymphomas	(12)	

*Projects that could use data to extrapolate to effects on animals in field tests, such that effects on humans in field tests could have been extrapolated.

**Seventh Day Adventists

UNCLASSIFIED

3-B

UNCLASSIFIED
 U.S. Army Medical Research Institute of Infectious Diseases
 Research Projects Involving Volunteers (Continued).

Year and Project Number	TITLE	Number of Volunteers (Non-SDA)*	Hos D
1961			
61-5	Evaluation of Attenuated VEE Virus Vaccine (TC-80)	5, (13)	
61-6 (was 61-A)	Evaluation of Attenuated VEE Virus Vaccine (TC-80)	8	13
61-7 (was 61-3)	Respiratory Virulence of Aged Aerosols of <i>Pasteurella tularensis</i> , SCHU-S4, for Man (30-min) (61-TE-1462)*	??	15
61-8	Evaluation of Attenuated VEE Virus Vaccine (TC-80)	6, (5)	
1962			
62-1A	Evaluation of Attenuated VEE Virus Vaccine (TC-80)	(6)	
62-1	Respiratory Virulence of Aged Aerosols of <i>Pasteurella tularensis</i> , SCHU-S4, for Man (60 min.) (61-TE-1519)*	8	20
62-2	Respiratory Virulence of Aged Aerosols of <i>Pasteurella tularensis</i> , SCHU-S4, for Man (180 min.) (61-TE-1519)*	8	14
62-3	Assessment of Respiratory Immunization with Living Tularemia Vaccine (LVS) Against Challenge with <i>Pasteurella tularensis</i> , SCHU-S4	20	17
62-4	Evaluation of Attenuated VEE Virus Vaccine (TC-81)	(7)	
62-5	Evaluation of Attenuated VEE Virus Vaccine (TC-81)	(13)	
62-7	Respiratory Virulence of Aged Aerosols of <i>Pasteurella tularensis</i> , SCHU-S4, for Man (120 Min.) (62-TE-1564)*	8	15
62-8	Evaluation of Reimmunization with Attenuated VEE Virus Vaccine (TC-81)	(4)	
62-9 (was 9B)	Estimation of Human Immunizing Dose of Attenuated VEE Virus Vaccine (TC-81, 10^{-4} , 10^{-5} , 10^{-6})	6	
62-10	Evaluation of Interference of Response to Attenuated VEE Virus Vaccine (TC-81) by Yellow Fever Vaccine (17-D)	36	

UNCLASSIFIED

UNCLASSIFIED
 U.S. Army Medical Research Institute of Infectious Diseases
 Research Projects Involving Volunteers (Continued).

Year and Project Number	TITLE	Number of Volunteers (Non-SDA)*	Hosp D
<u>1963</u>			
63-1	Respiratory Virulence of Aged Aerosols of <i>Pasteurella tularensis</i> , SCHU-S4, for Man (180 min.) 62-TE-1629*	8	1
63-1A	Evaluation of Attenuated VEE Vaccine (TC-93), ND-4	(13)	
63-2	Evaluation of Attenuated Tularemia Vaccine (LVS), NDBR-101, Lot 2	17	
63-2A	Evaluation of Attenuated Tularemia Vaccine (LVS), NDBR-101, Lots 1-4, 6	33, (6)	
63-3	Evaluation of Metabolic Changes in Immunized and Nonimmunized Man Exposed to an Infectious Dose of <i>Pasteurella tularensis</i> , SCHU-S4 (62-TC-1684)*	20	1
63-4	Respiratory Virulence of Aged Aerosols of <i>Pasteurella tularensis</i> , SCHU-S4, for Man (120 min.) (62-TE-1713)*	8	1
63-5	Evaluation of Attenuated Tularemia Vaccine (LVS), NDBR-101, Lot 1	(8)	
63-6	Evaluation of 1-year Storage Stability of Tularemia Vaccine (LVS), NDBR-101, Lots 2 and 4	20	2
63-7	Evaluation of Attenuated VEE Virus Vaccine NDBR-102, Lot 4	2, (7)	
63-8	Determination of Human ID ₅₀ of Attenuated VEE Virus Vaccine (TC-93) ND-4 from National Drug Co.	42	
63-9	Evaluation of Attenuated Tularemia Vaccine (LVS), NDBR 101-2	(11)	
63-10	Evaluation of Susceptibility of Volunteers Previously Infected with Tularemia (Respiratory) to Reinfection by Aerosolized <i>Pasteurella tularensis</i> *	23	26
63-11	Evaluation of Attenuated Tularemia Vaccine (LVS), NDBR-101, Lot 3	(9)	
<u>1964</u>			
64-1	Evaluation of Metabolic Changes in Normal Humans with Hyperthermia Induced to Mimic the First Day of Fever in Acute Tularemia	8	237
64-2	Evaluation of Attenuated Tularemia Vaccine (LVS), NDBR-101, Lot 4	(5)	
64-2A	Evaluation of Attenuated VEE Virus Vaccine (TC-83), Lot 3-2	1, (6)	
64-3	Classified Project	(4)	
64-4	Classified Project	(4)	
64-5	Classified Project	(4)	

UNCLASSIFIED

UNCLASSIFIED
 U.S. Army Medical Research Institute of Infectious Diseases
 Research Projects Involving Volunteers (Continued).

Year and Project Number	TITLE	Number of Volunteers (Non-SDA)*	Hospital Days
<u>1964 (Continued)</u>			
64-6	Evaluation of Intermittent and Continuous Tetracycline Prophylaxis in Respiratory Tularemia, SCHU-S4	22	5
64-7	Evaluation of Attenuated Tularemia Vaccine (LVS), NDBR-101, Lot 6	(11)	
64-8	Evaluation of Metabolic Changes in Normal Humans with Fever Induced by Bacterial Endotoxin	8	3
64-9	Evaluation of Personnel Exposed to a Patient with Bolivian Hemorrhagic Fever	7, (12)	
64-10	Evaluation of Metabolic Changes in Humans during Induced Q Fever (63-TE-1823)	8	4
64-11	Evaluation of Metabolic Changes in Humans during Antibiotic Therapy	8	2
64-12	Evaluation of Intermittent Therapy and a 28-Day Prophylactic Course of Tetracycline in Respiratory Tularemia	24	4
64-13	Evaluation of Attenuated Tularemia Vaccine (LVS), NDBR-101, Lot 1	(7)	
64-14	Evaluation of Metabolic Changes in Nonimmunized Man Exposed to an Infectious Dose of <i>Pasteurella tularensis</i> while on an Animal Protein (as opposed to a vegetable protein) Diet	7	3
64-15	Evaluation of Two Courses of Tetracycline Therapy and a 14-Day Course of Tetracycline Prophylaxis in Respiratory Tularemia*	12	4
64-16	Evaluation of metabolic Changes in Humans during Induced Sandfly Fever	8	3
64-17	Respiratory Virulence of Aged Aerosols of <i>Pasteurella tularensis</i> , SCHU-S4, for Man (180 min.) 64-TE-1907	8	1
64-18	Evaluation of Attenuated Tularemia Vaccine (LVS), NDBR-101, Lot 2	(3)	
<u>1965</u>			
65-1	Respiratory Virulence of Aged Aerosols of <i>Pasteurella tularensis</i> , SCHU-S4, for Man (180 min.) (64-TE-1907)*	8	17
65-2	Evaluation of clinical and Serological Responses of Volunteers to Phase I Q Fever Vaccine	6	
65-3	Evaluation of Clinical and Serological Responses of Volunteers to Phase I Q Fever Vaccine	4??	
65-4	Evaluation of Attenuated Tularemia Vaccine (LVS), NDBR-101, Lot 3	(7)	
65-5	Evaluation of Tetracycline Therapy and Prophylaxis in Respiratory Tularemia	22	36

UNCLASSIFIED

UNCLAS' ED
 U.S. Army Medical Research Institute of Infectious Diseases
 Research Projects Involving Volunteers (Continued).

<i>Year and Project Number</i>	<i>TITLE</i>	<i>Number of Volunteers (Non-SDA)*</i>	<i>Hosp Do</i>
1965 (Continued)			
65-6	Evaluation of Individuals Following Accidental Respiratory Exposure to Staph Enterotoxin B*	(15)	
65-7	Evaluation of Attenuated Tularemia Vaccine (LVS), NDBR-101, Lot 4	(12)	
65-8	Evaluation of Attenuated Tularemia Vaccine (LVS), NDBR-101, Lots 2 and 4	20	
65-9	Evaluation of Attenuated VEE Virus Vaccine (TC-83/3-2L3)	(19)	
65-10	Evaluation of Metabolic Changes in Humans during Graded Reduction of Dietary Intake or during Low Dose Cortisol Administration	6	33
65-11	Evaluation of Tetracycline Therapy in Respiratory Tularemia Due to SCHU-S5 Strain*	8	34
65-12	Evaluation of Clinical and Serological Responses of Volunteers to Phase I and Phase II Q Fever Vaccine	16	
65-13	Evaluation of 3-year Storage Stability of Tularemia Vaccine (LVS), NDBR-101, Lots 2 and 4	14	27
65-13A	Evaluation of Metabolic Changes in Immunized Subjects Exposed to Infectious Doses of <i>Pasteurella tularensis</i>	8	34
65-14	Viremia determinations in Humans Vaccinated with the Recommended Immunizing Dose of VEE Virus Vaccine, Live, Attenuated (TC-83/3-2)	3	
65-15	Classified Project	(4)	
65-16	Evaluation and Comparison of Efficacy of Phase I and Phase II Henzerling Strain Q Fever Vaccines Against Challenge with the AD Strain (Phase II) Q Fever (65-TE-2033)	18	28
65-17	Classified Project	(9)	
65-18	Classified Project	10	
1966			
66-1	Evaluation of Tetracycline Prophylaxis and Therapy of Respiratory Tularemia in Volunteers*	16	35
66-2	Classified Project	10	3
66-3	Classified Project	(3)	2
66-4	Classified Project	2	2
66-5	Classified Project	2	2
66-6	Classified Project	2	3
	UNCLASSIFIED		

UNCLASSIFIED
 U.S. Army Medical Research Institute of Infectious Diseases
 Research Projects Involving Volunteers (Continued).

<i>Year and Project Number</i>	<i>TITLE</i>	<i>Number of Volunteers (Non-SDA)*</i>	<i>Hospital Days</i>
<u>1966 (Continued)</u>			
66-7	Classified Project	3	4
66-8	Classified Project	4	5
66-9	Classified Project	4	5
66-10	Classified Project	4	5
66-11	Classified Project	3	4
66-11A	Classified Project	4	4
66-12	Classified Project	4	4
66-13	Evaluation of Effects of Respiratory Tularemia on Task Performance of Volunteers (BEID-2) and Tetracycline Therapy of Respiratory Tularemia in Volunteers	18	29
66-14	Investigation of Clinical Effects of Attenuated VEE Virus Vaccine in Volunteers (TC-83/3-2L3)	20	9
66-14A	Investigation of Clinical Effects of Attenuated VEE Virus Vaccine in Volunteers (TC-83/3-2L3)	20	13
66-15	Determination of the Effect of Diet Upon Normal Periodicity of Whole Blood Amino Acids in Humans	6	8
66-16	Classified Project	10	5
66-17	Classified Project	8	4
66-18	Classified Project	10	4
<u>1967</u>			
67-1	Evaluation by Task Performance of Respiratory Tularemia in Man (BEID-3)*	10	23
67-2	Study of Whole Blood Amino Acids in Normal Adult Male Subjects		
	2A	6	6
	2B	24	
	2C	6	22
	2D	10	10

UNCLASSIFIED

UNCLASSIFIED
 U.S. Army Medical Research Institute of Infectious Diseases
 Research Projects Involving Volunteers (Continued).

<i>Year and Project Number</i>	<i>TITLE</i>	<i>Number of Volunteers (Non-SDA)*</i>	<i>Hospital Days</i>
<u>1967 (Continued)</u>			
67-3	Preliminary Evaluation of Plague Vaccine, Live, Attenuated (Strain EV-76-WR, Freeze-Dried, Lot 7)		
	(1A) 5 x 10 ⁵	6	13
	(1B) 5 x 10 ⁴	8	10
	(1C) 5 x 10 ⁵	6	9
	(1D) 5 x 10 ⁶	6	9
	(1E) 5 x 10 ⁷	6	9
	(2A) 5 x 10 ⁶	10	8
	(2B) 5 x 10 ⁷ Reimmunization of 5 x 10 ⁵ and 5 x 10 ⁶	10	8
67-4	Evaluation of Metabolic and Biochemical Responses to Immunization with 17-D Strain Yellow Fever	10	15
67-5	Evaluation of Metabolic and Biochemical Responses to Immunization with 17-D Strain Yellow Fever	12	15
67-6	Acceptability Study of Eastern Equine Encephalitis (EEE) Vaccine, Tissue Culture Origin, Lot 1-1966	(6)	
<u>1968</u>			
68-1	Evaluation of Metabolic and Biochemical Responses to Immunization with 17-D Strain Yellow Fever	12	
68-2	Evaluation of metabolic, Biochemical and Serological Responses to EEE Vaccine Inactivated, Tissue Culture Origin, Lot 1-1966	20	Group I 1 Group II 1
68-3	Evaluation of Behavioral, Metabolic and Serological Responses to Infection with Sandfly Fever Virus, Sicilian Strain (Task Performance BEID-4 and 5)	20	Group I 1 Group II 1
68-4	Evaluation of 5-year Storage Stability of Tularemia Vaccine, Live, Attenuated, NDBR-101, Lot 4. Part I: Immunization. Part II: Aerosol Challenge	20	21
68-5	Evaluation of Response to Immunization with 17-D Strain Yellow Fever	14	16
68-6	Evaluation of Circadian Variation in Tyrosine Metabolism in the Human	13	12
68-7	Comparison of Blood Levels and Urinary Excretion of Chloromycetin ?? and a Generic Preparation of Chloramphenicol	22	5

UNCLASSIFIED

BIOLOGICAL OPEN AIR TESTING

Anti-Personnel Biological Simulant Tests: 123 1949-1969

Simulants Used: *Bacillus globigii*
Serratia marcescens
Aspergillus fumigatus
Escherichia coli
Fluorescent particles

Anti-Personnel Pathogenic Agent Tests: 53 1951-1969

Agents Used: *Psittacosis virus* *Coxiella burnetii*
Hog Cholera *Pasteurella pestis*
Newcastle disease *Pasteurella tularensis*
Clostridium botulinum toxin *Brucella suis*
Botulinum toxin *Brucella melitensis*
Shellfish poison *Bacillus anthracis*
Staphylococcus enterotoxin *Coccidioides*

Agent Tests/Projects Using Human Volunteers: 120 1954-1969

Agents Used: *Coxiella burnetii*
Pasteurella tularensis
Venezuelan Equine Encephalitis

UNCLAS

February 94 Briefing Book
Info Not Confirmed

CHEMICAL EXPERIMENTS

- During World War II, records indicate the Army tested primarily blister agents such as mustard gas and lewisite;
- DoD working with DVA to provide information for veterans who may have participated in those tests.
- The National Academy of Sciences report was the genesis of the department's organization of a task force to develop a data base of experiments, personnel participation, etc.
- The Navy also conducted this type of tests. Its records are better. 2900 naval personnel volunteered to participate in these experiments which were conducted at the Naval Research Laboratory in Washington, D.C. Primary purpose was to test protective clothing and ointments/powders.
- To date, Naval Research Laboratory has responded to about 60 Congressional requests for information relating to these mustard gas tests. Hundreds of claims from veterans have been filed with the DVA. They have established a program to deal with them. DoD works closely with the DVA to provide information relating to the claims.
- In other chemical experiments, we have copies of other chemicals such as prescription drugs and the number of people involved in tests conducted by the Army.
- During the Cold War, human volunteers participated in other chemical tests including nerve agents, nerve agent antidotes, psychochemicals (LSD), and blister agents. Congressional knowledge of these experiments has existed since 1959 and hearings were held on the LSD experiments in 1975.

February 94
Briefing Book *Info Not Confirmed*

LSD EXPERIMENTS

- Conducted by Army Chemical Corps during the period 1955-67
- Army says volunteers were solicited from the Army at large.
- Army says tests were conducted under strict medical supervision.
- Army says written consent was obtained from participants though surviving subjects claim they were not told of the substances they would receive.
- Several efforts were made to do follow ups evaluations on the subjects.
 - Δ Two preliminary evaluations done.
 - Δ Pilot Study designed and completed in 1977
 - Δ Full Scale follow up project subsequently developed.
- Full scale project sought to contact all of those for whom addresses could be obtained who had received LSD.
 - Δ Asked them to come to either Walter Reed Hospital, Letterman Hospital in San Francisco, or Eisenhower Medical Center in August, GA. for a complete week long series of studies including medical and neurological examinations, screening laboratory tests, EEGs, psychiatric interviews, ophthalmology and ENT consultations, and a Halstead Reitan Neuropsychological Test Battery.
- Pertinent data compiled in a comprehensive report.
- Unfortunately, a control group with which to compare the LSD exposed subjects could not be obtained.
- Comparison was then done with the general male population in the US.
- Conclusions:
 - Δ Majority of examined subjects did not appear to have sustained significant damage;
 - Δ LSD could not be identified conclusively as the cause when abnormalities were found; due primarily to many confounding variables which could not be controlled such as length of time expiring and onset of symptoms, exposure to other chemical, intervening life experiences, etc.
 - Δ Incidence of psychiatric illness was identical to the general population;
 - Δ LSD exposed subjects as a group were unusually well educated, maritally stable, and economically successful;
 - Δ No consistent evidence of chromosomal damage;
 - Δ Neuropsychological testing showed abnormalities in about one-third of the subjects. Most cases were borderline and 73% had probably etiologic explanations other than LSD exposure.
 - Δ 16% of the subjects reported psychological symptoms occurring within a reasonable proximity to LSD exposure (defined as within 2 years).
- The Department's position has been, however, that these human subjects should be afforded the opportunity to present their complaints for consideration on a case by case basis.

February 94
 Briefing Book
 Info Not Confirmed

BIOLOGICAL WARFARE RESEARCH

- Army report on this subject was released in 1977;
- Offensive biological warfare research ended in 1969 and the limited stocks in the US arsenal were destroyed;
- 1977 report contained a full listing of biological warfare testing done both on military reservations and in the public domain;
- According to historical reports, the Army was well aware of the significant health and safety threats of biological agents and conducted its tests accordingly. In fact, because of the researchers concerns, their efforts became the foundation for infectious disease safety procedures, and the program developed such now common equipment as negative pressure isolation cabinets, glove ports, and exhaust ventilation systems incorporating air incineration chambers;
- Media reports in the mid-70s reported that biological agents had been released in the atmosphere in several American cities: San Francisco (1950), New York subway (1966), the Pentagon (1950), Key West, Florida (1952), Panama City, Florida (1953), Mechanicsburg, PA (1951), Ft. McClellan, Alabama (1953), and Port Mugu-Port Huéneme, CA (1956).
 - Δ These tests were conducted to examine the dispersal pattern of bacteria in the atmosphere;
 - Δ The bacteria used were then considered benign simulants. They were *serratia marcescens*, *bacillus globigii*, and *aspergillus fumigatus*, a fungus.
- Because of concerns about a possible link between the San Francisco test in 1950 and the incidence of *SM* infection in the Stanford University hospital in 1952, the Army asked a group of four scientists from the Communicable Disease Center of the Public Health Service to review the situation and provide recommendations for future use of *SM*. Their conclusions:
 - Δ Experimental BW work outside the lab is impossible without the use of simulants;
 - Δ Since the early days of bacteriology, *SM* has been the most commonly used organism for studying the dissemination of bacteria in the air;
 - Δ The finding of *SM* in the Stanford cases was not shown to have influenced the clinical course of the patients' illness;
 - Δ Use of *SM* should continue to be used as simulant;
 - Δ Efforts to find a more suitable simulant should be continued and a substitute be used when found.
- *SM* was used medically as a bacterial tracer from 1937 to 1969.
- *Project Whitecoat* used Seventh Day Adventists conscientious objectors as test subjects.

CHEMICAL WEAPONS EXPOSURE STUDY TASK FORCE

To address issues discussed in March 1993 hearings and to oversee response of Secretaries of Military Department to DEPSECDEF Memo of March 9, 1993.

Composed of senior representatives from OASD (P&R), (HA), DDR&E, ATSD Atomic Energy (Chemical Matters), Military Departments, DMDC, and DTIC.

Series of meetings held in April 1993.

Priorities: 1) identification of dates and sites of chemical weapons tests that used human test subjects; 2) identification of locations where source data or documents on test sites and test subjects are located, and 3) identification of individuals who were subjected to full body exposures.

Actions: 1) Determination of major records repositories location, content of records, scope of effort needed to analyze information and extract personnel data. 2) Team of senior analysts dispatched by ASD (P&R) to begin reviewing records of repositories of which we were aware or had reason to believe had information on chemical weapons testing.

CHEMICAL WEAPONS EXPOSURE STUDY TASK FORCE (CWEST)

MEETING SUMMARY FOR 12 APRIL 1993

The first meeting of the CWEST was convened at 9:00 a.m. by Ms. Norma St. Claire, Director of Information Resources Management, OASD (FM&P). A copy of the attendance roster is attached.

Ms. St. Claire opened the meeting by noting that this issue has the personal interest of the President and several members of Congress. The purpose of the CWEST is to identify individuals exposed to chemical weapons agents, not to assign responsibility for past actions. Members were asked to ensure that the heads of their organizations are aware of the importance of this issue, and that it is a priority issue with DepSecDef.

The following paragraphs summarize the major points of discussion. Critical issues, taskings, and decisions are highlighted.

The group spent some time discussing the objectives of CWEST. The March 9 DepSecDef memorandum requires us to identify current and past service members, current and past civilian employees of DoD, and contractor personnel that may have been exposed to chemical weapons agents through participation as human test subjects, or by participation in production, storage, or transportation activities. The question was raised as to whether or not we should search contractor facilities for records. Ms. St. Claire responded that this may have to be done. If it must be done, contractors who participated will most likely be asked to search their own files. There was further discussion about the fact that many of the companies participating in chemical weapons programs during the 40's and 50's have been absorbed into large conglomerates such as 3M and Honeywell.

CAPT Ray Chaput, the Navy point of contact, questioned the purpose of the CWEST, and expressed doubt about the scientific validity of the causal relationship between mustard gas exposure and subsequent medical problems. Ms. St. Claire said that this question is outside the scope of the CWEST responsibilities. She further said that determination of causal relationships have already been made by the National Academy of Science (NAS) Institute of Medicine (IOM) report issued January 6, 1993. Any further questions of causalities will be determined on a case-by-case basis by medical staff at the VA.

During the hearing on March 10, Mr. Vogel, Deputy Under Secretary for Benefits at VA, stated that the VA is aware that in some instances there may

not be personnel and medical records available, especially since there were many records destroyed in the 1973 fire at the National Records Center. Disability determinations made by the VA will err on the side of the veteran. CAPT Chaput reiterated his concern that there be some kind of disclaimer that the DoD is not accepting any responsibility for medical conditions by putting individuals into an exposure database.

There was some concern over the declassification directive in the March 9 DepSecDef memorandum, concerning issues that may be contained in some of the records. CAPT John Jemjonek, OASD (HA), emphasized that what the CWEST has been tasked with is the identification of who was involved in the testing, and to what extent. The declassification direction pertained specifically to people and units involved, agents tested, dates, and sites. Ms. St. Claire reminded the group that there is a failsafe in the memorandum which requests the Military Departments to specify in writing to the ASD(FM&P) if there is an overriding reason for maintaining classification of particular information.

Ms. St. Claire stressed that the priorities for the Task Force are: 1) identification of dates and sites of all chemical weapons tests that were conducted using human test subjects; 2) identification of locations where source data on sites and individuals may be found; and 3) identification of individuals who were subjected to whole body exposure. CWEST members should provide information on test sites, dates, participants, etc., in writing, or, when possible, in an automated format, so we may begin putting the information into a database.

Since many of the personnel and medical records for individuals who served in the military during this period have been lost, and since many of the test documents and records may not include names and service or social security numbers, we will have to rely, in part, on self identification. During the March 10 hearings Mr. Vogel stated that VA is taking the lead in the outreach effort.

Ms. St. Claire asked the members to provide a status report on the information they had gathered to date.

LTC Mike Brown, the Army representative, brought to the meeting a notebook with lists of sites and descriptions of activities performed at each site.

Dr. Forrest Frank, Defense Technical Information Center (DTIC), will have the NAS Report put in the DTIC system.

Members of the group found 690 names, with dates, exposure sites, and chemical agent information from the Washington National Records Center in

Suitland, MD. There is additional information there concerning San Jose Island in Panama, as well as classified medical documents from WWII, that FM&P will be reviewing.

There is reportedly a large amount of documentation at Ft. Mclellan, AL, and some information at Dugway Proving Ground, UT. There is also information in many technical reports that may help identify test sites and specific agents tested and the testing protocols.

CAPT Chaput noted that the Navy already gave information to the VA. He said that they are preparing a memorandum to send to the DepSecDef describing the information they provided.

Several members had questions about contractor and personnel resources that will be available to support the effort. Dr. Frank told the group that DTIC currently has the Chemical Warfare and Biological Information Center under contract and suggested that DoD may want to consider using them for information collection. CDR Yaffe, DDR&E, suggested that the CWEST might request each Service to designate three individuals to work full time on reviewing and collecting information from the records repositories that have been identified. Ms. St. Claire noted that the DepSecDef memorandum of March 9 tasked the Military Departments to make the required searches. At this time, no funds have been allocated for contractor support to the effort. The first task must be to determine the magnitude of the undertaking. Ms. St. Claire again stressed the importance of gathering the preliminary data on test sites and on locations where data on individuals may be stored. If additional resources are required to complete the effort, the ASD(FM&P) will review the alternatives for providing them.

CAPT Jemionek suggested that the CWEST develop a work plan, time line, and description of final product or deliverables. Ms. St. Claire asked CAPT Jemionek to chair a Planning subgroup to develop a work plan for presentation to the full CWEST. It was also suggested that we try to get CAPT Bill Flor, Defense Nuclear Agency (DNA), to sit on the Planning group. He was deeply involved in the development of the Nuclear Test Personnel Review, a similar database established to provide a roster of personnel exposed to ionized radiation. Other members of the subgroup will be COL Frank Cox, ATSD(AE), Mr. Ed Christie, DMDC-W, Mr. Randy Rakers, USAMHI, LTC Mike Brown, DCSOPS, and Ms. Marty Hamed, OASD (FM&P). The group will meet on April 19 at 9:00 am at Ballston Towers. Ms. St. Claire said that VA representatives will be invited to attend some of the CWEST meetings, to ensure that we are responsive to their needs. They will be invited to attend the subgroup meeting next week.

The last issue discussed was on how much access VA needs to the actual records. Mr. Ed Christie will develop a strawman for the data base and bring

it to the planning meeting next week. CWEST members will also be the designated point of contact for working with VA.

In closing, Ms. St. Claire again summarized the priorities of the CWEST. She emphasized that after identification of test sites, the initial task is to locate records (personnel, medical, technical) and then to determine the nature of the information they contain. First priority information is that pertaining to tests where individuals were subjected to full body exposure (as in the chamber tests at NRL), and where there was full body or critical exposure through accidents (such as the Bari Harbor incident).

The meeting was adjourned at 12:00 pm. The Planning subgroup will meet on April 19 and the full group will meet again on Monday, April 26, at 9:00 am at Ballston Towers.



OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, DC 20301-1200

22 APR. 1993

HEALTH AFFAIRS

MEMORANDUM FOR DIRECTOR, INFORMATION RESOURCES MANAGEMENT,
OASD(FM&P)

SUBJECT: Chemical Weapons Exposure Testing Program of Work Study
Group

On 19 April 1993, the above subject group met to recommend a Program of Work for executing an information retrieval to identify DoD personnel exposed to chemical agents during testing, training, transport, production or storage which occurred prior to 1 January 1968. At TAB (A) is an attendance sheet of individuals who participated in the study group.

The study group used as a model the Defense Nuclear Agency (DNA) Nuclear Test Personnel Review (NTPR) Program Fact Sheets and DNA Document 6041F, "For the Record - A History of the Nuclear Test Personnel Review Program, 1978-1986" (TAB B) to respond to your two taskings. These tasking being: (1) to define as a product a suitable data base usable by the Department of Veterans Affairs (DVA); and, (2) to develop a work plan to develop said product.

The study group recommends that seven tasks be assigned as goals or requirements to an Executive Agency for program execution:

- (1) To identify the location, content, and where possible declassification of all chemical warfare agents source documents issued prior to 1 January 1968.
- (2) To compile a electronic data base records file and roster of DoD personnel involved in the production, transport, storage, and testing of chemical warfare agents prior to 1 January 1968. (Add RDT&E)
- (3) To develop a history of each chemical warfare agent or test site that involved DoD personnel.
- (4) To provide estimates, where available, of personnel exposure levels based upon scientific or technical reports issued in the course of a whole body chemical warfare agent(s) exposure study program.
- (5) To identify those individuals who were involved in whole body chemical agent exposure studies (chamber tests) and to provide, whenever possible, dose exposure levels on a priority basis to the Veterans Administration.
- (6) To establish personal contact with as many test participants as possible. (primarily Chamber Test participation)

- (7) To provide assistance to the veteran, the Veterans Administration and other organizations by providing as complete data as possible on individual participation and possible exposure to chemical warfare agents.

To accomplish the above goals, the following actions are recommended:

- (1) That a letter from DEPSECDEF or appropriate authority be issued which prohibits the destruction of any records related to Chem/bio Defense Research. Any records so identified shall be reported to the Executive Agent for this program tasking. Records are to remain on site until instructed otherwise.
- (2) That an Executive Agent for this program tasking be identified. The Executive Agent will be responsible for: (a) identification of sites where available records exist and information content of such records; (b) declassification, to the extent possible, of all such records; (c) establish an electronic data base file of these records (d) extraction from each record pertinent detailed information that may assist in identification of individuals who participated in the chemical weapons program and were exposed to chemical agents. The Executive Agent shall also establish liaison with the DVA regarding such information transfer.
- (3) That an Agency be identified and tasked with the responsibility for development of a complete history regarding chemical weapons testing conducted at each identified site.

The following product reports are recommended to assist in the execution of this program:

- (1) **A SITE LEVEL DATA BASE FILE** This data base would establish the existence of records at a particular site, and would provide a preliminary description regarding information content in such records. The Site Level Data Base File would consist of the following fields regarding information contained in the records:

- Service (Civilian or Military Branch of Service)
- Unit Identification
- Location of Event (Field test, storage, test site)
- State where Event Occurred
- Agent
- Type of Involvement
- Start Date -
- End Date -
- Current Location of Records
- Type of Record (medical, muster role, morning report)
- Number of Individual Exposed to Agents
- Classification Status of Records Held.

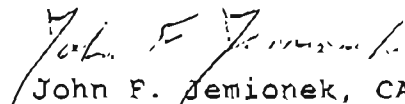
An example of such a Site Level Data Base File is contained at TAB C.

- (2) NAME LEVEL DATA BASE FILE This is a detailed listing of information found on each relevant document related to chemical weapons testing at identified sites. The file would also consist of an electron copy of each relevant document with a cross identification number for future access. Priority would be given to records which involved chamber tests, field testing, or accidental exposures during production, storage, transport, and testing. The Name Level Data Base File would consist of the following fields:

Service Branch of Individual (Military or Civilian)
Name of Individual
SSN
Service Number
Chemical Agent(s) Involved
Location of Exposure (Name of Base, City, Ship, etc)
State Postal Code
Zip Code
Start Date of Exposure
End Date of Exposure
Nature of Exposure (Accident, Patch, chamber, field, unknown, training, production, transportation, disposal)
Unit or Individual
Location of Hardcopy Record
Rank or Grade of Individual at time of Test
Date of Birth
Research Project Name or Project Number Identifier
Record Identification Number Assigned for Cross Reference
Record Source (medical, morning report, muster, summary, research notes, research logs)

- (3) A HISTORICAL REPORT OF HUMAN EXPOSURE TO CHEMICAL AGENT TESTING This historical document would provide an overview of the program. Detailing information as to units, dates, testing sites, agent(s) employed, and any other information which may be declassified regarding the background, purpose or outcome of such testing.

It should be noted that this will be a multi-year project. ^{4 multi-#}
Completion date will be determined by resources which the Executive Agent commits to the Program.


John F. Jemonek, CAPT, MSC, USN
Director, Scientific Activities

CHEMICAL WEAPONS EXPOSURE STUDY TASK FORCE

MINUTES FOR MEETING 26 APRIL 1993

The meeting was opened at 0900 by Ms. Norma St. Claire, OASD (FM&P). A copy of the attendance roster is attached. Ms. St. Claire told the group that Ms. Pam Parker, from Congressman Sonny Montgomery's staff, has been inquiring about what we are doing in DoD to implement the requirements of the March 9 memorandum signed by Mr. Perry. Ms. St. Claire informed her that we are currently trying to estimate the magnitude of the problem and get a reasonable estimate of the costs to go through records. Ms. St. Claire asked each of the members of the group to provide a status report on their efforts to date.

LTCOL Mike Brown reported that Army workload in individual claims is rising. He said that a central focal point to accept and farm out congressionals would be helpful. Ms. St. Claire said that FM&P will take all congressionals and will check to see if Public Affairs will respond if provided a form letter. Army is also working on milestones for accomplishing tasks set forth in the March 9 memorandum. A worldwide message is being sent out to all archivists to look at their records and get information back to Headquarters about what is out there. Army will forward a copy of the memo to FM&P. Army also stated that if biological weapons are added to this effort that the tasking needs to be clarified with the Military Departments since they are currently operating under the guidance that this is chemical only.

COL Mike Browne reported that the Air Force is contacting people involved with chemical weapons matters. However, so far they have not found any one who was a test participant. They have sent out Mr. Perry's March 9 memorandum and will forward a copy of the cover letter to FM&P.

Ms. Zee Ferris, from Defense Manpower Data Center (DMDC), reported that they had attended the Task Force Planning Meeting held on April 19, and have added the field suggested to the strawman database report. A copy was passed out at the meeting and is included as an attachment.

Ms. MaryJo Timmons reported that Defense Technical Information Center (DTIC) is getting a copy of the Institute of Medicine Report and will have it put into their system. A subsequent phone call from Dr. Forest Frank informed FM&P that the report is in the DTIC system and can be requested by document number AD-A263272 at (703)274-7633. They have a bibliography of chemical and biological papers in their system, by Service, and provided a copy to each Service as well as FM&P. DTIC also provided a list of documents prepared by the Chemical Warfare/Chemical and Biological Defense Information Analysis Center

(CBIAC) and a set of relevant documents.

Ms. Marty Hamed, OASD (FM&P), reported that the number of congressionals was increasing, as is the number of inquiries from individuals. Information was received from the Naval Historical Institute citing Naval Surface Warfare Center and Naval Sea Systems Command as possible repositories in of Navy records on chemical weapons. Staff from FM&P and the Army Environmental Support Group are going to the National Records Center in Suitland April 29 to review the Surgeon General files from WWII.

Captain John Jemionek, OASD (HA), gave a report on the Planning Group Meeting held on April 19. A written report and recommendations were provided to Ms. St. Claire and distributed at the meeting. The VA sent two representatives to the Planning Group Meeting. There were many similarities between the Nuclear Test Personnel Review (NTPR) Program and the tasks assigned to the CWEST. The NTPR Program lasted nine years and cost about \$49M in contract support alone. The CWEST Planning Group recommended that we pursue seven of the nine tasks assigned the NTPR and that we assign the project to an Executive Agent. It was also suggested that one of the elements we might want to add to the database if we can find it, is the reason for the individual's separation from the Service. There was discussion on the possibility of contract support. The Planning Group also suggested that DepSecDef put out direction to Military Departments and Defense Agencies to retain records pertaining to chemical weapons testing. Ms. St. Claire agreed that FM&P would prepare a memorandum on this subject.

In closing, Ms. St. Claire recapped that:

1. FM&P will prepare a preliminary report to the ASD (FM&P) on the size of this effort and recommendations on how to proceed after we receive information on test sites and locations where data are stored. The package will be coordinated with Military Departments, OASD Offices, and the appropriate Defense Agencies.
2. FM&P will draft a memo for DepSecDef signature concerning the retention of records.
3. FM&P will consider requesting an Executive Agent after a better a determination has been made on the scope of this project.
4. There will be further guidance developed concerning the declassification of information on chemical weapons testing programs after 1968.
5. The CWEST agreed with the formats for the databases that were recommended by the Planning Group.

The next meeting will be scheduled when we have some specific information to discuss on the above issues. Attendees were given the minutes from the first CWEST and asked to review them and have comments in by April 30, 1993.

CHEMICAL WEAPONS EXPOSURE STUDY TASK FORCE (CWEST)

MEETING SUMMARY FOR 7 FEBRUARY 1994

The meeting of the CWEST was convened at 1000 by Ms. Norma St. Claire, Director of Information Resources Management, OUSD(P&R) (R&R). A copy of the attendance roster is attached.

Ms. St. Claire opened the meeting by reviewing what has been accomplished to date. She stressed the need for the Services to move faster to locate data pertaining to the use of human test subjects in chemical weapons testing in the past. She stressed that the Services will need to screen their records to locate names of all personnel who participated in tests as well as those exposed as part of training, transportation, and storage. Data must be extracted from archives leaving the records intact. Services are to document the data found and reference the location of the primary data.

Ms. St. Claire also covered the fact that the Services must locate data that pertained to the testing and exposure of personnel to biological agents as well. She also issued instructions to the Services to inform all their personnel who were doing research in chemical or nuclear testing to also note the location of biological data and to forward the information to DoD. Service representatives stated that since the original direction did not specify biological agents that they would need specific direction to include biological agents testing in their searches.

The Army representative stated that the Army did not have the funds needed to do an extensive search of the records. Ms. St. Claire replied that there were no additional resources available to give the Services and that a way to do the screening must be found within their current resources.

It was mentioned that databases will be established for all current clinical trials and experimentation. These databases are being developed from the formats developed by the CWEST and will be compatible with across all human experimentation programs. The databases are being developed by DMDC.

The group agreed that a follow-up memorandum from the Deputy Secretary would help focus attention on the project. Ms. St. Claire asked Ms. Hamed to prepare and coordinate a draft package for DepSecDef signature.

The meeting was adjourned at 12:00 p.m.

Chemical Weapons Testing Sites Using Human Subjects

Naval Research Laboratory, Washington, D. C.

Naval Training Center, Great Lakes, IL

Camp LeJeune, NC

Edgewood Arsenal, MD

Bushnell Field, FL

Fort Pierce, FL

San Jose Island, Panama Canal Zone

Camp Sibert, AL

Dugway Proving Ground, UT

Camp Polk, LA

Gulfport, MS

El Centro, CA

Fort Richardson, AK

Fort Detrick, MD

Fort Benning, GA

U. S. Navy, Harts Island, NY

FC -
Volunteers

Harts Island Letter 1944
Volunteers from Navy Brig 11 April 1944

MEMORANDUM FOR CHIEF, MEDICAL DIVISION:

Subject: Procurement of Enlisted Volunteers.

1. A meeting was held at Cornell Medical Center on 10 April 1944 at 1400. Those present were:

Comdr. Marion B. Sulzberger (MC) USNR
Lt. A. Kanof, USN
Major Richard C. Carlisle, MC
Dr. Rudolph L. Baird
Capt. William H. Shervin, Jr., CWS

Comdr. Sulzberger produced a letter dated 7 April 1942 to the Secretary of the Navy requesting that the study of the effect of toxic agents be permitted on volunteers from the U. S. Navy.

2. Approval of this project was obtained from the Secretary of the Navy as per attached letter. The N.D.R.C. and C.M.R. have in progress tests on volunteer Navy personnel at the Naval Disciplinary Barracks, U.S. Navy Receiving Station, Harts Island, New York. The volunteers for this project are obtained by addressing groups of Navy personnel being held for disciplinary measures and asking that they volunteer for necessary tests. Comdr. Sulzberger states that the procurement of these men is very satisfactory.

3. Comdr. Sulzberger suggested that we confer with Mr. Austin McCormick, advisor to the Secretary of War on rehabilitation of enlisted personnel. Mr. McCormick was Commissioner in New York State for the rehabilitation of prisoners and would no doubt be in a position to aid this Service in the procurement of enlisted Army personnel. Comdr. Sulzberger requested that this information be conveyed to Colonel Rhoads for his consideration and further action.

4. Comdr. Sulzberger suggested that, in the event the approval of the Secretary of War is obtained to use volunteer enlisted personnel from the rehabilitation center at Camp Upton, New York, suitable laboratory equipment be installed at this post and also the construction of a gas chamber if necessary. The finding of such tests under the direction of Comdr. Sulzberger and the Army could then be readily correlated in New York City.

Mr. Austin MacCormick,
114 East 30th Street,
New York City - phone Regent 7-0814.
Caledonia 5-9720.

W. H. Shervin, Jr.
WILLIAM H. SHERVIN, JR.
Captain, CWS

COPY

DEPARTMENT OF THE NAVY

Office of the Secretary

Washington

May 8, 1942.

My dear Doctor Richards:

This will acknowledge your letter of April 7, 1942 with reference to scientific investigation of war gases.

As Secretary of the Navy I authorize the proposed investigation which shall be carried out in a manner subject to the approval of the Surgeon General.

Sincerely yours,

s/James Forrestal
Acting Secretary of the Navy

Dr. Alfred N. Richards
Chairman, Committee on Medical Research
Office of Scientific Research and Development
1530 P Street N.W.
Washington, D. C.

Certified a true copy
E. H. Cushing
Commander MC-V(S) USNR

Copy

April 7, 1942.

The Honorable Frank Knox
Secretary of the Navy
Washington, D. C.

My dear Mr. Secretary:

Among the problems of war medicine, vitally important both for the armed forces and the civilian population, are those connected with war gases. Investigations in this field are the subjects of contract between the Office of Scientific Research and Development and several University groups in Chicago, New York, Philadelphia and Baltimore. These studies include means of both prevention and treatment.

In the study of vesicant gases, investigators are confronted with one major obstacle, namely, that the skin of man is so different anatomically from that of laboratory animals that the latter are relatively useless as subjects for experimentation. It becomes necessary, therefore, to consider means by which human subjects may be made available for this type of research.

In the hands of competent experimenters much can be learned concerning the prevention and treatment of gas burns in men without subjecting them to more than relatively trivial annoyance or disability. A system is successfully in force under the auspices of the Canadian National Research Council which provides experimenters in this field with volunteers for these experiments. I have in my files a full description of their arrangements.

In or adjacent to the cities in which the investigators alluded to above are located are numbers of military establishments. It is our belief that a plan could be designed in accordance with which volunteers in limited numbers (not more than 50 in a group) for limited periods of time (10 days) would submit themselves to carefully supervised tests which would yield highly significant information. Such a plan should require the approval of the Surgeon General of the Service from which volunteers might be drawn; should be subject to arrangements approved by the officer in command of the unit of that Service and the tests themselves should be performed under the supervision of a medical officer of the unit.

In addition to the scientific and practical information which might emerge from such studies, another very practical advantage might accrue; that is, an educational familiarity with these gas weapons and consequent lessening of fear of their unknown qualities.

It is the purpose of this letter to request your approval of this general plan and perhaps to obtain your suggestions as to the most appropriate steps to be taken in its initiation should you choose to make them.

Certified a true copy
E. B. Cushing
Commander MC-V(S) USNR

Yours very respectfully,
s/Alfred H. Richards, Chairman
Committee on Medical Research

BS Lt. Side track, L. 277.
1893

Page 3-72-70

MEDICAL HISTORY

HOLCOMB 007 39 11

Class Michael A. ENR

State: From Connecticut Date: 6-29-21

STATE NAME OF PLACE DATE EACH NEW ENTRY

USN DISCIPLINARY BARRACKS

MARTIN ISLAND, N. Y.

2-10-45. GENERAL COURT MARTIAL PRISONER

Diagnosis: 1917-Derentitis, Contact, AKA (NOT DISCONDUCT) (NEPTE)

PI: This prisoner was volunteer for experimental mustard gas warfare tests, burn on outer left forearm, treated with various things off and on, finally some sulfathiazole ointment, was applied and patient broke out in a localized rash of left upper extremity, called a drug sensitivity rash by experimental group. This was treated with 2% ointment and then 1% and patient didn't improve. Referred for treatment.

Started on wet boric acid dressings.

2-13-45. Improved, continue medication.

2-16-45. Start on t.i.d. boric acid soaks, and vaseline between soaks.

2-20-45. Improving, use scarlet red instead of vaseline.

2-24-45. To duty this date.

HIGGINSON

11/24/93

17:15

2022334811

CJP Service (21)

002/003

11/24/93

14:26

DUR REGIONAL OFFICE-HARTFORD-308

002

HEADQUARTERS OF THE
 COMMANDANT THIRD NAVAL DISTRICT
 FEDERAL OFFICE BUILDING, 20 CHURCH STREET
 NEW YORK 7, N. Y.

Nov. 29 1944

Subject: Commendation for Halcomb, J.M.

The above-named individual has offered himself as a subject for experiments with chemical warfare agents. He is commended for this act and it is requested that this commendation be made a part of his service record.

Marion B. Sulzberger

Marion B. Sulzberger
 Comdr., (MC) USNR
 Cornell University Medical College

As A past subject of Mustard Gas testing I am submitting this claim. The doctor I've listed can document eye disorders, dizzy spells, migraines, chronic hoarseness, nervous disorders, scars from mustard gas burns.

Thank you,

Jesse M. Halcomb

10/12/93

Refer To: 308/27



DEPARTMENT OF VETERANS AFFAIRS
Veterans Benefits Administration
Washington DC 20420

ABATU
Reference
- Refer to

TELEFAX COVER SHEET

TO: Ms MARTY HAMEIS
Routing: _____
Telephone: _____
Fax Phone: _____
Number of Pages including cover 3

FROM: Compensation & Pension Service (21 1A)
Name: LARRY PETERSON
Phone: (202) 233-3005

REMARKS: 1. RECORD OF HIS GRAVURE, IMMAGE OF HART'S ISLAND SIGNAL B&B
2. COMMENDATION FOR ABIGAIL VOT FROM CORNELL UNIVERSITY MEDICAL COLLEGE

C&P Telefax Number: (202) 233-4811

HISTORY OF THE
UNIVERSITY OF CHICAGO TOXICITY LABORATORY
(Respiratory Project)

Prepared by
Dr. E. M. K. Coiling

HISTORY OF THE UNIVERSITY OF CHICAGO TOXICITY LABORATORY
(Respiratory Project)

About nine months after the outbreak of hostilities in Europe, there was created, by order of the Council of National Defense, the National Defense Research Committee* under the chairmanship of Dr. Vannevar Bush. The functions of this committee were to develop mechanisms and devices of warfare. The activities of the committee were to supplement those of the War and Navy Departments so as to insure an adequate over-all program, and, particularly, to assume the responsibility for research and development work in new fields which would require the setting up of additional research facilities and organizations.

The activities of the National Defense Research Committee were apportioned among four divisions. Studies of bombs, fuels, gases, and chemical problems were assigned to Division B, the Chemical Division, under the chairmanship of Dr. J. B. Conant. Division B was in turn divided into various sections, one of which was the Toxicity Section, headed by Dr. Roger Adams of the University of Illinois, Vice-Chairman of Division B.

Among the functions of the Toxicity Section was the provision of facilities for testing new potential chemical warfare agents. The members were informed that gas attacks might be launched against Britain. There was urgent need not only for accurate appraisal of the new agents which were being prepared by chemists working under contract with the NDRC, but also, for purposes of comparison, for accurate information concerning standard gas warfare agents.

During February and March of 1941 the Toxicity Section held several meetings, at short intervals, to discuss these problems and their possible solution. It was decided that the final assay of all products of the various research groups could best be carried out in one laboratory, inasmuch as such a procedure would insure uniformity of technique and of standardization. Since the toxic effects of various chemical agents often were multiple, it was agreed that both vesicants and lung irritants should be submitted to such a laboratory.

The next problem was to determine the location of the proposed toxicity laboratory. This was decided at a meeting of the following members of the Section in New York City on March 30, 1941:

Roger Adams	V. duVigneaud	W. R. Kirner
H. M. Chadwell	E. S. Cresser	A. E. Moritz
W. M. Clark	E. M. E. Geiling	A. E. Richards

* By Executive Order No. 8807, Dated June 26, 1941, the National Defense Research Committee was incorporated into the Office of Scientific Research and Development. With the growth of the NDRC, reorganization became necessary, and in place of the original four divisions there were established nineteen divisions, each with its own chairman and a number of committees. (See "Hearings before the Subcommittee of the Committee on Appropriations, House of Representatives - Seventy-Ninth Congress".)

In the course of this meeting it was pointed out that, in addition to the usual prerequisites, such as availability of personnel and laboratory facilities, a unique physical layout was required. There must be a large stack for the discharge of noxious or toxic fumes, and this stack must be proximal to adequate ground space for the erection of suitable buildings. The writer drew attention to the fact that these requirements could be met at the University of Chicago, and that the administration of that university would be willing to cooperate in such a project.

It was therefore decided that a contract should be awarded to the University of Chicago for the purpose of establishing a toxicity laboratory to test various chemical warfare agents, whether lung irritants or vesicants. The writer was named as Official Investigator for the project. The administrative officers of the University were consulted by telephone and their informal approval of the plan was obtained.

Two days later, on April 1, 1941, Dr. Adams met at the University of Chicago with E. F. Filbey, Vice-President of the University, W. E. Taliaferro, Dean of the Division of the Biological Sciences, W. B. Harrell, Business Manager, and the writer. Further details as to the staff and the construction of the laboratory were discussed and decided. (See Appendix IV and V). The contracts formally concluded between the University and the NDRC were effective as of this date, April 1, 1941. Subsequently, on December 9, 1942, the functions of the NDRC were taken over by the Office of Scientific Research and Development, Dr. V. Bush, Director; and from that date the contracts with the University of Chicago Toxicity Laboratory were assigned to Division 9 of the NDRC, under the chairmanship of Dr. W. R. Kirmser. Activities continued under these auspices until February 28, 1945, when the Toxicity Laboratory was transferred to the Chemical Warfare service of the United States Army.

Dr. Franklin C. McLean was selected to be the first Director of the Laboratory. Members of the university faculty were enlisted as consultants. The personnel of the NDRC and of the University aided Dr. McLean in selecting the staff, purchasing necessary equipment, and in erecting the required buildings. Development was rapid. There was at all times a minimum of red tape and delay. Dr. McLean's official acceptance by the Committee came within a few days after the first meeting with the University officials, and organization was well under way within a week. At this time Dr. McLean, Mr. L. B. Flook, Dr. C. W. Muehlberger, and the writer made their first visit to Edgewood Arsenal to obtain details of the construction of the various gassing chambers, and to learn of the experiences of the Edgewood personnel in this field.

The first buildings for the project were erected and equipped in record time. Building plans were begun immediately after the meeting of April 1, and ground was broken even before the plans had been completed. The first meeting of the Committee with the staff of the project was held in the new buildings on May 29, 1941, less than two months after the initiation of the project. Such an exceptional record was made possible by the excellent cooperation of Dr. McLean, the members of the Committee, and the Buildings and Grounds Department of the University, under the direction of Mr. Flook. All suitable building material and laboratory equipment which were on hand at the University were

placed at the disposal of the project, and this cooperation resulted in tremendous savings in both time and cost. Subsequent construction on the project was more costly and time-consuming not only because of the more elaborate apparatus required and the increasing shortages of materials, but also because this initial advantage was no longer possible.

The ground plan and also north and south views of the physical plant of the Toxicity Laboratory are shown in the attached photograph (Appendix I). Details of cost and construction are given in Appendix II. From an initial unit of a laboratory and animal quarters, the plant was expanded to include six laboratory suites, additional animal quarters, and an administration building. It should be noted that the University also provided certain laboratory space and animal quarters for the project in Abbott Hall and in the Anatomy Building.

The selection of staff of the laboratory was excellent in that young and enthusiastic individuals were chosen to carry out the various activities. In a remarkably short time, through their energy and unstinting effort, apparatus was set up, techniques were devised, the necessary fundamental data were accumulated, standards were established, and the effective function of the laboratory in the screening of potential new compounds for chemical warfare was realized.

The first months of work in the new laboratory required not merely the assembly and construction of equipment but also its calibration, and, in many instances, the devising of new apparatus for specific purposes. It was particularly fortunate that the project was able to enlist as a consultant, Mr. Matthew Benesh, Chief Engineer for the Peoples Gas, Light and Coke Company. His services were invaluable, for he possessed to a unique degree both practical and technical knowledge of the problems involved. He not only devised the now well-known Benesh apparatus, for the exposure of small animals to toxic atmospheres, and a micro-pipette for the delivery of minute amounts of vesicants to the skin of human volunteers, but also contributed many suggestions for the construction and calibration of other pieces of equipment.

As the laboratory techniques were established, it became evident that there was an acute need for an index to the available source material on chemical warfare. Dr. McLean was instrumental in establishing a Master Index, which proved to be most helpful not only to the Toxicity Laboratory itself but to the Chemical Warfare Service, to the United States Navy, to other HRC projects, to British and Canadian laboratories and similar agencies. It should be noted that at the first threat of outbreak of war in Europe, and of possible chemical warfare against the British mainland, the British had expanded their smooth and highly organized defense against such warfare, and studies of the agents involved. Their knowledge and resources were made available to United States investigators and were of great value. The project was particularly fortunate in securing the services of Dr. Hoylands Young to establish the Master Index and act as librarian to the project, for her background and ability made possible the excellent results achieved.

Soon after the laboratory began work it became apparent that the studies of vesicants would require special attention. In May 1942, Dr. William Bloom was invited to take charge of this division of the program. At the same time

-OPEN-

Dr. Bloom was also under contract to the Committee on the Treatment of Gas Casualties of the OGR, under the chairmanship of Dr. M. O. Wintermills, for the study of protective agents against vesicants, a contract taken over in July 1944 by the Toxicity Laboratory. Thus under Dr. Bloom's direction both vesicant action, direct from liquid or vapor or indirect from contaminated materials, and the irritation, protection, and decontamination offered against it by ointments and protective clothing were studied.

It had been known that the skin of laboratory animals cannot be blistered with irritants, yet is more sensitive to vesicants than human skin. This fact made the screening of vesicant substances extremely difficult. Using animal subjects, many attempts were made to establish standards for vesicant activity, but none of the various techniques were successful.

In 1942, however, this obstacle was removed through an arrangement with the Fifth Naval District, with the approval of the Surgeon General and of the Secretary of the Navy, making possible the testing of vesicants and protective agents on volunteers from the naval personnel at the Great Lakes Naval Training Center. Some 500 compounds have been screened for vesicant action, and more than 500 proposed decontaminants and protective agents have been tested, on over 70,000 human volunteers. In the fall of 1944 a gas chamber, with elaborate controls of temperature, humidity, and vesicant vapor concentrations, was installed at the Great Lakes Naval Training Center, and the apparatus was used intensively until the cessation of hostilities. *drawings*

This cooperative enterprise with the United States Navy was made possible primarily through the patience and diplomacy of Drs. McLean and Bloom and through the good offices of Commander A. F. Abt (MC, USNR). The project is particularly indebted to Captain E. W. Brown (MC, USN, Ret.) of the Bureau of Medicine and Surgery of the Navy, and to the senior medical officers of the Fifth Naval District, for sympathetic understanding of the problems involved and for unfailing cooperation.

Commander Abt was assigned to Chicago late in 1941, with extra duty at the Toxicity Laboratory, and soon recognized the deficiencies of animal testing. He carried out the first tests on naval volunteers, and remained as naval officer in charge until his transfer to Edgewood Arsenal in July 1944. Lt. Comdr. T. B. Friedman (MC, USNR) was assigned to the project from July 1942 to May 1944. Lt. Henry Heinen (MC, USNR) was assigned to the project from January 1943 until October 1944, and since that time the naval officer on the project has been Lt. Comdr. John C. Trexel (MC, USN, Ret.).

From July 1, 1944 to February 28, 1945, the vesicant program was financed by the OGRD. At the latter date it was transferred to the Medical Division of the Chemical Warfare Service, with the continued cooperation of the United States Navy.

An unlooked-for but valuable expansion of the activity of the laboratory was the establishment, late in 1943, of a kennel to condition dogs for toxicity tests. Difficulty in obtaining an adequate supply of healthy animals led to the development of this project, which was carried out on a farm outside the city. Incoming dogs were treated for parasites and infection, and they were

4

-OPEN-

-OPEN-

delivered to the laboratory only after they had been brought up to optimal physical conditions. The added expense of this procedure was more than offset by decreased variability in experimental results. The success of the experiment was so great that it might well be taken over as a peacetime project by the University, to facilitate scientific research and reduce one more factor causing variability in data. Standardization of small animal stock has become a widely accepted procedure; it is rather remarkable that hitherto similar standardization has not been attempted with the dog.

The first work of the Toxicity Laboratory was to establish its own standards for toxicity on the common or accepted chemical warfare agents. Then began the screening tests on new compounds. By the end of 1942 some 500 compounds had been submitted and the majority had been assayed. By 1945 the list had grown to include some 1500 substances. As emphasis was shifted from one group of compounds to another, new problems arose, and extensive toxicological and pathological studies, in addition to routine screening tests, were required. Again the evolution of new agents of low volatility necessitated the development of new methods of dispersal. These in turn required new studies of routes of absorption and extensions of screening routines. It was necessary not only that toxicities be determined for varying types of exposure, but that such exposure be related to the types of offensive and protective devices contemplated. In 1943 a chemical laboratory was set up for measurements of volatility, and an explosion chamber was installed for testing stability to detonation.

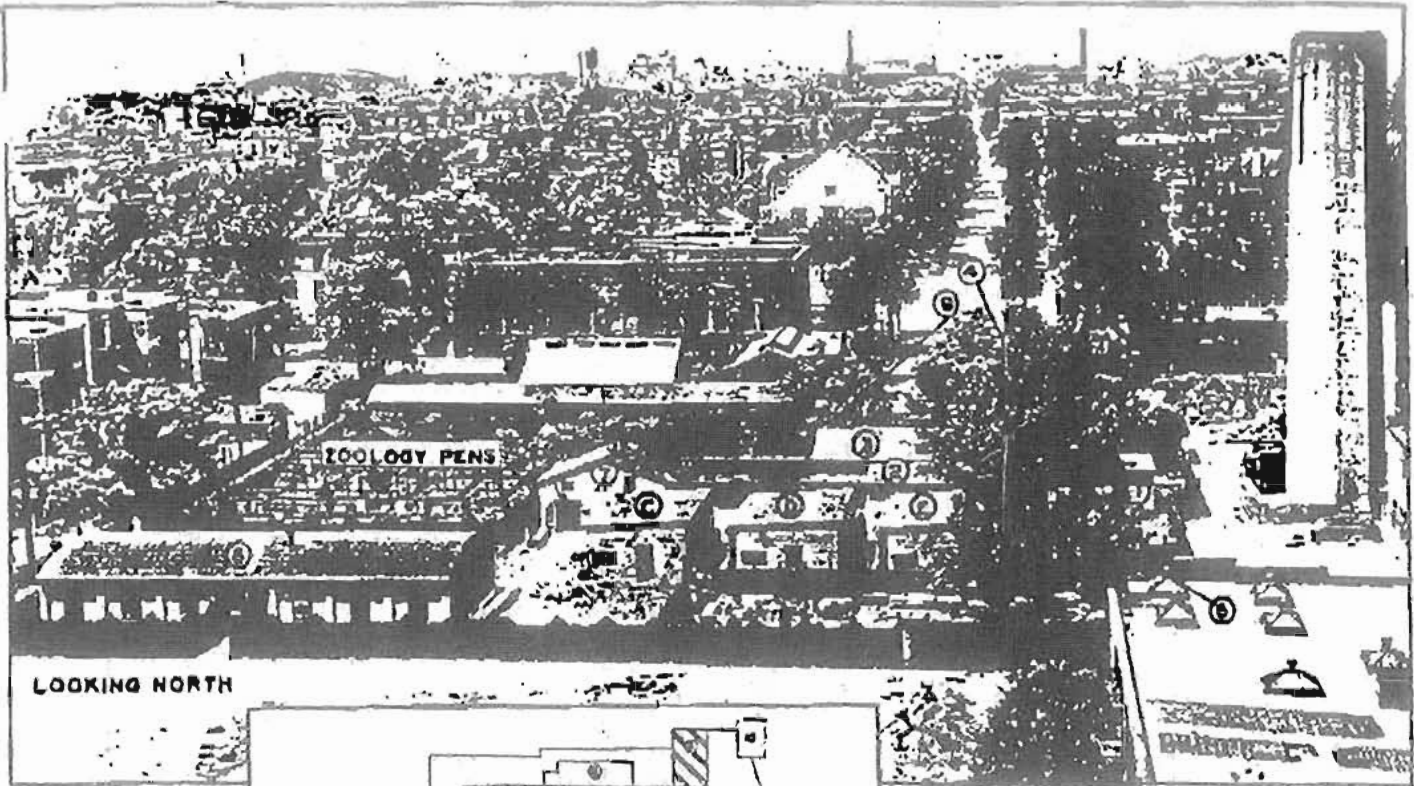
As a result of laboratory experience in the evaluation of toxic dusts, members of the staff of the Toxicity Laboratory were frequently requested to participate in the development and interpretation of field trials in the United States and in Canada. Such assignments aided materially in developing the perspective required for evaluation of potential weapons. These field trials were first formally undertaken in 1944.

In August, 1943, Dr. McLean resigned as Director to join the Chemical Warfare Service as a Lieutenant Colonel in the Army of the United States. Dr. R. Keith Cannon succeeded Dr. McLean as Director in December 1943, and the work proceeded under his direction until the Laboratory was taken over by the Chemical Warfare Service on March 1, 1945. At that time Dr. Cannon returned to New York University, from which he had been "on loan" to the University of Chicago, and Dr. William L. Doyle, a staff member of the project, was selected to be Director under the Chemical Warfare Service.

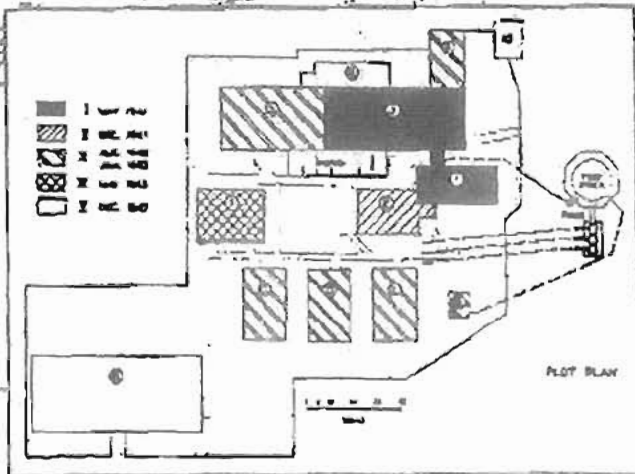
Dr. Cannon's report (UCRL No. 55) on the details of the laboratory's activities from 1941 to 1945 has been drawn on freely in preparing this historical sketch, and gives more abundant technical details than can be included here. It also has bibliographic data. At present the program of the laboratory is continuing under the Chemical Warfare Service. It has not been possible to refer in detail to the numerous researches conducted by members of the staff. There is, however, attached, as an appendix (III), a list of the individuals who participated in the work of the project. UC 55

The Toxicity Laboratory was born of urgent necessity, to meet emergency conditions. The results have been so successful as to warrant its continuation, with some modification and extension of its activities, as a peacetime

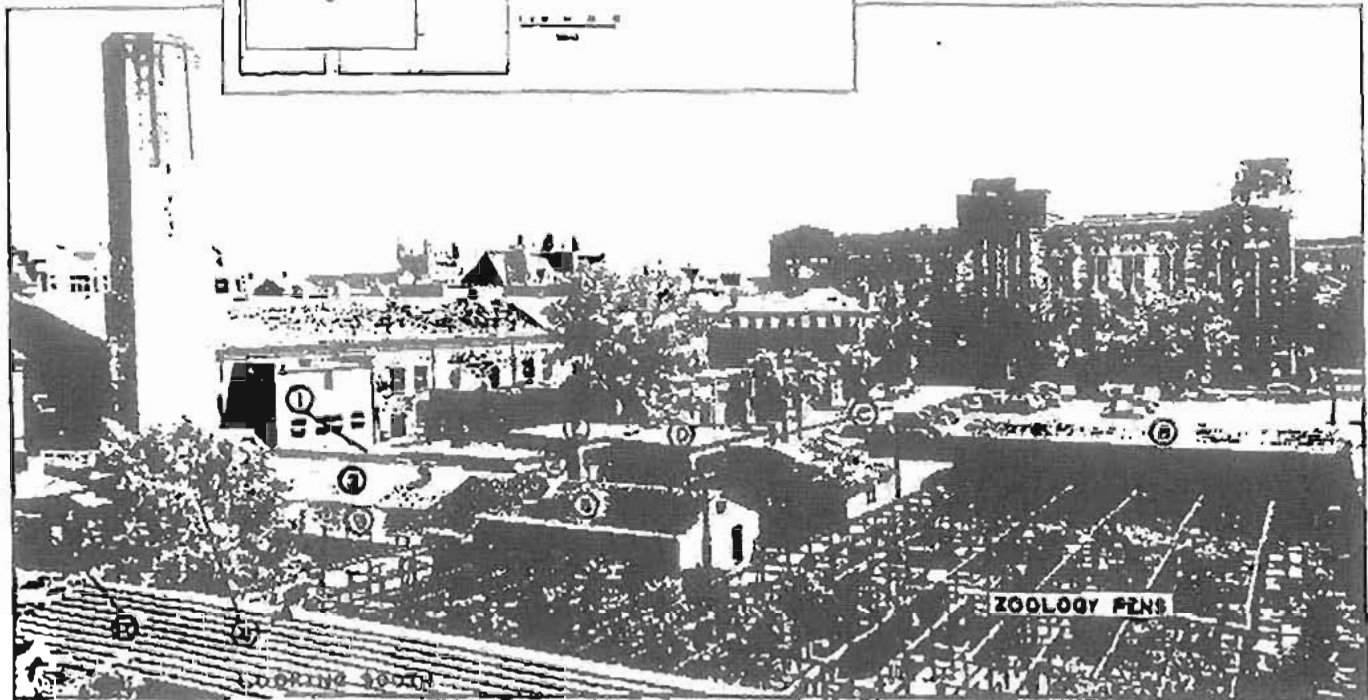
activity. The program has been broadened to include work on physiological and biological mechanisms of toxic agents. The staff is composed of men drawn from anatomy, organic and biochemistry, biophysics, mathematics, pathology, pharmacology, physiology and zoology. The original program required skills in all these subjects for the development of procedures and the interpretation of results. With the removal of the threat of enemy use of toxic gases, the extension of the program has done much to stimulate the academic interest of the staff in the fundamental aspects of toxic action. Under the stress of war it has been possible to bring together men of diverse training for application to a common problem. It would be unfortunate if such effective coordination should be lost with the coming of peace. It is to be hoped that some means may be found to maintain this and similar groups, with planning on a long-range basis and with due consideration given to the establishment of proper opportunities for personal advancement and professional development of the individual staff members.



LOOKING NORTH



TOXICITY LABORATORY
THE UNIVERSITY OF CHICAGO
JULY 1945



LOOKING SOUTH

THE UNIVERSITY OF CHICAGO
The Department of Buildings and Grounds

February 3, 1945

TOXICITY LABORATORY
Refer to Plat Plan, dated 3-16-45

	<u>Cubage</u>	<u>Cost</u>
<u>First Construction (Bldgs. 1 and 3)</u>		
1941 - May 5 - Ground broken		
May 28 - Construction complete		
Cubage - 25,781 cu. ft.		
Final Cost - \$16,394.14		
Cost per cu. ft. - 68.9¢	25,781	\$16,394.14
Cost per sq. ft. - \$8.87		
<u>Second Construction (Bldg. 2)</u>		
1941 - Dec. 8 - Authorized		
Dec. 8 - Preliminary plans completed		
Dec. 9 - Plans revised		
Dec. 12 - Preliminary approval received		
Working drawings started		
Dec. 15 - Excavations completed and footings poured		
Dec. 28 - Building complete and occupied		
Cubage - 4,950 cu. ft.		
Final Cost - \$5,000.00		
Cost per cu. ft. - \$1.0111	<u>4,950</u>	<u>5,000.00</u>
Cost per sq. ft. - 11.11	28,731	\$21,394.14
<u>Third Construction (Bldgs. 4, 5, 6, "C", "D", and "E")</u>		
1942 - Aug. 21 - Ground broken		
1943 - Jan. 9 - Inspection of finished construction by U.S. Group		
Cubage - 37,286 cu. ft.		
Final Cost - \$45,000.00		
	<u>37,286</u>	<u>45,000.00</u>
	66,017	\$26,394.14
<u>Fourth Construction (Bldg. 7)</u>		
1943 - Feb. 23 - Ground broken		
May 17 - Work finished and inspected by U.S. Officers		
Cubage - 8,676 cu. ft.		
Final Cost - \$12,389.66		
	<u>8,676</u>	<u>12,389.66</u>
	74,693	\$78,783.80
<u>Fifth Construction (Bldgs. 8 and 9)</u>		
1943 - Aug. 31 - Ground broken		
Dec. 2 - Bldgs. completed		
Cubage - Bldg. 8 - 29,079; Bldg. 9 - 3,283		
Final Cost - Bldg. 8 - \$19,724.50		
Bldg. 9 - 3,828.00		
	<u>32,362</u>	<u>23,552.50</u>
Cost per cu. ft. - Bldg. 8 - 67.8¢	107,055	\$102,336.30
Bldg. 9 - \$1.19		

Appendix III

Professional Staff of the Laboratory

Harry G. Albano	April 1943 - March 1944
G. W. Bartolmez	July 1944 - February 1945
Dora Benedict	February 1943 - March 1945
Myrtle Bernstein	July 1943 - December 1944
Sixm Black	July 1942 - February 1945
Ben B. Blivaise	January 1945 - February 1945
Margaret A. Bloom	February 1945
William Bixon	May 1942 - February 1945
Richard U. Byerum	April 1944 - February 1945
R. Keith Casman	December 1943 - March 1945
Olga Y. Carpenter	July 1943 - December 1943
Saul W. Chaikin	June 1943 - February 1945
David B. Clark	
Julius M. Coon	May 1941 - March 1945
Ruther Da Costa	July 1941 - May 1944
Peter DeBruyn	
William L. Doyle	July 1942 - February 1945
Kenneth P. DuBois	June 1943 - February 1945
William H. Elder	April 1943 - February 1945
Crawford P. Failley	June 1942 - February 1945
Ralph B. Fearing	February 1943 - November 1943
E.M.K. Gelling	May 1941 - February 1945
Benson E. Ginsburg	May 1944 - February 1945
Howard G. Glass	January 1942 - September 1944
Eugene Goldwasser	July 1944 - October 1944
Haight W. Gurney	October 1942 - September 1943
Dalton W. Hein	February 1942 - June 1942
James H. M. Henderson	August 1943 - March 1945
Roy G. Herrmann	April 1944 - February 1945
Joseph J. Hickey	July 1943 - August 1944
Louis V. Holm	June 1943 - February 1945
John O. Hutchens	November 1941 - September 1943
Herbert D. Landehl	February 1944 - February 1945
Jules H. Last	September 1941 - November 1942
John E. Löffler	July 1944 - February 1945
Elmer E. Le Nenzo	April 1943 - February 1945
Norris A. Lipton	May 1941 - February 1945
William R. Longenecker	June 1944 - December 1944
Jean Lougini	November 1942 - January 1944
Clarence C. Lushbaugh	September 1941 - February 1945
James E. LuValle	July 1942 - November 1942
Alexander May	April 1944 - February 1945
Albert McGinnis	November 1944 - February 1945
Franklin C. McLean	May 1941 - February 1945
Robert S. Merrill	January 1942 - February 1945
G. Henry Mundt	July 1942 - May 1943
Raymond G. Murray	

Appendix III (continued)

C. Ernst Hedsmann	September 1942 - November 1944
James M. Richardson	January 1942 - February 1943
George J. Rotariu	June 1941 - February 1943
Joseph Savit	July 1942 - February 1943
William R. Schmitt	June 1944 - February 1945
Richard M. Schrems	September 1944 - December 1944
H. L. Seifert	Summer of 1942
Lawrence S. Senkin	June 1942 - February 1943
Walter E. Steinmetz	April 1944 - February 1945
John F. Thomson	January 1943 - February 1945
Drusilla Van Hoesen	March 1944 - February 1945
John F. Van Pilsom	May 1944 - July 1944
Thomas A. Wills	May 1944 - July 1944
Harold A. Wooster	June 1943 - February 1945
Koylande D. Young	February 1942 - February 1945

Officers of the Medical Corps, U. S. Navy, assigned to cooperate in the Vesicant Studies

Lt.Cdr. Arthur F. Abt, M.C., U.S.N.R.	January 1942 July 1942
Lt.Cdr. T. B. Friedman, M.C., U.S.N.R.	July 1942 - May 1944
Lt. John H. Heinen, M.C., U.S.N.R.	January 1943 - October 1944
Lt.Cdr. John G. Troxel, M.C., U.S.N.R.	October 1944 - February 1945

FEB 23 1993

THE WHITE HOUSE
WASHINGTON

February 19, 1993

Dear Glen:

Thank you for your letters concerning trade and mustard gas.

First, let me address your concerns of the impact of the Uruguay Round on the textile industry. I have asked Ambassador Mickey Kantor, the U.S. Trade Representative, to conduct a thorough study of all aspects of the GATT negotiations. We will, of course, look at the textile issue, as well as the still incomplete negotiations on market access and agriculture, and the rule making provisions of the draft agreement that was prepared by GATT Director-General Arthur Dunkel.

As part of this review, we look forward to working closely with you and your colleagues in Congress and in the industry, as well as with other affected groups. I know that you hope, as I do, for a successful Uruguay Round that provides economic benefit to all Americans.

Secondly, I can assure you that the Department of Veterans Affairs (VA) is diligently attempting to identify veterans who may have been affected in mustard gas experiments during World War II. They are in the process of expanding the list of recognized long-term effects of mustard gas exposure and have relaxed requirements for evaluating mustard gas-related compensation claims. VA has established a toll free number (800-827-1000) that veterans or survivors of veterans who may have been exposed can use to contact the Department.

As you are aware, VA contracted with the National Academy of Science for the study that resulted in the report that you cited in your letter. Since that report was issued, VA has requested the Department of Defense (DoD) to cooperate and assist

03/08/93 09:55

2

in its effort to locate and provide benefits to affected veterans by providing the names, service numbers, type of test and the type of agent used during these experiments. They have also asked DoD to release the affected personnel from their oath of secrecy so that they are free to come forward and file a claim. Further, the Secretary of Veterans Affairs, Jesse Brown, has expressed his personal commitment to insure that the service men and women included in these experiments are identified and receive the care that they deserve.

I am informed that the House Veterans Affairs Subcommittee on Compensation, Pension, and Insurance will hold a hearing on March 10, 1993 at which both the Departments of Defense and Veterans Affairs will testify about plans for resolving this unfortunate period in our military history.

Be assured this will not be treated as business as usual. I have directed both Secretaries to expedite the process of locating, treating and providing other benefits that these loyal citizens have earned.

With best wishes,

Sincerely,

Tim

The Honorable Glen Browder
House of Representatives
Washington, D.C. 20515

Congress of the United States
House of Representatives
Washington, DC 20515-0103

January 11, 1993

WASHINGTON OFFICE
1221 CONGRESS BUILDING
WASHINGTON, DC 20515-C
PHONE: 225-3281

DISTRICT OFFICES
104 FEDERAL BUILDING
PORT CHARLES, SC 29422
ANNISTON, AL 36202
PHONE: 228-5555

107 FEDERAL BUILDING
OPELIKA, AL 36801
PHONE: 765-6221

115 EAST NORTHVIEW
TUCKAHOE, VA 23083
PHONE: 727-6400

The Honorable Bill Clinton
President-Elect of the U.S.
1120 Vermont Avenue, NW
Washington, D.C. 20270

Dear Mr. President-Elect:

Following last week's report by the National Academy of Sciences on chemical weapons testing carried out during World War II, I am calling upon you as incoming Commander-in-Chief to right the wrong that has been done to thousands of soldiers and civilians who were put at risk to the hazardous effects of mustard gas and other chemical munitions.

While the secret tests performed at several sites throughout the United States during World War II had significant value to our wartime research program, the revelations of abuse documented by the National Academy of Sciences study have tarnished that value.

We cannot undo what happened during World War II or decades of official denial and neglect, but we need to do more than just adjusting the disability claims bureaucracy and approaching this as business as usual. We need to right this wrong -- now!

Specifically, I am calling on you to: (1) recognize the contributions of the tested soldiers and apologize for the way they have been treated, (2) lift the veil of secrecy which still hinders full disclosure of the program, and (3) commit the resources of the Department of Defense and the Veterans Affairs Department to finding and helping these citizens.

Last week's report, entitled "Veterans at Risk: The Health Effects of Mustard Gas and Lewisite," revealed that 60,000 American soldiers were exposed to dangerous chemicals as part of secret research in Washington, D.C., Maryland, Utah, Illinois, North Carolina, Florida, Alabama, and Panama during World War II.

The Honorable Bill Clinton

Page 2

January 11, 1993

The soldiers were sworn to secrecy forever during the testing, and the government never officially acknowledged the program until 1991. The Veterans Administration then requested the National Institute of Medicine to conduct a study; and the resulting "Veterans at Risk" report is the first documentation of the extensive nature and problems of the program.

Besides the 60,000 soldiers participating in the secret research, the report indicates that many thousands of civilian personnel at defense installations in Maryland, Arkansas, Colorado and Alabama may have been exposed to the dangerous chemicals. In 1943 alone, 28,000 civilians were employed by the Chemical Warfare Service in the production and handling of chemical weapons; and the report cites a "dismal safety record" with a "quite high" number of injuries for the CWS.

I feel this issue warrants immediate attention following your inauguration on January 20.

Sincerely,



Glen Browder
Member of Congress

GB/vfp

2

Activity Tracking

Site Name	Site Synonym	Country	Reference	Activity	Human Exposure	Agents	Container	Start Date	End Date	Transported To	Remarks
United States	CB-001654	United States	CB-001654	Transport	N	CO, H, L	Cylinder	19480603	19480603	EA	1 Total
United States	CB-001654	United States	CB-001654	Transport	N	CL	Cylinder	19460203	19460313	Classy, Korea	14 General Material
United States	CB-001654	United States	CB-001654	Storage	N	CO, CNE, H	Gasoline, Benzene	19470802	19470807	Europe	20 Chemical Equipment was returned to the laboratory at a date near 1970. 1941 and two 1947 M Cores

The report was part of project A 183. In the report only one (1) core was actually exposed to HE and two were being a secondary use. Good samples from other projects were used.

Testing was conducted on the 204607815 and 18777845 using rapid analysis. The history generated by the test analysis was reviewed and included the use of 'Pump, operation, and 1:3 day integration'. Details of measurements, the range of performed the same physical activities. All work done was listed in the general data report (USIA). The test procedure included: first and second use from the USIA report of the primary production (PMP) being used. The test used for the higher part of the analysis history generated with primary and secondary production. Items used were as listed below:

1. The test was conducted for the screening and detection of trace levels of CB as developed by the analytical procedure. The detector will be used to measure a variety of CB and associated exposure to concentrations of concentration as at the standard level of (200) mg/m³ using the primary and secondary production. The detector system consists of a radiation gas bubble, or an existing pump in the laboratory setting. The detector system, and a variety of other equipment for testing the detector on the pump. The detector was installed in the field (see also) and various test components using the analysis of chemical, operational, and human factors capability and the test requirements. The design, testing, and production of several similar detector systems are described. The applicable standards are given for the standard detector which includes all safety, accuracy, reliability, and human engineering requirements. (Category)

204607815 was never experimentally exposed to the history and described. Page 181

At 1970, on 1970, T-8 worked in the support of a laboratory. AN CONSTRUCTION, MANUFACTURE of Program (PMP). The MANUFACTURE of equipment (equipment). Its capability list the use. AN PRODUCTION, who was working in the test and using of 'Study' to the MANUFACTURE of the gas used and going to the DDO, which required the weight under down from the safety hazard problem. When he heard the MANUFACTURE of equipment and was then sent on the way out of the laboratory to have done was a program test. Over several, the MANUFACTURE of equipment, which included the test the detector and was under the use of a program system. (Category)

Site Name	Site Synonym	Country	Reference	Activity	Human Exposure	Agents	Container	Start Date	End Date	Transported To	Remarks
United States	CB-001335	United States	CB-001335	Treasure	Y	HS	Drum	19420102	19420102		The report was prepared under project A 183. The report gives the details of those exposed and the results of the exposure.

As of Sept 94

SOURCES OF NAMES IN DATABASE

3,189 names extracted from 11 Scientific Notebooks at Naval Research Laboratory

690 names extracted from medical cards found at Washington National Records Center in Suitland, MD

These names were from multiple test locations: Bushnell Field, Florida; Edgewood Arsenal, MD; and Dugway Proving Ground, UT. They were in a box labeled Bushnell Field.

270 names extracted from an Order for Special Commendation for Chemical Test Volunteers

869 names currently being extracted from documents found at Edgewood Arsenal Historian's Office, and at the NPRC in St. Louis.

500 names extracted from documents found at Rocky Mountain Arsenal.

6,721 names from the Medical Research Institute for Chemical Defense (MRICD) in Edgewood, MD.

504 names gathered from sources at National Archives, U.S. Coast Guard, et al. for personnel involved in the December 2, 1943, bombing of Bari, Italy's harbor

12,743 Names

Names still to be added:

24 Names extracted from a lab notebook in Edgewood Arsenal files.

There are additional technical reports at Edgewood which remain to be extracted.

OBS	BRANCH	NAME	SSN	SVCNUM	DOB	AGE	RANK	AGENTS	ILOC
226	A	ARNABEE LOUIS K	1	3805808	2	26		VEVICANT	EDGEWOOD ARSENAL
227	A	ARNWICK BERNARD	1	4183325	2	28	PVT	H	BUSHNELL
228	A	ARSCHE KARL R	1	9042161			T/3	CLASSIFIED	DUGWAY
229	A	ARTOM ROBERT B	3	1457364			PVT	GAS	EDGEWOOD ARSENAL
230	A	AUERNFEIND ROBERT H	4	2013111	2	25	PVT	GAS	EDGEWOOD ARSENAL
231	A	CATTY JOSE P	1	9049966			SGT	CLASSIFIED	EDGEWOOD ARSENAL
232	A	ECK JAMEE V	6	394492	2	26	T/8	H	BUSHNELL
233	A	ECK JAMEE V	6	394492	2	26	T/8	MOBILE CWS UNIT	BUSHNELL
234	A	EDER ALEX A	3	1297293	2	24	LST SGT	CLASSIFIED	DUGWAY
235	A	EDER ALEX A	3	1297293	2	24	LST SGT	OC CWS	DUGWAY
236	A	EEMAN CHARLES H	3	9008575			T/4	CLASSIFIED	DUGWAY
237	A	EEMAN CHARLES H	3	9008575			T/4	OC CWS	DUGWAY
238	A	EENE JAMES L	3	9277358	2	20	PVT	GAS	EDGEWOOD ARSENAL
239	A	ELL PHILLIP F	3	6481726			TEC 5	H	BUSHNELL
240	A	ENE STEVE	3	1327872	3	37	PVT		
241	A	ENE STEVE	3	1327872	3	37	PVT		
242	A	ENJAMIN DONALD W	3	3849079	2	20	PVT	GAS	EDGEWOOD ARSENAL
243	A	ENJAMIN ELLIS	3	3730179			PVT	H	BUSHNELL
244	A	ENNETT WILLIAM L	3	9680713	2	24	PFC	CLASSIFIED	DUGWAY
245	A	ENSON ARTHUR W	3	3203219			PVT	GAS	EDGEWOOD ARSENAL
246	A	EREZINSKY JACOB	3	2957192	1	19	PVT	GAS	EDGEWOOD ARSENAL
247	A	ERTINO BENJAMIN J	3	2269034	2	23	PFC	H VAPOR	EDGEWOOD ARSENAL
248	A	EYER FREDERICK C JR	3	2957596	1	19	PVT	GAS	EDGEWOOD ARSENAL
249	A	IGCAE RAEFORD B	3	4176620	2	27	SGT	H	BUSHNELL
250	A	ISHOP FRED H	1	9052369			PFC	CLASSIFIED	DUGWAY
251	A	LACKFORD GERALD E	1	2135265	2	23	TEC 5	GAS	EDGEWOOD ARSENAL

OBS	BEGDATE	ENDDATE	EXPTYPE	NARRATIV	UNIT	SLOC	D
226	440824		CHAMBER TEST	YES	6 M T B	SUITLAND	H
227	440819	441117	TRIAL TEST	YES	DPG MOBILE CWS UNIT	SUITLAND	H
228	450202	450411	TEST	YES	TSU 9770 CWS DET#4 MED DIV	SUITLAND	H
229	000824		TEST	YES	26 M T B CP GT	SUITLAND	H
230	440516		TEST	YES	169TH CML SG CO CWS	SUITLAND	H
231	440516		TEST	YES	9770 CWS DET#4 MED DIV OC C	SUITLAND	H
232	440605	440925	TEST	YES	125TH CHEMPROCCO	SUITLAND	H
233	440605	440925	TEST	YES	125TH CHEMPROCCO	SUITLAND	H
234	440609		TEST	YES	121ST CWS	SUITLAND	H
235	440609		TEST	YES	121ST CWS	SUITLAND	H
236	441209		TEST	YES	TSU 9770 CWS DET#4 MED DIV	SUITLAND	H
237	441209		TEST	YES	TSU 9770 CWS DET#4 MED DIV	SUITLAND	H
238	440825	440923	TEST	YES	PP12 SQ200HQ	SUITLAND	H
239	440226	440311	TEST	YES		SUITLAND	H
240				YES	121	SUITLAND	H
241				YES	121	SUITLAND	H
242	440825	440926	TEST	YES	ENL DET 1848SU8C	SUITLAND	H
243	440226	440311	FIELD TRIALS	YES		SUITLAND	H
244	440805		TEST	YES	SCU 3999 CWS	SUITLAND	H
245			TEST	YES	CP CROW 36 S T B ASFTC	SUITLAND	H
246	440516		TEST	YES	169TH CML SG CO CWS	SUITLAND	H
247	440516		TEST	YES	169TH CML SG CO CWS	SUITLAND	H
248	440516		TEST	YES	169TH CML SG CO CWS	SUITLAND	H
249	440605	440925	FIELD TRIALS	YES	125TH CHEMPROCCO	SUITLAND	H
250	450131	450324	TEST	YES	9770 CWS DET#4 MED DIV OC C	SUITLAND	H
251	440516		TEST	YES	169TH CML SG CO CWS	SUITLAND	H

February 94 Briefing Book

SOURCES OF NAMES IN DATABASE

2300 names extracted from 11 Scientific Notebooks at Naval Research Lab

690 names extracted from medical cards found at Records Center in Suitland

These names were from Bushnell Florida Test using mustard agent. Personnel were from Edgewood & Dugway.

270 names extracted from an Order for Special Commendation for Chemical Test Volunteers

800 names currently being extracted from documents found at Edgewood Arsenal Historians Office, and at NPRC in St. Louis.

4,060 Names

Chemical Compounds used in Human Testing at EDGEWOOD ARSENAL (1955 to 1975) *
(number in parenthesis shows number of human subjects who received drug/chemical)

Approved Drugs/Chemicals

- I. ANTICHOLINERGIC (519)
Scopolamine (519)
- II. BARBITURATES (145)
Amytal (41)
Nembutal (25)
Phenobarbital (21)
Seconal (58)
- III. DIAGNOSTIC (120)
Antipyrine (16)
BSP (Sulfobromophthaleim) (14)
ICG (Indocadio green) (54)
PAH (Sodium Aminohippurate) (56)
- IV. ANTICHOLINESTERASE AGENTS (161)
DFP (12)
Physostigmine (Eserine) (125)
Prostigmine (24)
- V. ANTIDOTES (409)
Atropine (319)
Benactyzine (16)
Homatropine (4)
Sodium Nitrite (6)
Vasoxyl (3)
Methscopolamine (61)
- VI. OXIMES (245)
Protopam Chloride (245)
- IX. MISCELLANEOUS (OTHER) (912)
Adrenalin (5)
Alcohol (125)
Amyl Nitrite (20)
Artane (2)
Ammonium Chloride (5)
Benadryl (3)
Caffeine (52)
Compazine (2)
Cogentin (7)
Curare (7)
Dapsone (2)
Dexedrine (64)
Dilantin (4)
Dibenzylamine (2)
Heparin (68)
Inderal (4)
Isuprel (3)
Lanoxin (6)
Lidocaine (16)
Maislid (2)
Mecholyl Chloride (8)
Meprobamate (36)
Mylaxin (9)
PABA (2)
Propylene glycol (38)
Frolixin (22)
Fyribenzamine (1)
Reserpine (2)
Ritalin (99)
Sodium Bicarbonate (5)
Thiamine (86)
Thorazine
(chlorpromazine) (82)
Urecholine (11)
Valium (111)
ACTH (1)

Investigative Drugs/Chemicals

- I. ANTICHOLINERGIC (850)
3167 (2) 302196 (52)
3443 (101) 302282 (8)
3580 (152) 302368 (5)
3834 (164) 302668 (29)
218437 (8) B2(2277, 4030) (276)
226086 (23) Ditran (10)
301060 (29) 219362 (11)
- IV. ANTICHOLINESTERASE AGENTS (1042)
314E (32) GD (70) Malathion (10)
GA (25) GF (21) VX (418)
GB (11) G-V (347)
- V. ANTIDOTES (77)
BOL (5) Metatropine (15) THA (15)
BTA (24) 4929 (18)
- VI. OXIMES (139)
P2S (53) TMB4 (50)
Toxogonin (36)
- VII. IRRITANTS (1648)
T792 (26) 3547 (53) DMHP (55)
1778 (28) 4923 (9) DEP (4)
1779 (2) CA (6) T792DM (29)
2097 (8) CN (17)
2542 (15) CS (393)
Other Irritants (503)
- VIII. MISCELLANEOUS (INCAPS) (873)
1729,1653,3528 (LSD) (399)
1476 (35) 302089 (33)
2233 (all isomers) (213)
27349 (50) 302537 (18)
218437 (8) 302582 (18)
219362 (11) Nitrogen Dioxide (3)
220548 (32) Sernyl (6)
302034 (44)
ALD (LSD-inactive analog) (3)
- IX. MISCELLANEOUS (Others) (170)
SHIP (21)
Mustard (119)
N-Octylamine (38)

CHART I

VOLUNTEERS USED IN CHEMICAL AGENT EXPERIMENTS AT
EDGEWOOD ARSENAL

<u>YEAR</u>	<u>VOLUNTEER AVAILABLE*</u>	<u>NO. OF VOLUNTEERS USED IN AGENT TESTS**</u>	<u>% USAGE IN AGENT TESTS</u>
1955	142	91	64
1956	103	57	55
1957	208	144	51
1958	382	212	55
1959	414	179	43
1960	534	38	7
1961	472	156	33
1962	396	130	33
1963	348	169	43
1964	474	290	61
1965	480	347	72
1966	400	243	61
1967	470	245	52
1968	407	208	51
1969	406	184	45
1970	312	161	52
1971	306	158	52
1972	271	159	59
1973	186	130	70
1974	103	70	68
1975	106	54	51
	<u>6,992***</u>	<u>Total 3,425</u>	<u>20 Yr Avg 49</u>

*Average of five different reports.

**Extract from case record at Biomedical Laboratory, Edgewood Arsenal.

***Does not include an estimated 115 volunteers from the Medical Laboratory over the 20-year period.

HUMAN VOLUNTEER MEDICAL FILES MAINTAINED BY ARMY MEDICAL RESEARCH
INSTITUTE OF CHEMICAL
DEFENSE (MRICD)

THIS PAGE IS THE TEST IDENTIFICATION SHEET COPIED FROM MICROFICHE
TEST SUBJECTS ARE LISTED ON DATA RUNS BY ALPHABETICAL ORDER,
AND BY VOLUNTEER NUMBER

TEST IDENTIFICATION

NAME _____
VOLUNTEER # 1640
CASE # _____
TASK PLAN _____
DATE 12 + 21 WINE 1960
DRUG 5HTP

AMRI-CD Form 3 (Temp)
1 Jul 81

Sample from Micro Fiche Record

THIS PAGE FROM THE MICROFICHE SHOWS THAT SUBJECT 1640
WAS TESTED WITH LSD

R-M(C)

Volunteer Report for June & July, 1960

17 August 1960

The University of Maryland used 16 men in 4 days in June and 24 men in July. The volunteers were given LSD and 5-Hydroxytryptophan. The these contractor tests will be reported elsewhere.

Ref. - 5HTP - 13, 21 June 1960

Shows Subject was tested with
LSD and 5 HTP by the
University of Maryland under contract,

3366	16370	0201270660	2195BAY	JV	VX	EQUIPMT
3367	16370	0201270660	2195BRAY	NV	VX	EQUIPMT
3368	16370	0201270660	BRAY	NV		PERFORM
3369	16310	020114066070951	3049HAGEMAN	RL	VX	PC2006TREATED
3370	16310	0201270660	HAGEMAN	FL		PERFORM
3371	16310	020114066071950	3049HAGEMAN	RL	TIME4	POT201TREATMTVX
3372	16310	020114066071907	3049HAGEMAN	RL	ATROPIIMT203	TREATMTVX
3373	16320	0201270660	HENRY	DF		PERFORM
3374	16320	0201270660	HENRY	DF	1729	
3375	16330	0201090866101914447059	HICKS	WP77040703368IV	320	ROUTINENON
3376	16330	0201140660	3049HICKS	WR	VX	PC
3377	16330	0201270660	HICKS	WR		PERFORM
3378	16330	02011301661103	3049HICKS	WR77070702196IV	606	ROUTINENON
3379	16330	02012501661100019257057	HICKS	WR770527233-4IV	148	ROUTINENON
3380	16340	020109126070951	3049JENKINS	KL	VX	PC2006ROUTINE
3381	16340	0201290660	JENKINS	KL		PERFORM
3382	16340	0201170660	JENKINS	KL	1729	
3383	16340	02010706610950	5449L4JENKINS	KL5090002	10	406ROUTINENON
3384	16350	0201270660	2195KALISCHAK	R	VX	EQUIPMT
3385	16350	0201140660	KALISCHAK	R		PERFORM
3386	16360	0201070660	KANE	JR	1729	
3387	16360	0201270660	KANE	JR		PERFORM
3388	16360	020114066070954	3049KANE	JR	VX	PC2006ROUTINE
3389	16370	0201290660	LAZAR	J		PERFORM
3390	16370	0201270660	LAZAR	J		EQUIPMT
3391	16370	0201270660	2195LAZAR	J	VX	EQUIPMT
3392	16380	0201140660	3049LEJELINE	CC	VX	PC
3393	16390	02011406601700	3049MAGGIORE	WJ	VX	PC2006TREATEDPM
3394	16390	0201270660	MAGGIORE	WJ		PERFORM
3395	16390	02011406602000	3049MAGGIORE	WJ	ATROPIIMT103	TREATMTVX
3396	16390	0201070660	MAGGIORE	WJ	1729	
3397	16390	02011406602000	3049MAGGIORE	WJ	PANCHLIVT050	TREATMTVX
3398	16400	0201130660	MELE	JF	SHTD	
3399	16400	0201290660	MELE	JF		PERFORM
3400	16400	0201270660	MELE	JF		EQUIPMT
3401	16410	0201090866101024	3049MEMMEL	JF	TSCL4 INT401	TREATMTVX
3402	16410	020109086602750	3049MEMMEL	JF	PANCHL	T050TREATMTVX
3403	16410	0201070660	MEMMEL	JF		EQUIPMT
3404	16410	0201070660	MEMMEL	JF	VX	PC2006TREATED
3405	16410	0201090866	3049MEMMEL	JF	ATROPIALTB03	TREATMTVX
3406	16430	020114066070954	3049FESSING	JH	VX	PC2006ROUTINE
3407	16430	0201070660	FESSING	JH	1729	
3408	16430	0201070660	FESSING	JH	1729	
3409	16430	0201090866101024	3049FEUNIER	DF	VX	PC2006TREATEDPA
3410	16430	0201090866	3049FEUNIER	DF	PANCHL	T020TREATMTVX
3411	16430	0201070660	FEUNIER	DF		EQUIPMT
3412	16440	0201270660	MILLEN	JF		EQUIPMT
3413	16440	0201270660	2195MILLEN	JF	VX	EQUIPMT
3414	16450	0201270660	2195MORSILLO	JJ	VX	EQUIPMT
3415	16460	0201070660	MULLEN	RJ		EQUIPMT
3416	16460	0201090866	MULLEN	RJ		PERFORM
3417	16460	0201130660	MULLEN	RJ	SHTD	
3418	16470	0201090660	3049MULLINBROCK	G	PANCHL	T070TREATMTVX

Volunteer Number

Name

Agmt

Type TEST

Volunteer number file

13749.	34180	0201141064	300110MELICK	ATD9729SCOPOLIM 836ROU
13750.	34180	0201141064	ME	AT DEXLDRPOT152PER
13751.	34180	0201211064	MELICK	AT SCOPOLIM1206PER
13752.	46840	0201090567	5139MEKA	JJ FOU
13753.	46840	0201160567	21597087MEKA	JJ 302196IV2696ROU
13754.	46840	0201210607	0867MEKA	JJ PER
13755.	38480	0201 0765	MELANCON	HF EQU
13756.	38480	0201 0765	7043MELANCON	HF PEP
13757.	38480	0201180865	7207017MELANCON	HF708093580 AE 536ROU
13758.	48430	0201 0907	4124MELANG	KG STR
13759.	48430	0201120907	4124MELANG	KG ATROPIIIVT093STR
13760.	48430	0201200907	4124MELANG	KG ATROPIIIVT103STR
13761.	48430	0201161067	4124MELANG	KG ATROPIIIVT103STR
13762.	48430	0201181067	4124MELANG	KG ATROPIIIVT093STR
13763.	48470	0201 1167	7067MELANG	KG EQU
13764.	16400	0201130660	MELE	JA <u>SHTP(LSD)</u>
13765.	16400	0201230660	MELE	JA EQU
13766.	16400	0201290660	MELE	JA PER
13767.	07310	0201161155	3001MELICK	EF09772GB AE
13768.	07310	0201161155	2000MELICK	EF
13769.	07310	0201011255	6006MELICK	EF CHLPCNAE EQU
13770.	07310	0201051255	6001MELICK	EF DMHP AE EQU
13771.	07320	02011807570930	MELLOTT	GB0257766 AE
13772.	16410	02010906601026	3040MEMMEL	JR THCL4 IMT401TRE
13773.	16410	0201090660	MEMMEL	JR VX PC2006TRE
13774.	16410	0201090660	3040MEMMEL	JR ATROPIALIT303TRE
13775.	16410	02010906602050	3040MEMMEL	JR PAMCHL TOSUTRE
13776.	16410	0201230660	MEMMEL	JR EQU
13777.	41020	0201230660	16697061MENARD	ID VX IV TRE
13778.	41080	02012206609-516697061MENARD	1106MENARD	ID727810Z IM 606TRE
13779.	41090	0201 0466	1106MENARD	ID EQU
13780.	41090	0201120466	1066MENARD	ID EQU
13781.	41090	0201290466	1266MENARD	ID EQU
13782.	07330	0201140755	0263MENDELL	KL CHLPCNAE EQU
13783.	07330	0201200755	0001MENDELL	KL DMHP AE EQU
13784.	07330	0201270755	3003MENDELL	KL09772GB AE
13785.	30230	0201 0163	MENDES	JT STR
13786.	30230	0201180963	MENDES	LD EQU
13787.	30230	0201240963	MENDES	LD PAMCHLPOT30CLAB
13788.	30230	0201011063	3574126MENDES	LD066903233-2PD 346ROU
13789.	30230	02012110631040	9304149MENDES	LD06672VX PC 306ROU
13790.	30230	0201220964	MENDES	LD PERF
13791.	30230	0201 1064	MENDES	LD EQU
13792.	30230	0201011064	4070MENDES	LD0667240CTYLPC 033STR

Alphabetical File

National Security and
International Affairs Division

B-251258

February 18, 1993

The Honorable John D. Rockefeller IV
Chairman, Committee on Veterans' Affairs
United States Senate

Dear Mr. Chairman:

This report responds to the former Chairman's request that we examine secret, U.S. military chemical and biological warfare research experiments that exposed service members to hazardous substances. Our objectives were to (1) identify, to the extent possible, all chemical and biological experiments conducted secretly by the military services during the past 50 years; (2) review the Department of Veterans Affairs' (VA) handling of disability claims associated with these experiments; and (3) review the VA's efforts to contact veterans who participated in the experiments and invite them to file claims.

Results in Brief

There were at least three secret chemical experiments conducted between 1942 and 1975: the Navy's and the Army's World War II mustard agent experiments and the Army's incapacitating agent tests of the Cold War era. All of these tests have been declassified by the services since at least 1975.

Because of a lack of data, making decisions on the validity of veterans' disability claims associated with mustard agent experiments has proven to be difficult for VA. This has not been a problem with claims associated with incapacitating agent tests because the Army has the necessary information. Before July 1992, the VA required that veterans prove that their medical problems resulted from their participation in the mustard agent tests. Few veterans, however, could prove this relationship. Thus, until 1992, only 13 of 145 claims for benefits were approved by VA. VA has recently recognized that the veterans' problems may be attributable to the fact that the experiments were conducted secretly, with no provision for medical follow-up testing.

In July 1992 VA revised its adjudicating procedures for these types of claims. To receive compensation, veterans with specific health problems known to be associated with exposure to mustard gas now need only to show that they participated in mustard agent tests. However, because there is only limited information available on test participants, VA will continue to have difficulty deciding whether veterans' claims are valid. VA,

for example, has not been able to validate veterans' claims of participation in mustard agent tests because the services do not have complete information on the test sites, the dates of the tests, and the units involved. Moreover, what information is available is widely dispersed in records held at numerous military locations. No effort has been made to aggregate the existing data.

VA has made other efforts to serve veterans who may not be receiving deserved compensation for their participation in the tests. For example, the agency had the National Academy of Science study the long-term effects of exposure to mustard gas to ensure VA's list of chronic conditions resulting from mustard agent exposure is complete.

VA's only outreach effort to identify veterans involved in these tests was hampered by the limited amount of information available on the testing programs. In this 1991 outreach effort, only 128 veterans out of the thousands that participated could be identified from existing information. Future outreach efforts could be enhanced if the Army and Navy provided VA with all available information on the location of the test sites, the dates of the mustard agent tests, and the units involved.

Background

Since at least World War I, the military has conducted medical, chemical, and biological research using military personnel who have volunteered. This research is done to maintain and protect the health of military personnel who may be exposed to a variety of diseases and combat conditions. Military procedures have long required that the volunteers be fully informed of the nature of the studies in which they participate and the foreseeable risks. However, prior to 1975, these procedures were not always followed.

In hearings conducted by the Senate Veterans' Affairs Committee in June 1991 and the Senate Committee on the Judiciary and the Senate Committee on Labor and Public Welfare in 1975,¹ participants in earlier testing programs testified that they were not informed about the nature of the experiments, the chemicals to be administered, or potential adverse effects. Additionally, the hearings disclosed that, in some tests, the volunteers' medical records were not adequately documented, nor were the volunteers medically followed after the tests. The June 1991 hearings also disclosed that some veterans were having trouble obtaining VA compensation for injuries alleged to have occurred in the testing.

¹Now the Senate Committee on Labor and Human Resources.

SUMMARY OF GAO ENTRANCE MEETING
19 August 1994 IRM OFFICE OUSD(P&R)

At 1000 the DoDIG opened the GAO entrance meeting. The GAO Auditor with lead on this study was Mr. Glenn Furbish, who also conducted the review on the GAO study completed in 1993 on human use.

GAO was requested to conduct this inquiry and provide testimony by Congressman John Conyers for his subcommittee on Legislation and National Security, House Committee on Government Operations. The objective of the review was to identify the magnitude, impact and government actions being taken to address problems resulting from experiments sponsored or conducted by Federal agencies in which humans were deliberately exposed to hazardous chemical, biological, and/or nuclear material. The Service points of contact for the Chemical Weapons Exposure Study Task Force were invited to attend, and most were there or sent a representative. NTPR sent a rep; as did DTIC, which has oversight for the contracting vehicle we use in (P&R) for our Battelle/CBIAC contract.

GAO was particularly interested in our efforts to (a) identify and notify participants about medical care necessary and compensation available, (b) the kinds and numbers of experiments, (c) the long term effects of the experiments on human subjects, (4) and what were the current laws or policies that we operate under where human use is concerned.

Questions were posed concerning who was in control of particular efforts to collect information, how the efforts were administered within OSD and the Services, what kind of resources were allocated to particular efforts, and what were the extent of our activities so far, what had we accomplished, and what were the major challenges to identification and notification. There was discussion as to where the responsibility lay and what the avenues were for compensation for injury. The attached *Human Subject Experimentation Audit Guidelines* were provided to the attendees.

GAO said they would be visiting the Services, specifically those installations that had human testing activities confirmed such as NRL and Edgewood Arsenal.

GAO was given copies of the DepSecDef memo of March 9, 1993, to the Services directing declassification of certain materials, collection of information and forwarding to OUSD (P&R), and releasing WWII test subjects from oaths of secrecy. They were also given a copy of the DepSecDef memo to Congressman Montgomery dated March 9, 1993; and a copy of the current human experimentation information sheet developed by OASD (HA). President Clinton's letter of January 31, 1994, to Congressman Porter Goss was also provided.

FOLLOW-UP MEETING WITH GAO SEPTEMBER 8, 1994

On September 8 Glenn Furbish and Meg Klucaritas held a meeting with OUSD (P&R) staff to clarify some of the issues concerning the chemical exposure study. The discussion centered on issues of personnel and fiscal resources committed to the chemical effort; a central or focal point for control and direction of the collection efforts; and what our understanding or intentions were concerning outreach efforts for persons identified during our records searches. They also asked about clarification on DoD policy. They were referred to the March 9, 1993, DepSecDef memo as the implementing policy for the chemical weapons exposure search.

September 12, 1994, Phone Inquiry

The week of 12 September OUSD (P&R) received a call from Ms. Klucaritas concerning questions on how and where people sought compensation. Marty Hamed discussed use of the VA for veterans, and the Department of Labor for former civilian DoD or contractor employees.



INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
400 ARMY NAVY DRIVE
ARLINGTON, VIRGINIA 22202-2884



Analysis
and Followup

AUG 16 1994

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR PERSONNEL AND
READINESS

SUBJECT: General Accounting Office (GAO) Letter Dated
August 9, 1994, "Human Use Experiments During the Cold
War Era" (GAO Code 709096)--NOTIFICATION OF GAO REVIEW

On August 11, we received the official GAO notification letter on the subject effort (Enclosure 1). The GAO National Security and International Affairs Division (Defense Management and National Aeronautics and Space Administration Issues) has started the subject review at the request of Chairman John Conyers, Jr., Subcommittee on Legislation and National Security, House Committee on Government Operations. The GAO is working with Mr. Jim Turner of the Subcommittee staff on this assignment.

Chairman Conyers has requested that the GAO testify on September 19, 1994, before his Subcommittee. In preparing its testimony, the GAO will review human use experiments conducted within the DoD during the Cold War era, including chemical, biological, radiological and medical experiments, both classified and non-classified. The GAO intends to provide (1) an overview on the types and magnitude of tests conducted, and (2) information on the Federal efforts to notify participants, provide assistance, and compensate test participants.

To preclude duplication and expedite this review, the GAO intends to use the radiation data gathered on its ongoing GAO Code 302113 effort, "Federally Sponsored Radiation Releases and Experiments Involving Human Subjects." Enclosure 2 is a copy of our July 1, 1994, tasking memorandum to the Under Secretary of Defense for Acquisition and Technology on the Code 302113 effort. Our July 22, 1994, weekly activity report item (Enclosure 3) described the details of the entrance meeting with the GAO on that project. The GAO also plans to use data from its recently announced review on the "Adequacy of Informed Consent Procedures for Volunteers at the Departments of Health and Human Services and Veterans Affairs." This latter project does not currently involve the DoD.

The DoD Directive 7650.2 designates this office as the central DoD liaison for GAO activities. The enclosed Information Sheet describes the DoD procedures for processing, monitoring, and managing GAO survey and reviews, and the DoD primary action office (PAO) responsibilities. Your office is the PAO for the subject review. Your audit liaison advises that your action officer for this case is Ms. Norma St. Claire, Office of the Deputy Assistant Secretary of Defense (Requirements and Resources), (703) 696-8710.

Collateral action offices (CAO) are listed at the end of this memorandum. The CAO should provide action officer information (name, telephone and telefax numbers, room number) to Ms. St. Claire and our action officer, Mr. Bob Benefiel, (703) 604-9630.

As arranged with Ms. St. Claire and the GAO, a joint, headquarters level entrance meeting with the GAO (to identify and discuss the detailed GAO workplans) is scheduled for Friday, August 19, 1994, at 10:00 a.m., in the 12th floor conference room, at 4015 Wilson Boulevard (Ballston Centre Tower III). We intend to telefax copies of this letter to members of the Chemical Weapons Exposure Study Task Force from the CAO as well as the other listed CAO that are not part of the Task Force.

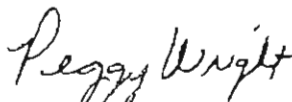
My office, in coordination with Ms. St. Claire, will also schedule interim and/or exit meetings with the GAO and cognizant DoD component representatives before any GAO congressional briefing or testimony based on this audit work, or before the GAO issues a final report.

The interim status and exit meetings are particularly important because these meetings may effectively be the only DoD opportunity to comment on GAO work that could result in budget reductions and/or program direction decisions by the Congress long before any GAO report is issued. My action officer should be alerted if the GAO distributes written information to your office for review and informal comments.

All involved DoD components are requested to inform your office and this office if the GAO requests an interim status or exit meeting with them (i.e., provide advance notice of the meeting, forward copies of memoranda for the record on the meetings and any GAO document discussed). This information is important because the PAO is ultimately responsible for responding to GAO reports (and other documents) on behalf of the Secretary of Defense.

Staying informed on GAO survey/review activity depends on the PAO, the other involved DoD components, and this office working closely together. We request your full support in these efforts to prevent surprises related to the GAO audit and to ensure that the DoD is in a position to realize the maximum benefits from this GAO audit work.

For additional information, please contact Mr. Benefiel. If he is not available, I can be reached on (703) 604-9636.



Peggy Wright
Acting Director
GAO Surveys and Reviews

Enclosures:
As stated

CAO Copies:	SEC ARMY	DIR, JS
	SEC NAVY	DIR, ARPA
	SEC AIR FORCE	DIR, DIA
	USD(A&T)	DIR, DNA
	ASD(C3I)	DIR, PA&E
	ASD(HA)	

Info Copies:	CMDT, USMC
(Without	DDR&E
Info	ASD(LA)
Sheet-A)	ATSD(AE)
	ATSD(PA)
	GC



United States
General Accounting Office
Washington, D.C. 20548

REC'D OFFICE
GAO SURVEYS/REVIEWS

National Security and
International Affairs Division

AUG 11 1994

AUG 9 1994

The Honorable William J. Perry
The Secretary of Defense

Attention: DOD Office of the Inspector General
Director for GAO Surveys and Reviews

Dear Mr. Secretary:

This is to inform you that the General Accounting Office, in response to a congressional request, is initiating a review of human use experiments conducted within the Department of Defense during the Cold War era. Our review will include chemical, biological, radiological and medical experiments, both classified and non-classified. Our objectives are to provide (1) an overview on the types and magnitude of tests conducted; and (2) information on the federal government's response to include efforts to notify participants, provide assistance, and compensate test participants.

Our work, scheduled to begin this month, will be conducted under assignment code 709096. This assignment has been coordinated with Peggy Wright.

If you have any questions about this assignment, please contact Tom Howard, Assistant Director, at (202) 512-3620, or Glenn Furbish at (202) 512-8439.

Sincerely yours,

Donna M. Heivilin, Director
Defense Management and NASA Issues

Enclosure 1
Page 1 of 1



INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
400 ARMY NAVY DRIVE
ARLINGTON, VIRGINIA 22202-2884



Analysis
and followup

JUL - 1 1994

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR ACQUISITION AND
TECHNOLOGY

SUBJECT: General Accounting Office (GAO) Letter Dated
June 20, 1994, "Federally Sponsored Radiation
Releases and Experiments Involving Human Subjects"
(GAO Code 302113)--NOTIFICATION OF GAO REVIEW

On June 23, we received the official GAO notification letter (Enclosure 1) on the subject effort. The GAO has started the review based on an April 14, 1994, request letter (Enclosure 2) from Chairman John Glenn, Senate Committee on Governmental Affairs. Since sending the notice letter, the GAO has decided that its Health, Education, and Human Services Division (Federal Health Care Delivery Issues) will lead this effort with support from the Resources, Community, and Economic Development Division (Energy and Sciences Issues). The GAO National Security and International Affairs Division is no longer involved with this effort.

In his request letter, Chairman Glenn noted that the Administration is currently identifying the radiation releases, experiments, and tests that through lapses in science or ethics standards may have harmed individuals. The President has appointed an Advisory Committee on Human Radiation Experiments to provide advice and recommendations to the Human Radiation Interagency Working Group on the ethical and scientific standards applicable to human radiation experiments. The Departments of Defense, Energy, Health and Human Services, and Veterans Affairs have recently disclosed that they previously planned radiation releases, conducted experiments and other tests to determine the effects of radiation on humans.

Chairman Glenn cited the related January 25, 1994, Committee hearings and the Committee's need for additional work in this area. Specifically, the Committee requested that the GAO examine the Administration's plans for:

- disclosing the details of the Federally sponsored radiation releases and experiments that involved human subjects,
- identifying and notifying those subjects (or their families), and

Enclosure 2
Page 1 of 6

- compensating those people who are determined to have been injured as a result of the experiments.

The Committee has requested that the GAO testify in October 1994 on its work. The GAO testimony will likely show the status of the Administration's actions. Based on our past experience with the lead GAO team, we expect that the GAO will meet with appropriate DoD officials in advance of any congressional testimony to discuss the accuracy and completeness of its work.

The GAO is working with Mr. Chris Kline of the Committee staff on this assignment. The GAO will determine what further work is needed, completion dates, and reporting products based on input received during the Committee hearings in October 1994. The GAO does not know at this time whether the DoD will be provided an opportunity to comment officially on any GAO draft report. However, the GAO staff has agreed to an exit meeting with appropriate DoD officials to discuss the accuracy and completeness of its work before issuing any final report.

The DoD Directive 7650.2 designates this office as the central DoD liaison for GAO activities. The enclosed Information Sheet describes the DoD procedures for processing, monitoring, and managing GAO survey and reviews, and the DoD primary action office (PAO) responsibilities. Your office is the PAO for the subject review. Your audit liaison advises that your action officer for this case is Dr. Gordon Soper, Principal Deputy, Office of the Assistant to the Secretary of Defense (Atomic Energy), (703) 697-5161.

Collateral action offices (CAO) are listed at the end of this memorandum. The CAO should provide action officer information (name, telephone and telefax numbers, room number) to Dr. Soper and our action officer, Mr. Bob Benefiel (703) 693-0214. Action officer information should be provided as soon as possible to allow us an opportunity to advise on the entrance meeting arrangements.

Mr. Benefiel will coordinate with Dr. Soper to arrange a joint, headquarters level entrance meeting with the GAO so that the GAO can identify and discuss the detailed GAO plans and begin the review. My office, in coordination with Dr. Soper, will also schedule interim and/or exit meetings with the GAO and cognizant DoD component representatives before any GAO congressional briefing or testimony based on this audit work, or before the GAO issues a final report.

The interim status and exit meetings are particularly important because these meetings may effectively be the only DoD opportunity to comment on GAO work that could result in budget reductions and/or program direction decisions by the Congress long before any GAO report is issued. My action officer should

Enclosure 2
Page 2 of 6

be alerted if the GAO distributes written information to your office for review and informal comments.

All involved DoD components are requested to inform your office and this office if the GAO requests an interim status or exit meeting with them (i.e., provide advance notice of the meeting, forward copies of memoranda for the record on the meetings and any GAO document discussed). This information is important because the PAO is ultimately responsible for responding to GAO reports (and other documents) on behalf of the Secretary of Defense.

Staying informed on GAO survey/review activity depends on the PAO, the other involved DoD components, and this office working closely together. We request your full support in these efforts to prevent surprises related to the GAO audit and to ensure that the DoD is in a position to realize the maximum benefits from this GAO audit work.

For additional information, please contact Mr. Benefiel. If he is not available, I can be reached on the same number.

Marcia J. Van Note

Marcia J. Van Note
Director
GAO Surveys and Reviews

Enclosures:
As stated

GAO Copies:	SEC ARMY	CMDT, USMC
	SEC NAVY	ASD(HA)
	SEC AIR FORCE	DIR, DNA

Info Copies:	ASD(LA)	DIR, JS
(Without	ATSD(AE)	AIG(APO)
Info	ATSD(PA)	AIG(AUD) (2)
Sheet-A)	DUSD(ES)	AIG(INS) (2)
	GC	

Enclosure 2
Page 3 of 6

National Security and
International Affairs Division

June 20, 1994

JUN 23 1994

The Honorable William J. Perry
The Secretary of DefenseAttention: DOD Office of the Inspector General
Director for GAO Surveys and Reviews


Dear Mr. Secretary:

This is to inform you that, at the request of the Senate Committee on Government Affairs, the Resources, Community, and Economic Development Division of the General Accounting Office is initiating an examination of the administration's plans for 1) disclosing the details of federally-sponsored radiation releases and experiments that involved human subjects; 2) identifying and notifying those subjects (or their families); and 3) compensating those people who are determined to have been injured as a result of the experiments. DOD is one of the agencies GAO will examine in regard to these issues.

The assignment code for this work is 302113. This assignment will be jointly conducted by GAO's Health, Education, and Human Service Division, and National Security and International Affairs Division. If you have any questions or require further information, please contact any of the following individuals:

Robert E. Allen, Jr., Assistant Director, RCED, (301) 903-5710
Stephen P. Backhus, Assistant Director, HEHS, (202) 512-7111
Foy D. Wicker, Assistant Director, NSIAD, (202) 512-6042

Sincerely yours,



Frank C. Conahan
Assistant Comptroller General

Enclosure 2
Page 4 of 6

JOHN C. FORD, CHIEF EXECUTIVE

ALL FROM GAO
 DATE OF THE REPORT
 THE REPORT NUMBER
 OR ADDRESS
 ADDRESS COMMENTS
 NAME TITLE
 L. BOGGS, NORTH-DALTON

W. J. KELLY, JR., DELEGATE
 U. S. HOUSE OF REPRESENTATIVES
 WASHINGTON, D. C.
 THOMAS R. ROBERTS, JR., SENATOR
 JOHN H. HENNINGSEN, SENATOR
 BOBBY R. SMITH, SENATOR

United States Senate

COMMITTEE ON
 GOVERNMENTAL AFFAIRS

WASHINGTON, DC 20510-8180

RONALD WITTE, STAFF DIRECTOR

FRANK B. POLK, SENATE STAFF DIRECTOR AND CHIEF COUNSEL

April 14, 1994

The Honorable Charles A. Bowsher
 Comptroller General of the United States
 U.S. General Accounting Office
 441 G Street, NW
 Washington, DC 20548

Dear Mr. Bowsher:

Recently several federal agencies, including DOE, DOD, VA, and HHS, disclosed that experiments, planned releases and other tests have been conducted to determine, among other things, the effects of radiation on humans. Many of the human subjects involved in these radiation events were cognizant of what was happening to them. However, it appears that some of the subjects were not made aware of the significance and potential danger of these radiation tests and experiments. The administration, with DOE as the main sponsor of these tests, is currently involved in an effort to identify historical radiation tests, planned releases and experiments that through lapses in science or ethics standards may have harmed individuals.

As you know, the Committee is very interested in this issue and has held hearings, most recently, on January 25, 1994 to discuss the details of federally-sponsored radiation and other tests involving human subjects. To help support the Committee's effort in this matter, I request that the General Accounting Office (GAO) initiate an examination of the administration's plans for: 1) disclosing the details of the federally-sponsored radiation releases and experiments that involved human subjects; 2) identifying and notifying those subjects (or their families); and 3) compensating those people who are determined to have been injured as a result of these experiments.

GAO's primary objectives in this assignment should be to: 1) understand the administration's overall plans to locate and analyze information and then make public radiation-related releases and experiments involving human subjects; 2) understand DOE's, DOD's, HHS's and VA's detailed plans for addressing this issue; 3) determine whether these plans adequately address the full disclosure of federally-sponsored radiation tests and experiments involving human subjects; 4) assess the ability and success of the federal government in identifying and notifying human subjects; and 5) provide an assessment of other relevant compensation programs, including those established for the


Enclosure 2
 Page 5 of 6

"downwinders," the Marshall Islanders, and "atomic veterans," with respect to any lessons learned from those programs which might be applied to a compensation program for subjects of radiation experiments.

As you may know, the President has appointed an Advisory Committee on Human Radiation Experiments to provide advice and recommendations to the Human Radiation Interagency Working Group on the ethical and scientific standards applicable to human radiation experiments. I would expect GAO to closely monitor the meetings of the Working Group and Advisory Committee. Your examination should also include an assessment of the analytical plan or framework developed by the Advisory Committee to carry out its charge.

I understand that your staff has already had preliminary meetings with DOE officials, and has briefed my Governmental Affairs staff on your initial findings. I also understand that the scope of your investigation may need to change as it proceeds; therefore, I would appreciate your staff providing regular updates to my staff as your investigation continues. Chris Kline is my point of contact; he may be reached at 202-224-7954.

Thank you for your continued assistance.

Sincerely,

John Glenn
Chairman

JHG/cx

1. Entrance Meeting: "Federally Sponsored Radiation Releases and Experiments Involving Human Subjects" (GAO Code 302113).

The GAO has started the review based on an April 14, 1994, request letter from Chairman John Glenn, Senate Committee on Governmental Affairs. Since sending its June 20, 1994, notice letter, the GAO has decided that its Health, Education, and Human Services Division (Federal Health Care Delivery Issues) will lead its DoD efforts. The GAO Resources, Community, and Economic Development Division (Energy and Sciences Issues) will have overall responsibility for coordinating the GAO efforts at the Departments of Defense, Energy, Health and Human Services, and Veterans Affairs, as well as the National Aeronautics and Space Administration (NASA). The GAO National Security and International Affairs Division will do the work at the NASA. The GAO has excluded the Central Intelligence Agency from its work because it was not discussed in the request letter.

In his request letter, Chairman Glenn noted that the Administration is currently identifying the radiation releases, experiments, and tests that, through lapses in science or ethics standards, may have harmed individuals. The President has appointed an Advisory Committee on Human Radiation Experiments to provide advice and recommendations to the Human Radiation Interagency Working Group on the ethical and scientific standards applicable to human radiation experiments. The Departments of Defense, Energy, Health and Human Services, and Veterans Affairs have recently disclosed that they previously planned radiation releases, conducted experiments and other tests to determine the effects of radiation on humans.

Chairman Glenn cited the related January 25, 1994, Committee hearings and the Committee's need for additional work in this area. At the July 19 entrance meeting, the GAO staff discussed the Committee request that the GAO examine the Administration's plans for:

- disclosing the details of the Federally sponsored radiation releases and experiments that involved human subjects,
- identifying and notifying those subjects (or their families), and
- compensating those people who are determined to have been injured as a result of the experiments.

The Committee has requested that the GAO frequently update the Advisory Committee and Working Group so that its preliminary observations can be considered and search process adjusted, if needed. The Committee has also requested that the GAO testify in

October 1994 on its work. The GAO testimony will likely show the status of the Administration's actions. Based on our past experience with the GAO team working in the DoD, we expect that the GAO will meet with appropriate DoD officials in advance of any congressional testimony to discuss the accuracy and completeness of its work.

The DoD Principal Deputy Assistant to the Secretary of Defense (Atomic Energy) informed the GAO that the (1) Radiation Experiments Command Center is the focal point for the DoD search process, (2) agency General Counsel will decide on disclosures at the completion of the search, and (3) Congress will decide on compensation based on input from the Department of Justice.

The GAO is working with Mr. Chris Kline of the Committee staff on this assignment. The GAO will determine what further work is needed based on input received during the Committee hearings in October 1994. The GAO currently plans to issue its final report by May 1995 but does not know at this time whether the DoD will be provided an opportunity to comment officially on any GAO draft report. However, the GAO staff has agreed to an exit meeting with appropriate DoD officials to discuss the accuracy and completeness of its work before issuing any final report. The Office of the Under Secretary of Defense for Acquisition and Technology is the primary action office for this GAO effort. (Mr. Benefiel (703) 804-9630)

CODE 709096
HUMAN SUBJECT EXPERIMENTATION
AUDIT GUIDELINES

Objectives: Identify the magnitude, possible impact, and government actions to address problems resulting from experiments sponsored or conducted by federal agencies for national security purposes in which humans were deliberately exposed to hazardous or potentially hazardous chemical, biological, and/or nuclear material. Specifically, summarize available information on (1) the experiments and the approximate number of human subjects involved, (2) the potential effects of these experiments on human subjects, (3) the government's efforts to notify the participants and provide medical care and/or compensation, and (4) current laws, policies and procedures to ensure that the government obtains informed consent from participants in experiments.

Potential Agencies to Contact:

Department of Defense

OSD: Assistant to the Secretary of Defense (Atomic Energy)
Army
Navy/Marine Corps
Air Force
Defense Nuclear Agency
National Security Agency
Defense Intelligence Agency

Other Government Agencies

Veterans Administration
Central Intelligence Agency
Department of Energy
NASA
Presidential Advisory Committee on Human Radioactive Experiments

Audit Steps: Contact appropriate officials in the above listed agencies, use prior GAO reports and other existing studies and documents to meet the following objectives:

OBJECTIVE (1) Identify program, experiments, and number of participants

Purpose: To meet this objective we will gather information to support a testimony section in which we discuss, in general terms, the scope of tests that have been conducted by the federal government for national security purposes. It is not designed to develop an all-inclusive list, but to give the Committee as much information as possible within the time available concerning the extent and nature of experiments conducted. It will define "experiment", identify some of the more egregious examples, and summarize agencies' efforts to identify experiments and participants.

Specific audit steps are:

- a. Determine how each agency defines human use experiments.
- b. Determine what experiments were conducted by each agency. Describe the purpose, experimental agent(s) used, the number of subjects, and the dates of the experiments.
- c. Determine efforts taken or being taken by each agency to identify the experiments and the participants.
 - (1) prior efforts
 - (2) ongoing efforts
 - (3) resources dedicated to these efforts
 - (4) search methodology (e.g. archival research, outreach programs to identify participants, etc.)
- d. Identify the difficulties agencies are encountering in identifying experiments and participants.

OBJECTIVE (2) Potential Effects of Experiments on Subjects

Purpose: To meet this objective we will gather information to develop a testimony section that summarizes federal agencies' efforts to identify the effects of their experiments on human

subjects. Prior work in this area has shown that agencies are generally ignorant of any potential long-term effects related to the agents or contaminants used in their experiments. This, in turn, leads to problems when participants allege their current medical problems are the result of experiments conducted many years ago. Where these questions exist, it appears agencies have an obligation to determine whether, in fact, people have suffered negative health effects. These audit steps are meant to determine the extent of those efforts.

From the list identified in step 1b above, determine:

- a. What were the risks of the experiments to the human subjects identified at the time of the experiments?
- b. What studies have been done or are currently underway to identify the possible long term health effects of the experimental agents (including radioactive material) used in the experiments?

OBJECTIVE (3) Government's Efforts to Notify Participants, and Provide Medical Care and/or Compensation

Purpose: To meet this objective we will gather information to support a testimony section that summarizes federal agencies' efforts to locate and provide assistance to experiment subjects. From prior work in this area, we know that agencies do not always have comprehensive lists of experiment participants. This causes problems when experiment participants are required to prove participation in the experiments in order to receive medical care and/or compensation.

From the list identified in step 1b above, determine:

- a. What efforts have the agencies taken to locate both civilian and military subjects of the experiments?

- b. What criteria must the subjects meet in order to receive compensation and/or medical care?
- c. What is the level of compensation that human subjects have received?
- d. What barriers do the agencies perceive participants face in getting compensation?
- e. Identify private bills introduced by Congressional Representatives to obtain compensation for constituents (may be obtained from legislative searches rather than agencies).
- f. Identify agency points of contact that interested parties can contact to obtain information about their participation in human subject experiments.

(4) Current Laws, Policies, etc. to Ensure Informed Consent of Human Test Subjects

Purpose: This audit step will develop a testimony section that briefly summarizes the history of informed consent requirements, and current requirements designed to ensure that current human subjects are informed of the risks of their participation in an experiment.

- a. Summarize current Code of Federal Regulations requirements, laws, etc.
- b. Identify milestones in the legislative history of informed consent (Nuremberg Guidelines, 1975 Law, etc.).

ATTACHMENT I

ATTACHMENT I

TEAM MEMBER ASSIGNMENTS

TEAM MEMBER	AUDIT STEP RESPONSIBILITY	AGENCIES
GLENN FURBISH	(1) Experiments and number of participants	DOD VA NSA HHS
MARK LITTLE	(1) Experiments and number of participants	DQE NASA
EARL MORRISON	(2) Potential effects on subjects	Air Force Defense Nuclear Agency Navy/Marine Corps
MEG KLUCSARITS	(3) Govt efforts to notify participants/ provide medical care & compensation	Army Defense Intelligence Agency
DAVE ROWAN	(4) Laws, policies, etc. re. informed consent	CIA

OTHER GAO DIVISIONS INVOLVED

OFFICE OF GENERAL COUNCIL

RESOURCES, CONSERVATION AND ENERGY DIVISION

HEALTH, EDUCATION AND HUMAN SERVICES DIVISION

INDEXING SCHEME

- A Administrative
- B Background
- C Experiments and Number of Participants
 - C-1 OSD
 - C-2 Army
 - C-3 Navy/Marine Corps
 - C-4 Air Force
 - C-5 Defense Nuclear Agency
 - C-6 National Security Agency
 - C-7 Defense Nuclear Agency
 - C-8 Veterans Administration
 - C-9 Central Intelligence Agency
 - C-10 Department of Energy
 - C-11 NASA
 - C-12 Presidential Advisory Cmte. on Radioactive Experiments
- D Potential Effects of Experiments on Subjects
 - D-1 through D-12 same as C-1 through C-12
- E Government's Efforts to Notify Participants and Provide Compensation and/or Medical Care
 - E-1 through E-12 same as C-1 through C-12
- F Laws, Policies, etc. to Ensure Informed Consent



Department of Defense
Radiation Experiments Command Center
6801 Telegraph Road
Alexandria, Virginia 22310-3398

SEP 14 1994

RECC

MEMORANDUM FOR

DEPUTY UNDER SECRETARY OF DEFENSE FOR
REQUIREMENTS AND RESOURCES, PERSONNEL AND
READINESS
OFFICE OF THE DIRECTOR, DEFENSE RESEARCH AND
ENGINEERING, DIRECTOR, ENVIRONMENTAL AND
LIFE SCIENCES
LEGISLATIVE COUNSEL, CHIEF LEGISLATIVE
LIAISON

SUBJECT: Outline for Preparing Testimony to Respond to 12 August Questions from
Congressman John Conyers, Jr.

Attached is the outline which will be used to structure testimony for the oversight hearing of the Legislation and National Security Subcommittee of the Committee on Government Operations. The outline was prepared as requested during the 13 September meeting to establish the Department's approach to respond to the questions posed by Congressman John Conyers, Jr.

As discussed yesterday, your input is required in all areas you can address. Your prompt attention and preparation of the response material is greatly appreciated.

Fax all replies to the RECC at (703) 739-9576 by 1400 hours on Thursday, 15 September.

FOR THE DIRECTOR:

A handwritten signature in dark ink, appearing to read "Claud Bailey, Jr.", written over a light-colored background.

CLAUD BAILEY, JR.
Colonel, AG, USA
Deputy Director
Command Center

Attachment
as stated

14-C

OVERSIGHT HEARING RESPONSE

- I. Introductory Remarks by Dr. Soper
- II. The human subject experimentation programs sponsored by the Department of Defense (DoD) during the 1950s, 1960s, and 1970s are as follows:
 - A. Chemical Warfare Tests
 1. identify the specific programs
 2. discuss the number of subjects involved for each program
 3. explain any or all potential effects of these experiments upon human subjects
 - B. Biological Warfare Tests
 1. identify the specific programs
 2. discuss the number of subjects involved for each program
 3. explain any or all potential effects of these experiments upon human subjects
 - C. Radiation Experimentation
 1. identify the specific programs
 2. discuss the number of subjects involved for each program
 3. explain any or all potential effects of these experiments upon human subjects
 - D. Drug Testing Programs
 1. identify the specific programs
 2. discuss the number of subjects involved for each program
 3. explain any or all potential effects of these experiments upon human subjects
- III. In terms of DoD's follow-up efforts for the human subjects of these programs,
 - A. Discuss notification procedures
 - B. Address available medical programs and care
 - C. Outline your agency's approach to compensation
- IV. Current requirements for informed consent in experiments sponsored by DoD are:
- V. "In the late 1950s, the Army sprayed the chemical cadmium from an aircraft flying from Detroit, Michigan to Goodland, Kansas."
 - A. Provide background (who, what, when, where, why, how) of "Operation Large Area Coverage"
 - B. Provide copies of all documents relating to this operation
- VI. Concluding Remarks

St. Claire, Norma

From: Sinaiko, Ivy
To: Files, Jeanne; St. Claire, Norma
Subject: FW: Hearing on Sept. 28
Date: Wednesday, September 14, 1994 2:24PM
Priority: High

From: Crail Tamara
To: Sinaiko, Ivy
Subject: Hearing on Sept. 28
Date: Wednesday, September 14, 1994 1:42PM
Priority: High

Ivy:

The hearing scheduled for the 28th by Gov. Ops Subc. is beginning to shape up.

As we suspected, there will be additional panels.

1st panel - GAO (expected to frame the situation and provide the context)
2nd panel - victims (actually children of people who took LSD and mescaline (sp?).....they will tell how it look over 20 years for the Army to own up to these experiments and provide compensation. Both of the witnesses are children of parents who died because of the experiments.
3rd panel - DoD (they want to see us be open and responsive)
4th panel - "Talking Heads" - Intellectuals who are specialists associated with major universities who will talk about the ethics of human subject research.....a Mr. Roth and a Ms. Gamble from U of WI.

There are two important things the staff is telling us that will make this an easier hearing for DoD: (1) If we can manage to get the Large Area Coverage experiments in some declassified form so that people can know who was exposed and how much exposure they received.

(2) If we recognize the importance of doing whatever we can to help those people who may be suffering as a result of their involvement with all these experiments and tests.

Ivy, #2, which is probably mostly going to fall on Jeanne's shoulders is the one issue that the Chairman will focus on. It will be from two perspectives:

- The DoD commitment to doing whatever needs to be done to research our records to help these people (the staff brought up recent incidents like Persian Gulf Illness as an example of how the Department is unresponsive to the people who get sick as a result of their service (military or civilian)).
- Our willingness to not hide (or try to hide!) anything! They emphasized the example of how much they appreciated the Army being forthcoming to them about some helicopter problem and telling them problems with the aircraft

that the committee had not found out about, yet. Their conclusion was that
* Army was on top of it, and they didn't need to be and dropped it.

My recommendation is that we be as forthcoming as possible to include any
problems that we are having (except Jeanne should not do the nose thing
...she'll know what that means) even to the funding and staffing problems
that result from the need to do this kind of work. It is especially
important after admitting our problems that we be able to tell them how we
are trying to resolve the problems we are having!

I will try to make this a little more coherent, but knowing that the first
drafts for testimony are due Fri...I wanted to get it out to everyone ASAP.

Next week we will know even more from the Com. staff, even get some
questions.....they may also want to sit down with representatives from the
witnesses offices and discuss where we are going.....more on this to follow.

Tamara

PORTER GOSS
14TH DISTRICT ALABAMA

300 CANNON BUILDING
WASHINGTON, DC 20515-0912
(202) 225-7528

COMMITTEE
RULES
STANDARDS OF OFFICIAL CONDUCT

Congress of the United States
House of Representatives
Washington, DC 20515-0914

DISTRICT OFFICE
2000 MAIN STREET
SUITE 303
FT. MYERS, FL 33901
(813) 332-4877

2201 TAMMAM TRAIL EAST
BUILDING 9, SUITE 212
NAPLES, FL 34102
(813) 774-8060

PUNTA GONDA
1173 828-0067

January 4, 1994

The Honorable Bill Clinton
President of the United States
The White House
Washington DC 20500

Dear Mr. President:

As Americans react in horror to revelations about secret government experiments on unsuspecting citizens, your Administration has jumped to action with commendable speed and appropriate pledges to right the wrongs.

Your senior adviser, George Stephanopoulos, was quoted in this week's Washington Post as saying: "If these people were tested against their will. . . certainly something must be done to right that." Energy Secretary Hazel O'Leary has said "We cannot turn our back on our responsibility here. We have to do whatever is needed to make these people whole again." I agree wholeheartedly and am glad that timely and meaningful follow-up seems to be in the works

In the process of reaching out to those people whose lives were forever altered by such tests, I hope you will not forget the plight of another group of American citizens who also became unwitting guinea pigs and suffered at the hands of their government. I refer to the more than 1700 naval trainees (and perhaps thousands of other American military personnel) who were used in secret Mustard Gas experiments conducted by the Department of Defense during World War II and later. These men, mostly 17 and 18 years old, were used in full-body gas chamber experiments designed to study the effects of lethal Mustard Gas, without their advance knowledge or consent -- and without proper medical follow-up or assistance. In addition, they were sworn to secrecy and threatened with courts martial if they divulged the nature of their exposure.

In its final report, "Veterans At Risk," issued in January of 1993, the National Academy of Science's Institute of Medicine concluded that "Although the human subjects were called 'volunteers,' it was clear from official reports that recruitment of the WWII human subjects, as well as those in later experiments, was accomplished through lies and half-truths." The report continues: "Most appalling was the fact that no formal, long-term follow-up medical care or monitoring was provided for any of the WWII human subjects . . ." Finally, the report recognizes that: "There can be no question that some veterans, who served our country with honor and at great personal cost were mistreated twice -- first, in the secret testing and second, by the official denials that lasted for decades."

15
110

For nearly 50 years, these men suffered in silence. Finally, after countless rebuffs by the federal bureaucracy, the Bush Administration opened the door for providing assistance and we have come to the point where the federal government has promised additional action. But even this process has become bogged down and real relief has been painstakingly slow in coming -- in fact, for most of these veterans, there has been no relief to date. Final rules for handling of these claims are still mired in red tape at OMB, even though your Department of Veterans Affairs announced one year ago that help was on its way.

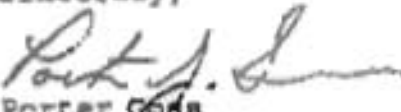
As you wrote in a February 19, 1993 letter on the subject of righting the wrongs committed on these World War II veterans by the U.S. government, "be assured that this will not be treated as business as usual." While I am impressed with the speed with which your Administration has released information on the radiation experiments conducted on civilians, when compared with the bureaucratic stonewalling that has occurred in the case of Mustard Gas testing, any reasonable observer would conclude that there is a double standard for our men and women in uniform. As these veterans continue to receive form letters of denial from their government, should they assume that civilians exposed to radiation are a higher priority than veterans lied to by their government and exposed to lethal chemical gases?

Mr. President, I urge you to use the weight of your office to speed along recognition of these men, who continue to suffer from the actions of their government as they find obstacles at every turn in seeking recognition and medical attention. In addition to expediting final publication of the new VA regulations, I request your support for my legislation, HR 1055, to help locate and provide commendation for these men. This bill has more than 30 cosponsors, including the Chairman of the House Veterans Affairs Committee, Rep. Sonny Montgomery, but it remains dormant in a House Armed Services subcommittee.

Our men and women in uniform need to know that their government stands behind them and will look out for their best interests. And, when a wrong has been committed, these brave citizens need to know the government will do its best to make things right. We must not have a double standard for our armed services.

I appreciate your consideration of this request.

Sincerely,


Porter Goss
Member of Congress

PORTER GOSS
14TH DISTRICT, FLORIDA

300 CANNON BUILDING
WASHINGTON, DC 20515-0912
(202) 225-3818

COMMITTEE:
RULES
STANDARDS OF OFFICIAL CONDUCT

JAN 05 1994

Congress of the United States
House of Representatives
Washington, DC 20515-0914

DISTRICT OFFICE:
2000 MAIN STREET
SUITE 202
FT. MYERS, FL 33901
(813) 833-4877

2001 TAMMAM TRAIL EAST
BUILDING 3, SUITE 212
MAPLE, FL 33642
(813) 974-8080

PUNTA GORDA
(813) 838-0061

January 4, 1994

Congressman Ike Skelton,
Chairman/Subc. On Military Forces & Personnel
2120 Rayburn H.O.B.
Washington, DC 20515

Dear Mr. Chairman:

Given your past interest and involvement with this important issue, I hope you will take a careful look at the enclosed letter I have sent to President Clinton.

I am eager to ensure that the federal government makes good on its commitments without adopting an arbitrary double standard.

Thank you for your consideration and I appreciate any suggestions or assistance you might offer.

Kind regards,



Porter Goss
Member of Congress

enclosure

DoD PARTICIPATION IN THE HUMAN SUBJECT
PROTECTION SYSTEM

08 FEB 1994

The modern foundations of DoD's participation in human subjects protection begins with the Nuremberg Code developed for the Nuremberg Military Tribunal as a standard by which to judge the human experimentation conducted by the Nazi government. The Code is based on several principles: freely given consent to participation in research; freedom of coercion; and, an understanding of the benefits and risks involved in participation. Similar recommendations were incorporated into the Declaration of Helsinki: "Recommendations Guiding Medical Doctors in Biomedical Research Involving Human Subjects," first adopted by the 18th World Medical Assembly in Helsinki, Finland in 1964. The Declaration underwent subsequent revision in 1975 and 1989 and distinguishes therapeutic from non-therapeutic research. These documents serve as reference points for human subjects protection and are often cited in various DoD or Service directives/regulations on the topic. Other documents cited by DoD are applicable sections of the Food and Drug Regulations (21 CFR primarily subchapter A, D, and H) and Department of Health and Human Services Regulations (45 CFR Part 46).

Regulations protecting human subjects first cited in the U.S. became effective in May 1974. Issued by the Department of Health, Education and Welfare (HEW), the regulations provided regulatory status to NIH policies for the protection of human subjects first issued by NIH in 1966. These regulations included the establishment of an investigational review board (IRB) as an additional mechanism through which human subjects would be protected.

Within DoD during the 1960's and 1970's, human subjects protection documents covered both the investigational use of drugs (DoD Instruction 5030.29, "Investigational Use of Drugs by the Department of Defense," May 12, 1964) and the clinical investigation program (DoD Directive 6000.4, "Clinical Investigation Program," April 16, 1976). DoD Directive 6000.4 was replaced by DoD Directive 6000.8, "Clinical Investigations Program issued December 6, 1985. DoD Instruction 5030.29 was replaced by DoD Directive 3216.2, "Protection of Human Subjects in DoD-Supported Research," January 7, 1983. Both of these latter Directives reference the Department of Health and Human Services Regulation (45 CFR 46). DoD Directive 3216.2 cites in the policy section, "Except as provided elsewhere in this Directive, the human protection regulations issued by the Department of Health and Human Services shall apply to research supported by the Department of Defense."

Variations in program execution and application by the various Federal Agencies led to the adoption of the Federal Common Rule which is Subpart A of the Department of Health and Human Services

OPTIONAL FORM 99 (7-89)

FAX TRANSMITTAL		# of pages 2
To MAETY HAND	From JOHN JEMONEK	
Sent Agency DAS) FM+P	PRVTS # 697 1494	

FEB 9 '94 13:07

PAGE 001

16

Regulation, "Protection of Human Subjects", (45 CFR 46). DoD issued the Federal Common Rule as the "Protection of Human Subjects" (32 CFR 219) on August 19, 1991. Policy Guidance was issued jointly by the Assistant Secretary of Defense (Health Affairs) and by the Director, Environmental and Life Sciences, Office of the Director, Defense Research and Engineering on June 19, 1993.

The DoD Directive 3216.2, "Protection of Human Subjects in DoD-supported Research" is undergoing revision to incorporate provisions of the Policy Statement and changes to address record tracking and data storage.

Q: For how long has DoD followed Human Subjects Protection Regulations issued by Agencies of the Federal Government?

A: DoD in its Directives and Instructions has cited the applicable Federal Regulations governing human subjects research. The applicable Federal Regulations have primarily been those of the FDA and DHHS. However, at times DoD has had to seek Memorandum of Agreements or Waivers regarding such regulations which conflict with the execution of DoD mission, especially in contingency operations. The most recent example is found in 21 CFR Subchapter A, Subpart B, Section 50.23 issued prior to the Persian Gulf War which permitted the use of two drugs listed under the category of Investigational New Drugs (IND). The two drugs were pyridostigmine and botulinum toxoid vaccine to counter the potential threat of chemical and biological warfare.

Q: For how long has DoD followed the Department of Health and Human Services Regulations governing human subjects protection?

A: DoD adopted the Federal Common Rule for the "Protection of Human Subjects" in August 1991. However, the Federal Common Rule covers only Subpart A of the HHS Regulation 45 CFR 46. Three other Subparts govern research conducted on protected classes of individual: Subpart B governs pregnant women, fetuses, and in-vitro fertilization research; Subpart C governs incarcerated persons as research subjects; and, Subpart D governs children as research subjects. The Policy Guidance issued on June 10, 1993 states, "The additional DHHS protection regulations found in Subpart B-D, while not part of the Common Federal Policy, contain basic protection concepts which should be adopted for research that involves protected classes of human subjects."

DEMOCRATS

G.V. (SONNY) MONTGOMERY, MISSISSIPPI
 DON EDWARDS, CALIFORNIA
 DOUGLAS AMLEGATE, OHIO
 LAMT EVANS, ALABAMA
 TIMOTHY J. PENNY, MINNESOTA
 J. BOY HOWLAND, GEORGIA
 V. SLATTERY, KANSAS
 SEYMOUR P. BARNETT, MASSACHUSETTS
 GEORGE E. BANGMILLER, ILLINOIS
 JIM L. HONG, INDIANA
 CHIT EDWARDS, TEXAS
 MARTIN WATERS, CALIFORNIA
 BOB CLYBURN, TENNESSEE
 BOB FILNER, CALIFORNIA
 FRANK T. SNODGRASS, TEXAS
 LINDA V. SMITH, ILLINOIS
 SCOTTY BAKER, KENTUCKY
 BARBARA BISHOP, GEORGIA
 JAMES E. DETHMUN, SOUTH CAROLINA
 MICHAEL ESKOLIA, WASHINGTON
 CONNOR BROWN, FLORIDA

MACK FLEMING
 STAFF DIRECTOR AND CHIEF COUNSEL

REPUBLICANS

BOB STUMP, ARIZONA
 CHRISTOPHER H. SMITH, NEW JERSEY
 DAN BURTON, INDIANA
 MICHAEL BILIRAKIS, FLORIDA
 THOMAS J. RIDGE, PENNSYLVANIA
 FLOYD SPENCE, SOUTH CAROLINA
 TOM HUTCHINSON, ALABAMA
 TERRY EVERETT, ALABAMA
 STEVE BRYER, INDIANA
 JACK QUINN, NEW YORK
 SPENCER BACHUS, ALABAMA
 JOHN LINDA, GEORGIA

ONE HUNDRED THIRD CONGRESS

G.V. (SONNY) MONTGOMERY
 CHAIRMAN

U.S. House of Representatives

COMMITTEE ON VETERANS' AFFAIRS

338 CANNON HOUSE OFFICE BUILDING

Washington, DC 20515

January 22, 1993

OFFICE OF THE
 SECRETARY OF DEFENSE
 93 JAN 26 PM 12: 58

Honorable Les Aspin
 Secretary of Defense
 Room 3E880, The Pentagon
 Washington, DC 20301-1000

Dear Mr. Secretary:

The report, "Veterans at Risk: The Health Effects of Mustard Gas and Lewisite," recently issued by the Institute of Medicine, National Academy of Sciences, provides important new information on secret U.S. chemical weapons programs during World War II. Of particular importance to this Committee and the Department of Veterans Affairs is the finding that an estimated 60,000 military personnel participated as human experimental subjects in tests of exposure to mustard agents (sulfur and nitrogen mustard) and Lewisite and unknown numbers of additional servicemembers may have been exposed to these agents through their participation in the production, transportation and/or storage of these chemical agents. In addition, this report contains information which is particularly significant with respect to submission of claims to VA for service-connected disability compensation for conditions believed to be caused by exposure to one or more of these chemical agents and adjudication of those claims.

The report indicates orders to maintain the secrecy of these programs given servicemembers more than forty years ago have been faithfully obeyed. As a result, many veterans reportedly have not filed claims with VA for compensation for service-connected disabilities believed to have resulted from exposure to one or more of these chemical agents during military service, because to file such a claim would require divulging information ordered to be kept secret. Fifty years after-the-fact, the interest of the government in maintaining secrecy about the chemical weapons programs conducted by the U.S. during World War II must be secondary to the government's responsibility to the veterans who participated in these once-secret programs. Official removal of unnecessary secrecy surrounding these programs is essential so all servicemembers who participated in these programs and believe they incurred a service-connected disability as a result of their

service may feel free to file a claim for compensation. Action should be taken immediately to countermand previous orders given servicemen requiring secrecy about these programs. This action should be accompanied by public announcements intended to inform former servicemembers that these secrecy orders have been countermanded, as recommended by the Institute of Medicine report.

Regarding adjudication of claims, the report provides conclusions regarding the causal relationships of exposure to the development of specific diseases. Also relevant to adjudication of claims submitted to VA for service-connected disability compensation, the report notes, "...many more military personnel were exposed to significant levels of mustard agents or Lewisite than is obvious from service records" and "there were often no records or documentation available of an individual's participation in the testing programs". Because individual military records may not record servicemember participation in these programs, the Department must provide VA the fullest possible accounting of these formerly secret tests of exposure to mustard agents (sulfur and nitrogen mustard) and Lewisite conducted by the U.S. during World War II and related production, transportation and storage of these chemical agents. This accounting should include, but not be limited to, the following:

The location of each U.S. chemical weapons research program which used human subjects, the purpose and nature of the research programs at each site, the identification of each military unit stationed at each chemical weapons research program location during the period of testing, the name, service number and military unit of each servicemember known to have participated as a human subject in a research program, the date on which research using human subjects, including preliminary research, was begun and was completed; and

The location of all facilities at which servicemembers participated in the production, transportation and/or storage of these chemical agents, the identification of each military unit stationed at each storage and/or production facility, the name, service number and military unit of each servicemember known to have participated in the production, transportation and/or storage of chemical agents, the date on which production and/or storage of chemical agents at each location was begun and terminated.

The recent Institute of Medicine report has provided valuable information on servicemember participation in secret U.S. chemical weapons programs during World War II which was not previously available to the public, this Committee or the Department of Veterans Affairs. Restrictions, however, on access to government-held information on these programs prevented access to all relevant information and consequently this report cannot be considered complete. According to the report, "...an

1/22/93


atmosphere of secrecy still exists to some extent regarding the WW II testing programs". As a result of this secrecy, "...the committee often had great difficulty obtaining information" and "The committee is certain that other relevant information exists that was never obtained." The unnecessary secrecy which still surrounds U.S. chemical weapons programs conducted during World War II must be removed if veterans who participated in these secret programs are to receive all benefits for which they are eligible. I strongly recommend the Department immediately take all necessary steps to remove the unnecessary restrictions on access to information regarding these programs and the servicemembers who participated in them.

In this regard, you may recall in early September, 1991, you and I, joined by Congressmen Stump and Dickinson, sent a letter to Secretary Cheney concerning "Department of Defense experimentation on military members with LSD, mustard gas, and other dangerous chemicals during the 1940s and 1950s" and requested a "report on the facts and circumstances surrounding these experiments...". The response we received from DOD did not disclose any of the information which has now been reported by the Institute of Medicine report. In addition to the circumstances associated with the Department's inadequate response to our earlier request being thoroughly examined, I am requesting the Department of Defense provide the Committee a report identifying all U.S. chemical weapons programs in which military personnel have participated as human experimental subjects in tests of exposure and all programs in which military personnel have participated in the production, transportation and/or storage of these chemical agents.

Finally, enclosed for your information is a copy of a letter dated January 5, 1993, from Acting Secretary Principi to Secretary Cheney regarding these issues. In his letter, Acting Secretary Principi has requested that the Department of Defense assist the Department of Veterans Affairs by identifying the servicemembers who participated in these exposure tests and other servicemembers who were otherwise exposed to these chemical agents and by providing relief from prior oaths of secrecy regarding these tests made by these veterans.

I look forward to receiving your reply and to being advised of the Department's plans to respond positively to my requests and the requests made by Acting Secretary Principi.

Sincerely,


G.V. (SONNY) MONTGOMERY
Chairman

committee regarding the association of exposure to mustard agents or Lewisite and the development of specific diseases in different organ systems. Much more is known about mustard agents than is known about Lewisite. Thus, the following summary pertains to mustard agents, except when Lewisite is indicated.

The findings generally fall into one of three categories. In some cases, the data examined were found to indicate a causal relationship between exposure and a particular disease. For a few diseases, the data were suggestive but not completely clear. Finally, there were many diseases for which very little or no data existed regarding the possible contributions of exposure to mustard agents or Lewisite. This means that many diseases in this category may (or may not) be caused by mustard agents or Lewisite, but no study has been done. It is important to emphasize that no condition evaluated could be removed from consideration as a health consequence of exposure to these agents. Thus, for many diseases there remains significant doubt.

The evidence found indicated a causal relationship between exposure and the following health conditions:

- Respiratory cancers
 - Nasopharyngeal
 - Laryngeal
 - Lung
- Skin cancer
- Pigmentation abnormalities of the skin
- Chronic skin ulceration and scar formation
- Leukemia (typically acute nonlymphocytic type, nitrogen mustard)
- Chronic respiratory diseases (also Lewisite)
 - Asthma
 - Chronic bronchitis
 - Emphysema
 - Chronic obstructive pulmonary disease
 - Chronic laryngitis
- Recurrent corneal ulcerative disease (Includes corneal opacities; acute severe injuries to eye from Lewisite will also persist.)
- Delayed recurrent keratitis of the eye
- Chronic conjunctivitis
- Bone marrow depression and (resulting) immunosuppression (An acute effect that may result in greater susceptibility to serious infections with secondary permanent damage to vital organ systems.)
- Psychological disorders
 - Mood disorders
 - Anxiety disorders (including post-traumatic stress disorder)
 - Other traumatic stress disorder responses (These may result from traumatic or stressful features of the exposure experience, not a toxic effect of the agents themselves.)
- Sexual dysfunction (Scrotal and penile scarring may prevent or inhibit normal sexual performance or activity.)

The evidence found suggested a causal relationship between exposure and the following health conditions:

- Leukemia (acute nonlymphocytic type, sulfur mustard)
- Reproductive dysfunction (genotoxicity, mutagenicity, etc.; mustard agents)

There was insufficient evidence found to demonstrate a causal relationship between exposure and the following health conditions:

- Gastrointestinal diseases
- Hematologic diseases
- Neurological diseases
- Reproductive dysfunction (Lewisite)
- Cardiovascular diseases (Except for those that may result from serious infections shortly following exposure—heart disease resulting from rheumatic fever, for example.)

MAJOR SYMPTOMS CITED
IN EXECUTIVE SUMMARY
"VETERANS AT RISK"
PAGES 4 and 5

Publication *Journal of the American Medical Association* 269:1000-1001

ADVANCE COPY

Not For Public Release Before:

*Wednesday, January 6, 1993
11 a.m. EST*

V
Veterans
at **R**isk

The
Health
Effects of
Mustard
Gas and
Lewisite

Executive Summary

BACKGROUND

World War II (WWII) has been called "the unfought chemical war." Both sides had produced millions of tons of chemical weapons and had made massive preparations for their use, yet the weapons were never used. These preparations included the establishment of secret research programs to develop better weapons and better methods of protecting against these weapons. In the United States, some of this research was focused on the development of protective clothing and skin ointments, which could prevent or lessen the severe blistering effects of mustard agents (sulfur and nitrogen mustard) and Lewisite (an arsenic-containing agent).

By the time the war ended, over 60,000 U.S. servicemen had been used as human subjects in this chemical defense research program. At least 4,000 of these subjects had participated in tests conducted with high concentrations of mustard agents or Lewisite in gas chambers or in field exercises over contaminated ground areas. The human subjects had experienced a wide range of exposures to mustard agents or Lewisite, from mild (a drop of agent on the arm in "patch" tests) to quite severe (repeated gas chamber trials, sometimes without protective clothing). All of the men in the chamber and field tests, and some of the men in the patch tests, were told at the time that they should never reveal the nature of the experiments. Almost to a man, they kept this secret for the next 40 or more years.

Public attention was drawn to these experiments when some of the WWII human subjects began to seek compensation from the Depart-

ment of Veterans Affairs (VA) for health problems that they believed were caused by their exposures to mustard agents or Lewisite. Two factors complicated resolution of these cases. First, there were often no records or documentation available of an individual's participation in the testing programs. Second, there was a great deal of uncertainty about which health problems were in fact the result of mustard agent or Lewisite exposure.

In June 1991 the VA announced guidelines for the handling of these cases. These guidelines included the loosening of normal requirements for documenting the individual's participation in the experiments and the identification of seven diseases that the VA would consider to be caused by mustard agents or Lewisite. These seven are asthma, chronic bronchitis, emphysema, chronic laryngitis, corneal opacities, chronic conjunctivitis, and keratitis (of the eye). In addition, the VA requested that the Institute of Medicine convene a committee to survey the scientific and medical literature in order to assess the strength of association between exposure to these agents and the development of specific diseases. The committee was also charged with identifying the gaps in the literature and making recommendations relevant to closing those gaps. This report details the committee's findings and recommendations.

Between October 1991 and August 1992, almost 2,000 scientific papers, technical reports, and other documents were reviewed by the committee. The experimental protocols used in the WWII testing programs were examined to assess the potential dose levels experienced by the experimental subjects. In addition, the committee consulted with a variety of outside experts and sought information from the affected veterans themselves, through a public hearing process that resulted in written or oral statements from over 260 veterans regarding their exposures to these agents and subsequent health problems.

The committee found large gaps in the literature pertaining to the long-term health effects of exposure to mustard agents and Lewisite. For many diseases, very little or no work had been done in the eight decades following the first use of sulfur mustard in World War I. Almost all of the work in the United States had been conducted or funded by chemical defense sections of the military and was concerned only with the acute effects of these agents and not with their long-term effects. As a result, the committee depended heavily on occupational studies of chemical weapons production workers in other countries, on what could be found on battlefield casualties, and on what was known about the effects of nitrogen mustard derivatives that have been used since WWII as cancer chemotherapy agents. In addition, the committee carefully considered the basic scientific data available regarding the biological mechanisms of tissue damage from mustard agents and Lewisite.

EXECUTIVE SUMMARY

3

Special attention was directed at estimating the dose levels to which the experimental human subjects had been exposed in gas chambers or field exercises. In these experiments, subjects wore varying amounts of the protective clothing being tested, as well as gas masks. In the chamber tests, human subjects were required to enter gas chambers repeatedly for an hour or more per trial, until, after a number of trials, their skin showed evidence of chemical burns (erythema)—an indication that the agents were penetrating the protective clothing. In the field tests, the agents were dropped over large tracts of land, and human subjects, wearing clothing being tested, were sent into those areas for varying amounts of time. Penetration of the agents through the clothing was assessed in these tests in the same manner as in the chamber tests.

GENERAL CONCLUSIONS

The committee reached the following conclusions on the basis of its analysis of the experimental protocols:

- The lack of follow-up health assessments of the human subjects in the WWII gas chamber and field tests severely diminished the amount and quality of information that could be applied in the assessment of long-term health consequences of exposure to mustard agents and Lewisite.

- The levels of exposure to mustard agents or Lewisite experienced by the human subjects may have been much higher than inferred in the summaries of the gas chamber and field tests.

The lack of follow-up of these subjects particularly dismayed the committee for a number of reasons. For example, the end point of the chamber and field tests was tissue injury, but it was already known by 1933 that certain long-term health problems resulted from sulfur mustard exposure. Further, it was documented that numerous subjects suffered severe injuries that required up to a month of treatment. Finally, the exposure levels were sufficiently high that even the most efficient gas mask would have leaked enough mustard agent or Lewisite to cause inhalation and eye injuries.

- The committee was additionally dismayed that there were no epidemiological studies done of mustard agent-exposed, U.S. chemical weapons production workers, war gas handlers and trainers, or combat casualties from WWII.

Tens of thousands of people (military and civilian) worked in U.S. arsenals that produced mustard agents, Lewisite, and other chemicals. Exposure levels in these facilities were often quite high, as evidenced by the number of injuries reported and by the poor safety record of the

Chemical Warfare Service during the peak years of production. Many other servicemen were trained to handle the gases or were assigned to jobs that put them in contact with mustard agents or Lewisite. A German bombing attack on the harbor of Bari, Italy, released sulfur mustard from a damaged American ship into the water and atmosphere, resulting in thousands of injuries and hundreds of deaths. Yet no follow-up studies were done with any of these groups; the committee had to rely instead on occupational studies from Japan and Great Britain for data on World War II production workers and their long-term health problems.

SPECIFIC FINDINGS

The following is a summary of the major conclusions reached by the committee regarding the association of exposure to mustard agents or Lewisite and the development of specific diseases in different organ systems. Much more is known about mustard agents than is known about Lewisite. Thus, the following summary pertains to mustard agents, except when Lewisite is indicated.

The findings generally fall into one of three categories. In some cases, the data examined were found to indicate a causal relationship between exposure and a particular disease. For a few diseases, the data were suggestive but not completely clear. Finally, there were many diseases for which very little or no data existed regarding the possible contributions of exposure to mustard agents or Lewisite. This means that many diseases in this category may (or may not) be caused by mustard agents or Lewisite, but no study has been done. It is important to emphasize that no condition evaluated could be removed from consideration as a health consequence of exposure to these agents. Thus, for many diseases there remains significant doubt.

The evidence found indicated a causal relationship between exposure and the following health conditions:

- Respiratory cancers
 - Nasopharyngeal
 - Laryngeal
 - Lung
- Skin cancer
- Pigmentation abnormalities of the skin
- Chronic skin ulceration and scar formation
- Leukemia (typically acute nonlymphocytic type, nitrogen mustard)
- Chronic respiratory diseases (also Lewisite)
 - Asthma

EXECUTIVE SUMMARY

5

- Chronic bronchitis
- Emphysema
- Chronic obstructive pulmonary disease
- Chronic laryngitis
- Recurrent corneal ulcerative disease (Includes corneal opacities; acute severe injuries to eye from Lewisite will also persist.)
 - Delayed recurrent keratitis of the eye
 - Chronic conjunctivitis
 - Bone marrow depression and (resulting) immunosuppression (An acute effect that may result in greater susceptibility to serious infections with secondary permanent damage to vital organ systems.)
 - Psychological disorders
 - Mood disorders
 - Anxiety disorders (including post-traumatic stress disorder)
 - Other traumatic stress disorder responses (These may result from traumatic or stressful features of the exposure experience, not a toxic effect of the agents themselves.)
 - Sexual dysfunction (Scrotal and penile scarring may prevent or inhibit normal sexual performance or activity.)

The evidence found suggested a causal relationship between exposure and the following health conditions:

- Leukemia (acute nonlymphocytic type, sulfur mustard)
- Reproductive dysfunction (genotoxicity, mutagenicity, etc.; mustard agents)

There was insufficient evidence found to demonstrate a causal relationship between exposure and the following health conditions:

- Gastrointestinal diseases
- Hematologic diseases
- Neurological diseases
- Reproductive dysfunction (Lewisite)
- Cardiovascular diseases (Except for those that may result from serious infections shortly following exposure—heart disease resulting from rheumatic fever, for example.)

RECOMMENDATIONS

There are large gaps in all areas of the knowledge base about the long-term health risks associated with exposure to mustard agents and Lewisite. For example, very little is known about the long-term effects on specific organ systems from studies in animals. The data from human studies lack precise information about the exposure levels in occupational settings. After consideration of these gaps in light of the commu-

tee's findings regarding the probable long-term health effects of exposure to these agents, as well as the likely exposure levels to the human subjects involved, the committee formulated the following recommendations.

The committee recommends that the Department of Veterans Affairs (VA) institute a program to identify each human subject in the WWII testing programs (chamber and field tests, and to the degree possible, patch tests), so that these individuals can be notified of their exposures and the likely health risks associated with those exposures. Further, all subjects so identified, if still living, should be medically evaluated and followed by the VA as to their health status in the future. These individuals should also, if they request it, be treated by the VA for any exposure-related health problems discovered. Morbidity and mortality studies should be performed by the VA, comparing chamber, field, and patch test cohorts to appropriate control groups, in order to resolve some of the remaining questions about the health risks associated with exposure to these agents.

The only way to answer some of the key remaining questions is to establish a base of knowledge based on human exposures. There is precedent in the later identification and follow-up of veterans exposed to chemicals, including hallucinogenic drugs, in other military testing programs.

The committee is well aware that a half century has now passed and that many of those who might have benefited from a broader understanding of the toxicity and carcinogenicity of mustard agents and Lewisite are already dead. Nevertheless, their surviving family members deserve to know about the testing programs, the exposures, and the potential results of those exposures. For those veterans still living, diseases such as skin and lung cancer may still appear, and full knowledge of their likely cause might well save their lives.

In the case of the human subjects of the WWII testing programs, it is reasonable to assume that secrecy, uncertainty, and fear may have resulted in adverse psychological effects for the veterans and their families.

The committee recommends that careful attention be paid by health care providers to the special problems and concerns of the affected veterans and their families. This attention may include the convening of a special task force of experts in stress disorders and risk perception to aid the VA, further than this

EXECUTIVE SUMMARY

7

committee is able, in the establishment of comprehensive guidelines for handling of these cases.

These recommendations are not meant to ignore the fact that thousands, probably tens of thousands, of other military and civilian personnel were exposed to mustard agents and Lewisite in occupational and training settings, and in combat in the Bari harbor disaster. Some of these exposures will have resulted in one or more of the exposure-related health problems identified in this report; and, in fact, some military personnel who served in the Chemical Warfare Service have qualified for service-connected disability as a result of such exposures. However, many more military personnel were exposed to significant levels of mustard agents or Lewisite than is obvious from service records.

The committee additionally recommends that the Department of Defense (DoD) should use all means at its disposal, including public channels, to identify former chemical warfare production workers (military or civilian) and individuals exposed to mustard agents or Lewisite from gas handling, training, the Bari harbor disaster, or other circumstances. Records of former military personnel could be turned over to the VA for notification, inclusion in morbidity and mortality studies, and health status evaluation. Records of the civilian personnel should be used by the DoD to advise former workers as to their health risks and options for seeking appropriate compensation for any illnesses that resulted from their exposures.

This committee discovered that an atmosphere of secrecy still exists to some extent regarding the WWII testing programs. Although many documents pertaining to the WWII testing programs were declassified shortly after the war ended, others were not. Of those declassified, many remained "restricted" to the present day and, therefore, not released to the public. As a result, the committee often had great difficulty obtaining information. For example, only one of the three major chamber test locations, the Naval Research Laboratory, freely shared technical reports and detailed summaries with the committee from the beginning of the study. For other locations, such information arrived only as the study was in its final stages, despite months of requests and inquiries to a variety of offices. The committee is certain that other relevant information exists that was never obtained. It is also clear that there may be many exposed veterans and workers who took an oath of secrecy during WWII and remain true to that oath even today. Even as this report was going to press, veterans were still contacting the committee for information, having just heard about the study and

thinking it might now be permissible to reveal their experiences. This continuing secrecy, in the committee's view, has impeded well-informed health care for thousands of people.

The committee recommends that the VA and DoD publicly announce and widely advertise that personnel exposed to mustard agents or Lewisite during their service are released from any oath of secrecy taken at the time. In addition, professional educational materials should be prepared by the VA or DoD, or both, and made available for physicians who may be treating affected individuals. These materials should incorporate the latest information regarding the long-term health effects of exposure to mustard agents and Lewisite.

There is no doubt that the long-term health consequences of exposure to mustard agents or Lewisite can be serious and, in some cases, devastating. This report has demonstrated that complete knowledge of these long-term consequences has been and still is sorely lacking, resulting in great costs to some of those exposed in WWII. The lack of knowledge, however, has ongoing ramifications as nations will probably continue to use these chemical weapons in battle or begin to grapple with their disposal. Thus, accidental and deliberate human exposures to mustard agents and Lewisite can only be expected to continue in the foreseeable future.

FEB 01 1994 05:47PM DASD R&R

Fact Sheet

dna

P.12

Defense Nuclear Agency
Public Affairs Office
6801 Telegraph Road
Alexandria, Va. 22310-3398
(703) 325-7095
Facsimile Number (703) 325-2962

Jan. 14, 1994

Nuclear Test Personnel Review (NTPR)

The Defense Nuclear Agency (DNA) has been conducting a major program since 1978 to identify the approximately 200,000 Department of Defense (DoD) military, civilian and contract personnel who participated in U.S. nuclear tests that were conducted during the atmospheric test series, primarily in Nevada and the Pacific Ocean. Since 1988, the program has also included an additional approximately 200,000 DoD personnel who participated in the post-war occupation of Hiroshima and Nagasaki, Japan. The NTPR program has involved intensive, high priority research of the broadest scope. Managed by a special office at DNA that is dedicated to identifying all such veterans, program personnel have compiled a register of DoD participants and the best available estimates of radiation exposure. In addition, program personnel have developed a history of each U.S. atmospheric nuclear event that involved DoD participants, collected and analyzed all known sources of recorded dosimetry and radiation data, and provided calculated doses in cases where recorded doses are unavailable or are incomplete. The program also supports studies to ascertain whether adverse health effects are being experienced by veterans that could be attributed to their participation.

An extensive public outreach program has been conducted to ensure maximum interface with the thousands of test participants, to share with them the vast amount of data that has been collected on their behalf, and to advise them of the specifics of their individual involvement and their radiation exposure, estimated from available records. Over 100 archives nationwide have been researched for relevant information. Over 40 historical volumes and more than 25 analytical reports have been developed to provide details of each test and operation, and a reading room has been established at DNA Headquarters to assist in making these data available to the public. The Coordination and Information Center, a repository for over 300,000 documents for the U.S. nuclear test era, has been established in Las Vegas, NV, for public use. All NTPR reports also have been placed in libraries throughout the country as well as at Veterans Administration (VA) regional offices. To date, over 70,000 participants or their representatives have contacted the program and have received a letter containing information that the NTPR has located on their participation. These contacts also have been followed up with mass mailings, whenever significant events involve the overall NTPR program.

FEB 01 '84 05:47PM DMSD RGR

P.13

This program has many elements which are designed to assist the veterans who participated, to help the Department of Veterans Affairs (VA) in responding to claims, and to provide information to those concerned with the possible health effects of low-level ionizing radiation. DNA has supported and continues to sponsor studies conducted by the National Academy of Sciences (NAS) to determine whether there is an increased disease specific mortality among nuclear test participants.

Under the mandates of Public Laws 98-542, 100-321, 101-426, 101-510, 102-86 and 102-578, DNA continues to identify individuals who participated in U.S. atmospheric nuclear tests and the occupation of Hiroshima and Nagasaki, their radiation risk activities, and the resultant radiation doses, thereby facilitating VA health care and/or compensation of veterans as authorized by these laws. The VA advises that free medical examinations are available at VA facilities to any former military participant, as well as medical care for conditions that the VA considers to be related to exposure to ionizing radiation. Relatively few individuals (less than one percent of all participants) received doses in excess of today's federal guidance for occupational exposure, which is 5 rem per year. DNA has contacted each for whom an address could be found and encouraged them to undergo an examination. No adverse health effects attributable to radiation exposure have been detected among this unique higher dose group of veterans.

Specific Accomplishments/Findings

DNA continues to research the many issues surrounding the nation's atmospheric nuclear test program and the occupation of Hiroshima and Nagasaki. To date:

- o Over 400,000 participants have been identified and researched as to their specific involvement and their recorded radiation exposure.
- o Extensive dose reconstruction methodologies, developed to provide a comprehensive analysis of both external dose and internal dose commitment, have been published in the *Federal Register* and reviewed by many of the country's leading experts. These methodologies have been applied to most participating units as well as to individual circumstances of exposure to determine total doses to participating veterans.
- o Research indicates that doses to most DoD personnel were quite low, averaging about 0.624 rem. This is one-eighth the current federal guidance for allowable dose to radiation workers, which permits up to 5 rem per year. Scientists generally agree that even the current allowable dose carries a very low risk of causing

FEB 01 '94 05:48PM DRED RLR

P.14

additional radiogenic disease above that normally observed in the general population.

- o Hundreds of thousands of pages of data have been re-covered and researched, including over 1,000 basic test reports, many of which were declassified, re-printed, and indexed for public use. These documents are available at the Coordination and Information Center.
- o Original dosimetry source documents have been and are still being re-examined for accuracy and completeness. Individual involvement is continually researched to ensure that all dose potential has been documented and included.
- o At DNA's request, the National Academy of Sciences (NAS) conducted an extensive study of the mortality of more than 46,000 nuclear test participants. The study, "Mortality of Nuclear Weapons Test Participants," published in 1985, found "The total body of evidence we have reviewed cannot convincingly either affirm or deny that the higher than statistically expected incidence of leukemia among SMOKY participants (or of prostate cancer among REDWING participants) is the result of radiation exposure incident to the tests. However, when the data from all the tests are considered, there is no consistent or statistically significant evidence for an increase in leukemia or other malignant disease in nuclear test participants." One of the co-authors of that study stressed that there were limitations in the study design that might affect the scope of the conclusions. Also, the cutoff year for collecting data for the first study was 1981. Since that time the data base has been refined, additional participants have been identified, and several more years of mortality data have become available. Accordingly, DNA is sponsoring a follow-on study by NAS. The follow-on is expected to be completed in late 1997. An additional NAS study, co-sponsored by the VA and DNA, on the mortality of the 42,000 participants at the 1946 Operation CROSSROADS is being conducted and will provide, in about two years, scientific information on deaths due to radiogenic disease in this large population.

DNA is dedicated to providing all participants with a responsive, helpful program of historical research, dose determination, and individual support to ensure that veterans fully understand their involvement in U.S. atmospheric nuclear tests and in the occupation of Hiroshima/Nagasaki. Individual dose reconstructions, as noted above, are based on evaluations of records available from all sources. Participants who can provide

copies of personal records are invited to send them to DNA if it appears that their dose reconstruction is based on incomplete records. Further inquiries can be addressed to Defense Nuclear Agency (ATTN: RAEM/NTPR), 6801 Telegraph Road, Alexandria, Virginia 22310-3398, or one may call 1-800-462-3683. In Virginia call (collect) 703-285-3610.

Fact Sheet

dna

Defense Nuclear Agency
Public Affairs Office
Washington, D.C. 20305

January 1989

Subject: Veterans' Services and the Nuclear Test Personnel Review Program

The Nuclear Test Personnel Review (NTPR) Program, established by the Department of Defense in 1978, has developed an extensive support system to assist the veterans of atmospheric nuclear tests in assessing the significance of their participation and radiation exposure. Through the NTPR Program, veterans may learn the details of their individual participation and their radiation doses, obtain documentation about the tests and their unit's role, and be informed of the availability of health care and other assistance by the Veterans Administration (VA).

The NTPR Program is conducted on a high-priority basis, with the Defense Nuclear Agency (DNA) directing its progress and effectiveness. Dedicated and knowledgeable uniformed and civilian personnel from the Army, Navy, Marine Corps, and Air Force initially researched the extensive archival records to provide the data about the thousands of units that participated in nuclear tests conducted from 1945 until the treaty banning atmospheric nuclear testing took effect in 1962. More recently, the resources committed to assist in this important effort have been consolidated at DNA to facilitate greater efficiency. To make all these items of information personally available to the veterans and other interested persons, DNA has established a reading room at 6919 Telegraph Road, Alexandria, Virginia, which is open to the public. Participants or their representatives are encouraged to visit this facility. If a visit is not possible, one may contact the Defense Nuclear Agency, ATTN: RARP-NTPR, 6801 Telegraph Road, Alexandria, Virginia 22310-3398, or call 1-800-462-3683. In Virginia, one may call (collect) 703-285-5610. Information is provided verbally or by mail, as requested.

These services will be much more effective if more veterans are aware of them and utilize them. Through extensive public outreach programs in the press and on television and radio, as well as with the many veterans groups, DNA has encouraged "atomic veterans" to come forth and examine the available information about their participation. Such contact enables each veteran to draw on DNA's wealth of information to apply to his individual case; it also allows the veteran to contribute any information about his participation that may be of help to others in his unit by augmenting the records that DNA has.

Public Law 97-72, the "Veterans' Health Care and Small Business Loan Act of 1981," authorized the VA to provide "hospital and nursing home care and limited outpatient services to veterans who were exposed while serving on active duty to ionizing radiation from the detonation of a nuclear device in connection with such veteran's participation in the test of such a device, or with the American occupation of Hiroshima and Nagasaki during the period beginning September 11,

1945 and ending July 1, 1946." This law provides for medical care related to radiogenic diseases, but does not authorize care for conditions that are found by the VA to have resulted from other than exposure to ionizing radiation. DNA assists the VA by verifying individual participation.

Public Laws 98-542 and 100-321 provide for VA determination of service connection and benefits for specified cancers. More specifically, PL 98-542, "Veteran's Dioxin and Radiation Exposure Compensation Standards Act," enacted October 24, 1984, defines rules for adjudicating VA claims and establishes a panel of experts for addressing scientific issues. PL 100-321, "Radiation Exposed Veterans Compensation Act of 1988," enacted May 20, 1988, provides a presumption of service connection for veterans (and survivors of such veterans) who participated in atmospheric or underwater nuclear tests as part of the United States nuclear weapons testing program or in the American occupation of Hiroshima and Nagasaki, Japan, and who suffer from certain diseases (i.e., thirteen types of cancer) that may be attributable to exposure to ionizing radiation. DNA assists the VA by providing participation and any associated radiation exposure information. Additional information about these benefits is available at local VA facilities. Veterans can receive free assistance in submitting claims by contacting one of the veterans' service organizations.

A history of atmospheric nuclear testing operations has been developed by DNA in an easily understandable series of more than 40 volumes containing over 9000 pages of detailed aspects of every test in each nuclear test operation. These historical reports are available at more than 700 libraries and facilities nationwide. In addition, over 25 volumes of radiation exposure assessments for major participant groups in the various test operations also have been widely disseminated. All reports are available in the NTPR reading room at DNA and may be purchased from the National Technical Information Service (NTIS), an agency of the Department of Commerce that provides unclassified DoD reports and other documents. The NTIS may be contacted at 5285 Port Royal Road, Springfield, Virginia 22161 (phone 703-487-4650). Any person who is interested in learning more about the histories, the radiation exposure assessments, or the thousands of now-declassified source documents that were used in the preparation of the historical and analytical reports is encouraged to visit the NTPR Reading Room or contact the NTPR Program.

A repository of over 125,000 documents related to nuclear weapons testing also has been established for public use at the Coordination and Information Center (CIC) in Nevada. The center, partially funded by DNA, is administered by the Department of Energy and operated by the Reynolds Electrical & Engineering Company at 3084 South Highland Avenue in Las Vegas, Nevada. The purpose of the CIC is to make available, at a facility accessible to the general public, unclassified and declassified historical documents that have been collected, consolidated, indexed, and stored for long term preservation and rapid retrieval. The facility also provides a staff to assist in the identification and retrieval of specific documents that relate to participation in atmospheric nuclear tests. Correspondence regarding the CIC should be directed to the U. S. Department of Energy, P. O. Box 14100, Las Vegas, Nevada 89114, or one may call the facility at 702-295-0731. Nominal charges to cover costs are made for duplicating documents and for information searches through the extensive data base. A fee schedule is available on request. The reading room at DNA has a computer terminal through which the index of this repository is accessible to interested veterans or their representatives.

Fact Sheet

dna

Defense Nuclear Agency
Public Affairs Office
Washington, D.C. 20305

January 1989

Subject: Radiation Exposure and the Nuclear Test Personnel Review Program

During the atmospheric test series from 1945 to 1962, the Atomic Energy Commission (AEC) conducted some 235 nuclear tests, principally in Nevada and the Pacific Ocean. Approximately 200,000 Department of Defense (DoD) personnel, military and civilian, were involved in this testing. Many were exposed to low levels of ionizing radiation in the performance of various activities. The doses generally were within established limits and averaged about 0.6 rem. Approximately 1700 personnel exceeded the current Federal occupational radiation exposure guideline of 5.0 rem per year.

The Nuclear Test Personnel Review (NTPR) Program, established by DoD and administered by the Defense Nuclear Agency (DNA), is committed to provide each test participant the recorded radiation exposure or to assess the most probable exposure. This fact sheet describes the methods used to assess radiation exposure for individual test participants as well as the major findings of the Program to date.

The basic means to measure dose from ionizing radiation is the film badge. Of the some 200,000 DoD participants in atmospheric nuclear tests, about 95,000 have film badge data available. The official repository for these records is maintained by the Reynolds Electrical & Engineering Company (REECO), a contractor of the Department of Energy, formerly the Atomic Energy Commission. Individual dose information is available from DNA. Requests for such information may be from the individual, an authorized representative, the Veterans Administration (VA), or others as authorized by the Privacy Act.

Until 1955, DoD and AEC policy resulted in the issue of film badges to only a portion of the personnel in a homogeneous unit, such as a platoon, ship, or aircraft. If everyone in the unit was expected to receive similar exposures, only a few representatives of the unit might be badged. If some personnel would be performing functions not typical of the unit as a whole, then those personnel would be individually badged. After 1955, the policy was to badge all participants. However, some badges were unreadable and some records were lost or destroyed, as in the fire at the Federal Records Center in St. Louis. Thus, a significant portion of the NTPR effort has focused on assessing the exposure of those personnel who were not issued film badges and those whose records are missing or are incomplete.

In performing exposure assessments, DNA considers all of the relevant circumstances leading to potential radiation dose. All assessments begin with the determination of individual or unit activities and the relationship of such

activities to the radiological environment. If it is obvious from records of where people were that they were not exposed to a radiological environment, their dose is judged to be zero. If some members of a unit had film badges with valid readings while others did not, and if all members had a common relationship to the radiological environment, the doses for unbadged personnel can be inferred from the doses of badged personnel. Where there are insufficient badges, or where a common relationship to the radiological environment does not exist, dose calculations are performed.

Determination of No Dose Potential. DNA researches activities of an individual or his unit for the period of participation in an atmospheric nuclear test. Unit locations and movements are related to areas of radioactivity. If personnel were beyond the range of initial radiation (several miles) from nuclear detonations, did not experience fallout or enter a contaminated area, and did not come in contact with radioactive materials, they are judged to have received no radiation dose.

Dose Based on Film Badges of Others. DNA uses film badge data from badged personnel to derive individual doses for unbadged personnel. A group of participants is identified who had a common activity and thus a similar potential for exposure to radiation. Identification of these homogeneous groups is based upon research of historical records, technical reports, or correspondence. Using standard statistical methods, the film badge data are examined to determine proper representation of the entire group and thus their validity for use in statistical calculations. Often, the dose or time distribution of badge readings indicates that the group should be subdivided into more similar groups before proceeding further with the analysis. For each homogeneous group, the mean dose, variance, and confidence limits are determined, and the 95th percentile dose is then assigned to unbadged personnel. This ensures that personnel are assigned doses that are much higher than the average for the group. If individuals cannot be associated with a specific homogeneous group, statistical derivation of dose is not used.

Dose Calculation. DNA performs rigorous dose calculations when film badge data are unavailable for any part (or all) of the exposure period. DNA also performs calculations if film badge data are available but cannot be used statistically, if unique activities are ascribed to specific individuals, or if neutron or internal radiation exposures are indicated. These calculations involve correlating the activities of an individual or unit with a fully characterized radiological environment.

The calculation of dose is a standard scientific practice used by health physicists when the entire circumstances of radiation exposure require assessment. First, the conditions of exposure are reconstructed to include all known activities based on input from the individual as well as information from official reports and historical documents. The radiation environment is then characterized in time and space, and collated with the activities and locations of the unit or the individual. In addition to the gamma radiation that would have been measured by a film badge, the radiation environment includes neutron radiation for close-in personnel and beta and alpha radiation for personnel whose activities indicate the possibility of inhalation or ingestion of radioactive materials. Finally, the intensity of the radiation is determined for the entire period of exposure, from which the total integrated dose is calculated. An uncertainty analysis, which considers the values of all

parameters used, provides a measure of the confidence of the calculations. Existing dosimetry is then analyzed and compared with the calculated dose to further enhance the confidence of the calculations. Where the potential existed for inhalation or ingestion of radionuclides, internal dose commitments are derived and provided to the VA and/or to the individual. These are doses accrued over a 50-year period after exposure which, when added to the film badge or calculated whole body dose, represent the total dose to the organ specified.

The above dose determination procedures have been reviewed by some of the country's leading scientists and were initially described in the Federal Register on May 20, 1982, and later amplified in the Federal Register on October 21, 1985. Subsequently, the National Academy of Sciences (NAS) completed a "Review of the Methods Used to Assign Radiation Doses to Service Personnel at Nuclear Weapons Tests." The NAS Committee on Dose Assignment and Reconstruction for Service Personnel at Nuclear Weapons Tests found that:

"...the procedures used to estimate external radiation doses were reasonably sound. The NTPR has developed procedures that permit satisfactory estimates to be made of the external doses received by these participants. There are uncertainties in the dose estimates, but it appears that 99 percent of the personnel received doses of less than 5 rem, which is approximately the average dose received by the general population during the last 30 years from exposure to natural radiation and the use of ionizing radiation during medical procedures. (The committee) found no evidence that the NTPR teams had been remiss in carrying out their mandate. If any bias exists in the estimates, it is probably a tendency to overestimate the most likely dose, especially for internal emitters or when the statistical procedure for assigning dose is used."

DNA has developed the NTPR Program to provide every interested veteran with the available information relevant to his or her radiation exposure. Dose reconstruction, as noted above, is based on evaluation of available records. Any test participant who can provide copies of personal records is invited to send them to DNA if it appears that his or her dose reconstruction is based on incomplete records. Further inquiries can be addressed to Defense Nuclear Agency (ATTN: RARP/NTPR), 6801 Telegraph Road, Alexandria, Virginia 22310-3398, or one may call 1-800-462-3683. In Virginia, call (collect) 703-285-5610.



THE DEPUTY SECRETARY OF DEFENSE

WASHINGTON, D.C. 20301

9 MAR 1993

Honorable G. V. (Sonny) Montgomery
Chairman, Committee on Veterans' Affairs
House of Representatives
Washington, D. C. 20515

Dear Mr. Chairman:

Thank you for your letter regarding the report "Veterans at Risk: The Health Effects of Mustard Gas and Lewisite," issued by the National Academy of Sciences Institute of Medicine. I read your letter, and Mr. Principi's, with great concern. As a result, I have taken action to respond to these critical issues affecting the health and entitlements of past service members, and to initiate full cooperation with the Department of Veterans' Affairs.

I have enclosed a copy of a memorandum to the Secretaries of the Military Departments, my staff, and other Department of Defense agencies, addressing the issues outlined in your letter and directing them to cooperate to the fullest in making this information accessible to the Department of Veterans' Affairs. I have also directed the Assistant Secretary of Defense (Force Management & Personnel) (ASD(FM&P)) to head a task force to monitor the performance and completion of these actions. I have directed that information be provided to the ASD(FM&P) by July 31, 1993. We plan to forward information to the Department of Veterans' Affairs as soon as possible. In addition, I am taking action to have this information made public so that past service members that have been hesitant to seek assistance will no longer be constrained by non-disclosure restrictions, such as written or verbal oaths of secrecy, concerning their exposure to chemical weapons substances.

As you know, I take these issues very seriously. The Department of Defense is committed to honoring the service and sacrifice made by the men and women who are serving, and have served, in the nation's military. We will continue to make every effort to cooperate with the Department of Veterans' Affairs in responding to the needs and providing entitlements to those who have served. Members of my staff will continue to work with your staff to ensure that we are responsive to the concerns you have raised.

Sincerely,

A handwritten signature in cursive script, reading "William G. Perry".

Enclosure:
As Stated

DEPSECDEF MEMO OF MARCH 9, 1993

Directed declassification, disclosure, and collection of personnel health and safety information related to testing, production, storage or transportation of chemical weapons agents prior to 1968.

Released individuals from any non-disclosure restrictions, or written or oral prohibitions (such as oaths of secrecy) that may have been placed on them.

Directed Secretaries of Military Departments to initiate procedures to declassify documents with respect to personnel health and safety issues for chemical weapons research studies conducted after 1968.

Directed the ASD (P&R) to establish a task force to monitor the status of these actions.

THE DEPUTY SECRETARY OF DEFENSE

WASHINGTON, D.C. 20301

9 MAR 1993

MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS
CHAIRMAN OF THE JOINT CHIEFS OF STAFF
UNDER SECRETARIES OF DEFENSE
DIRECTOR OF DEFENSE RESEARCH AND ENGINEERING
ASSISTANT SECRETARIES OF DEFENSE
COMPTROLLER
GENERAL COUNSEL
INSPECTOR GENERAL
DIRECTOR OF OPERATIONAL TEST AND EVALUATION
ASSISTANTS TO THE SECRETARY OF DEFENSE
DIRECTOR OF ADMINISTRATION AND MANAGEMENT
DIRECTORS OF THE DEFENSE AGENCIES

SUBJECT: Chemical Weapons Research Programs Using Human
Test Subjects

On January 6, 1993, the National Academy of Sciences Institute of Medicine published a report titled "Veterans at Risk: The Health Effects of Mustard Gas and Lewisite." Based on the findings of the report, Congressional inquiries, and requests from the Department of Veterans' Affairs, I am releasing any individuals who participated in testing, production, transportation or storage associated with any chemical weapons research conducted prior to 1968 from any non-disclosure restrictions or written or oral prohibitions (e.g., oaths of secrecy) that may have been placed on them concerning their possible exposure to any chemical weapons agents. I am also declassifying documents for all chemical weapons research studies conducted prior to 1968, with respect to the issues of personnel health and safety as specified below:

a. The location of each U. S. chemical weapons research program (chamber, field and patch) which used human subjects, the type of chemical(s) tested (e.g., sulfur or nitrogen mustard), and the start and finish dates of each test including preliminary research;

b. Identification of each military unit stationed at each research site during the testing period, and the name, service or social security number, and military unit of each individual known to have participated in a chemical weapons research or testing program (chamber, field, and patch); and

78073

c. The location of all facilities at which individuals participated in the production, transportation or storage of these chemical agents to include: the dates on which storage or production was begun and terminated; identification of each military unit stationed at each storage or production site; and the name, service or social security number, and military unit of each service member known to have participated in production, transportation, or storage of these chemical agents.

Secretaries of the Military Departments are tasked with the following actions:

a. Initiate procedures to fully cooperate in locating and providing the above specified information. Please ensure that the information is provided in such a way as to maintain the integrity of our records and meet Privacy Act requirements.

b. Initiate procedures to declassify documents with respect to the issues listed above for chemical weapons research studies conducted after 1968, including studies performed in support of other Federal agencies; and, release participants from any non-disclosure restrictions (e.g. oaths of secrecy) that may have been placed on them concerning their possible exposure to any chemical weapons agents during testing, production, or transportation of such chemicals. If there are any reasons that would prevent declassification of this material, those reasons should be provided to the Assistant Secretary of Defense (Force Management and Personnel) (ASD(FM&P)), in writing.

Information on the location, chemicals tested, and dates of each chemical weapons research program should be provided immediately. Personnel information should be provided to the ASD(FM&P) by July 31, 1993. Our goal is to provide information to the Department of Veterans' Affairs as soon as possible.

I fully recognize that some of this information may not be readily available. I expect a comprehensive search, however, to ensure that our current and former members receive the assistance and support to which they are entitled. I am directing the Assistant Secretary of Defense (Force Management and Personnel) to establish a task force to monitor the status of these actions. By March 31, Secretaries of the Military Departments should -- designate points of contact to Ms. Norma St. Claire, OASD(FM&P), (703) 696-8710.

William J. Perry

RECORDS REPOSITORY CONTENTS OF SITES VISITED

Dugway Proving Ground

Technical Library holds over 60,000 documents, mostly paper.
Records Holding Area Contains Over 400 Boxes of Material Including Scientific Notebooks (Over 6,000 paper records)

Aberdeen Proving Ground/Edgewood Arsenal

8,465 linear feet (filing cabinets and boxes), paper
29 linear feet index cards
6,776 reels of microforms
288 gigabytes electronic records
Some of this documentation is located at Rocky Mountain Arsenal

U. S. Army Training Command Chemical Center, Fort McClellan, AL

735 linear feet (filing cabinets and boxes), paper
Large Library collection of books, manuals, etc.

Washington National Records Center, Suitland, MD

13 Boxes of Army Surgeon General Files
Over 100 linear feet (filing cabinets and boxes) of Army Chemical Corps Records

National Personnel Records Center, St. Louis, MO

Extensive collection of personnel and organizational files from early 1900's to present
(fire in 1970's destroyed many records in relevant time period)
Extensive collection of morning reports and unit information

University of Chicago

82 Boxes of Records from Vice President for Special Projects from WWII DoD Contract

*National Archives, Washington D. C.

Various collections of records on DoD

*U. S. Coast Guard Headquarters

Collection of records on U. S. Merchant Marine Ships
in Harbor at Bari, Italy December, 1943 (504 names extracted)

*Visited since Hearing in February, 1994

RECORDS REVIEW

Except for the National Personnel Records Center in St. Louis, the collections are not composed of personnel or medical records.

Personnel identifications have to be extracted from scientific notebooks; plans and operational orders; administrative correspondence such as interagency letters, memos, and messages; technical reports, personnel rosters, and morning reports.

Documentation is stored in historical library collections, technical libraries, and records holding warehouses.

Many records are not indexed or sorted. A large percentage (75%) of two of the collections is still classified, which makes it necessary to review each piece of paper, letter, report, and page of each notebook in the collections.

Example of size of task: one collection consists of over 400 boxes of records; one technical library has over 60,000 documents with only about 80% still in hard copy form; another installation has 8,465 linear feet of paper or over 4,000 file drawers of material.

Many records are still classified because they contain weapons schematics, technical drawings and treatises, operational plans and directives, and scientific formulas.

Some of the information still has national security implications as well as foreign diplomacy implications since some refers to or describes agreements made with and operations carried out with foreign countries.

In addition to OASD efforts the Military Departments have made internal efforts to further identify test sites and human exposure information. These efforts are closely coordinated with our OASD (P&R) and communication is daily.

A Chemical Weapons Officer will report on board next week for a one year assignment to support review of technical information in archived documents.

Example of Morning Report Data filed at
National Personnel Records Center, St. Louis, Missouri

Shows departure of contingent of "observers" from Company L, 150th Infantry Regiment and their arrival at San Jose' Island. No names of the contingent are in the Morning Reports.

Co. L, 150th Infantry Regiment

HQ & HQ Det, San Jose Project

NAME	GRADE	STATUS	REMARKS
Richard J. Blackman	Sgt		Mar 45-31 Mar 45 Ft Clayton O S OFF A & B departed for San Jose Told in connection with Army activities

DATE	PRESENT	ABSENT	REMARKS
1	1	1	
2	1	2	
3	1	3	
4	1	3	
5	1	3	
6	1	3	
7	1	3	
8	1	3	
9	1	3	
10	1	3	
11	1	3	
12	1	3	

JACK C. TAYLOR

NAME	GRADE	STATUS	REMARKS
Edward O. Albrook	Pfc		Mar 45-31 Mar 45 Ft Clayton O S OFF A & B departed for San Jose Told in connection with Army activities

DATE	PRESENT	ABSENT	REMARKS
1	1	1	
2	1	2	
3	1	3	
4	1	3	
5	1	3	
6	1	3	
7	1	3	
8	1	3	
9	1	3	
10	1	3	
11	1	3	
12	1	3	

SECURITY AND PRIVACY ACT CONSIDERATIONS

Information in Personnel & Medical Records protected by Privacy Act.

Personal information in administrative records has Privacy Act implications.

At two of the DoD installations about 75% of the documentation is still classified.

Declassification of the documents and analysis of information for national security concerns will require review of every piece of paper by authorized and knowledgeable security and records management personnel.

Review of records collections has provided references to programs conducted with the U. S. intelligence community and several foreign governments (Canada, Great Britain, and Australia)

Relocation of all records to a centralized location will require a detailed audit trail and measures to ensure continuity of the chain of custody.

[H.A.S.C. No. 103-30]

MISCELLANEOUS PERSONNEL
LEGISLATION

HEARING
BEFORE THE
MILITARY FORCES AND PERSONNEL SUBCOMMITTEE
OF THE
COMMITTEE ON ARMED SERVICES
HOUSE OF REPRESENTATIVES
ONE HUNDRED THIRD CONGRESS
SECOND SESSION.

HEARING HELD
FEBRUARY 10, 1994



U.S. GOVERNMENT PRINTING OFFICE
WASHINGTON : 1994

79-342 CC

For sale by the U.S. Government Printing Office
Superintendent of Documents, Congressional Sales Office, Washington, DC 20402
ISBN 0-16-044354-7

MILITARY FORCES AND PERSONNEL SUBCOMMITTEE

IKE SKELTON, Missouri, *Chairman*

G.V. (SONNY) MONTGOMERY, Mississippi	JON KYL, Arizona
OWEN B. PICKETT, Virginia	ARTHUR RAVENEL, JR., South Carolina
H. MARTIN LANCASTER, North Carolina	STEPHEN E. BUYER, Indiana
JAMES H. BILBRAY, Nevada	TILLIE K. FOWLER, Florida
BART STUPAK, Michigan	JAMES M. TALENT, Missouri
MARTIN T. MEEHAN, Massachusetts	ROSCOE G. BARTLETT, Maryland
ROBERT A. UNDERWOOD, Guam	
JANE HARMAN, California	
SAM FARR, California (vacancy)	

KAREN S. HEATH, *Professional Staff Member*
CAREY D. RUPPERT, *Professional Staff Member*
DIANE W. BOWMAN, *Staff Assistant*

CONTENTS

STATEMENTS PRESENTED BY MEMBERS OF CONGRESS

	Page
Coss, Hon. Porter, a Representative from Florida:	
Statement	6
Prepared statement	8
Kyl, Hon. Jon, a Representative from Arizona, Ranking Minority Member, Military Forces and Personnel Subcommittee: Prepared statement	25
Kreidler, Hon. Mike, a Representative from Washington:	
Statement	25
Prepared statement	28
Skelton, Hon. Ike, a Representative from Missouri, Chairman, Military Forces and Personnel Subcommittee:	
Statement	1
Prepared statement	25

PRINCIPAL WITNESSES WHO APPEARED IN PERSON OR SUBMITTED WRITTEN STATEMENTS

Fites, Jeanne B., Deputy Assistant Secretary for Requirements and Resources:	
Statement	11
Prepared statement	18
Lokovic, Chief Master Sgt James E., USAF (Ret.), Director, Military and Government Relations: Prepared statement	37
Rush, Frank, Principal Director, Manpower and Personnel, Office of the As- sistant Secretary of Defense for Reserve Affairs:	
Statement	31
Prepared statement	31

MISCELLANEOUS PERSONNEL LEGISLATION

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
MILITARY FORCES AND PERSONNEL SUBCOMMITTEE,
Washington, D.C., Thursday, February 10, 1994.

The subcommittee met, pursuant to call, at 2 p.m. in room 2212, Rayburn House Office Building, Hon. Ike Skelton (chairman of the subcommittee) presiding.

OPENING STATEMENT OF HON. IKE SKELTON, A REPRESENTATIVE FROM MISSOURI, CHAIRMAN, MILITARY FORCES AND PERSONNEL SUBCOMMITTEE

Mr. SKELTON. Ladies and gentlemen, the Military Forces and Personnel Subcommittee will come to order.

We have two pieces of legislation today. We will proceed as quickly as we can in light of the fact we have a vote. We will have to adjourn very briefly.

Two items on the agenda: H.R. 1055, introduced by Congressman Porter Goss, concerning individuals exposed to mustard gas during World War II; H.R. 3273, introduced by Congressman Michael Kreidler, concerning Reserve retirement. We will receive testimony from each.

[The following information was received for the record:]

103D CONGRESS
1ST SESSION

H. R. 1055

To direct the Secretary of Defense to issue a commendation to each individual exposed to mustard agents during World War II, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

FEBRUARY 23, 1993

Mr. GOSS (for himself, Mr. FRANK of Massachusetts, Mr. BROWDER, and Mr. BILIRAKIS) introduced the following bill; which was referred to the Committee on Armed Services

A BILL

To direct the Secretary of Defense to issue a commendation to each individual exposed to mustard agents during World War II, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 SECTION 1. ISSUANCE OF COMMENDATION TO INDIVID-
4 UALS EXPOSED TO MUSTARD AGENTS DUR-
5 ING WORLD WAR II

6 (a) IN GENERAL.—The Secretary of Defense shall
7 issue to each individual described in subsection (b) a com-
8 mendation in honorary recognition of the individual's spe-
9 cial service, loyalty, and contribution to the United States.

1 (b) COVERED INDIVIDUALS.—An individual referred
2 to in subsection (a) is an individual who, as a member
3 of the armed forces or an employee of the Department
4 of War, was exposed to mustard agents in connection with
5 testing performed by the Department of War during
6 World War II.

7 **SEC. 2. NOTIFICATION OF EXPOSURE.**

8 The Secretary of Defense shall notify each individual
9 described in section 1 of the exposure described in such
10 section, the possible health effects of the exposure, and
11 the likely options available to the individual for medical
12 treatment for health effects resulting from the exposure.

13 **SEC. 3. AVAILABILITY OF INFORMATION.**

14 The Secretary of Defense shall make available to the
15 Secretary of Veterans Affairs any information of the De-
16 partment of Defense regarding the exposure described in
17 section 1, including the names of the individuals subjected
18 to the exposure.

103^d CONGRESS
1ST SESSION

H. R. 3273

To amend title 10, United States Code, to revise the requirements for eligibility under chapter 67 of that title for receipt of retired pay for nonregular service in the Armed Forces

IN THE HOUSE OF REPRESENTATIVES

OCTOBER 13, 1993

Mr. KREIDLER introduced the following bill; which was referred to the
Committee on Armed Services

A BILL

To amend title 10, United States Code, to revise the requirements for eligibility under chapter 67 of that title for receipt of retired pay for nonregular service in the Armed Forces

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the "Military Reserve Re-
5 tirement Fairness Act".

1 **SEC. 2. ELIGIBILITY FOR RETIRED PAY FOR NONREGULAR**
2 **SERVICE.**

3 (a) **MINIMUM REQUIRED RESERVE SERVICE.**—Sec-
4 tion 1331(a) of title 10, United States Code, is amended—

5 (1) by inserting “and” at the end of paragraph

6 (2);

7 (2) by striking out paragraph (3); and

8 (3) by redesignating paragraph (4) as para-
9 graph (3).

10 (b) **EFFECTIVE DATE.**—The amendments made by
11 subsection (a) shall apply to a member of the Armed
12 Forces who completes 20 years of service computed under
13 section 1332 of title 10, United States Code, after the date
14 of the enactment of this Act.

Mr. SKELTON. Our first witness is Congressman Goss and Ms. Jeanne Fites, the Deputy Assistant Secretary of Defense Requirements and Resources. We will do our best to speed through and still make our vote.

Mr. KYL, do you have an opening statement?

Mr. KYL. Mr. Chairman, I appreciate the opportunity to make a statement.

In view of the time, I will just recognize our colleague, Mr. Goss, who has been a very active and effective advocate for veterans and particularly those exposed to chemical weapons as a part of our World War II exercise. I look forward to his testimony and in view of the time, I won't make any further comment. But thank you both for being here.

Mr. SKELTON. Please proceed.

STATEMENT OF HON. PORTER GOSS, A REPRESENTATIVE
FROM FLORIDA

Mr. Goss. Thank you, Mr. Chairman.

I am very grateful for the subcommittee taking this time. This may not seem like the most momentous piece of legislation that you will consider, but, believe me, there are an awful lot of Americans out there who do think it is and they are very grateful that you are taking this time today also.

This all started some years ago when a constituent came forward and said that he was a victim and told me a tale that I found, frankly, hard to believe. As we went forward with the tale, we discovered that, in fact, men and women in uniform apparently have been used as guinea pigs, unwittingly, for testing in a number of areas.

Recently, radiation poisoning and testing of drugs, including LSD, have gotten a lot of attention. This is something that had gone on a long, long time. There was indeed a program of testing. It was indeed covered up. In fact, the victims who went in unwittingly were not properly protected. Many of whom came out damaged were sworn to secrecy and were threatened with severe sanctions if they broke the secrecy.

That is an incredible story to be telling in the United States of America and I am happy to say that it is becoming clearer. The sunlight is shining on this and disinfecting what needs to be disinfected. I believe the responsible agencies indeed have grasped this now finally and are doing their best, remembering that this is many years ago that these particular tests happened.

I do not honestly know whether we are talking about under several hundred, more than several hundred or thousands of people. I know in my office that once this has become known, that we have literally had hundreds of responses and we know other colleagues that have had responses as well, and we have referred and cross-referred back and forth. That is why we are particularly happy that this legislation has gotten to this point.

I have to report that the Department of Veterans Affairs has come around and really tried to do the right thing now that they understand what the issue has been, what the victimization has been and the legitimacy of the claims. Thresholds have been

changed on the symptoms and recently published in the Federal Register. That is a marvelous step forward.

The sanctions for the confidentiality or the secrecy requirement were lifted by the Department of Defense. We have pledges of cooperation from the Department of Defense in the area of having to find files, which is critically important.

Without the records, it is virtually impossible under the rules for somebody to prove that they are a victim. The law says that they must have a medical record to show what happened. If they have no military medical records and were sworn to secrecy, and have no medical records even from their own doctors because they were prohibited from telling their doctors they had participated in these cases, they, obviously, have no proof to go forward with. So they really have thrown themselves on the mercy of the U.S. Congress and asked belatedly for justice and consideration for what has happened to them.

My bill that is before us does not ask for compensation. It asks for commendation. This is not a big-cost bill. I think many of the people I have talked to are more concerned about being recognized by their government that they put their life on the line during the Second World War, and got involved in this situation, not only unwillingly, but unwittingly, in the sense of knowing what they were really being exposed to. I think they want to be recognized as people who have not done something wrong and are not out there with false claims but people who were taken advantage of.

So my bill really does two things. It provides commendation and it very much encourages and directs that the Defense Department proceed with its difficult task of finding the best possible trail that can be found to help these people who are bona fide in their efforts to process legitimate claims. That is the main bit.

There is much more I could talk about on this. I don't particularly want to take the time because of the clock, and I will stop there and ask that you submit for the record my full written testimony. I am also available for any questions the subcommittee may have.

Mr. SKELTON. Without objection.

PREPARED STATEMENT OF HON. PORTER GOSS

PORTER GOSS
 135 (Congressional Mail Room)
 - 1100 - (Room 24, 100-11-001)
 JOHN F. BERRY
 COMMITTEE
 ON
 SELECT COMMITTEES ON
 INVESTIGATION OF
 THE
 HOUSE OF REPRESENTATIVES

DEPT. OF DEFENSE
 1100-11-001
 ROOM 24
 100-11-001
 JOHN F. BERRY
 COMMITTEE
 ON
 SELECT COMMITTEES ON
 INVESTIGATION OF
 THE
 HOUSE OF REPRESENTATIVES

Congress of the United States
 House of Representatives
 Washington, DC 20515-0011

CONGRESSMAN PORTER GOSS
 TESTIMONY BEFORE THE SUBCOMMITTEE ON
 MILITARY FORCES AND PERSONNEL
 FEBRUARY 10, 1994

MR. CHAIRMAN, MEMBERS OF THE SUBCOMMITTEE, I VERY MUCH APPRECIATE THE CHANCE TO COME BEFORE YOU TODAY.

FOR THE PAST 5 YEARS, I HAVE WORKED TO BRING ABOUT RELIEF AND OFFICIAL RECOGNITION FOR THE VICTIMS OF SECRET GOVERNMENT TESTS INVOLVING LETHAL MUSTARD AND LEWISITE GASES. THESE MEN, ALL MILITARY TRAINEES, WERE UNWITTINGLY USED AS HUMAN GUINEA PIGS AND THEN ABANDONED BY THE GOVERNMENT THEY SERVED.

AFTER NEARLY 30 YEARS OF DENIAL AND BUREAUCRATIC INACTION, THE GOVERNMENT HAS FINALLY ADMITTED ITS RESPONSIBILITY FOR CONDUCTING THESE SECRET TESTS WITHOUT THE FULL, INFORMED CONSENT OF ITS SUBJECTS AND THAT IT HAS BEGUN TO ASSIST VICTIMS SUFFERING FROM LONG-TERM HEALTH PROBLEMS.

LAST MONTH, THE DEPARTMENT OF VETERANS AFFAIRS ISSUED NEW REGULATIONS DESIGNED TO PROVIDE MEDICAL CARE AND DISABILITY COMPENSATION FOR VETERANS WHO UNDERWENT THESE TESTS.

THE FACTS ARE NO LONGER IN QUESTION: DURING WORLD WAR II, AMID FEARS OF AN ENEMY CHEMICAL ATTACK, THE UNITED STATES NAVY (AND LIKELY THE OTHER ARMED SERVICES AS WELL) EMBARKED ON A PROGRAM TO TEST THE EFFECTIVENESS OF PROTECTIVE CLOTHING AGAINST IMPREGNATION BY MUSTARD GAS AND LEWISITE. IN GATHERING THE NEEDED SUBJECTS FOR THESE TESTS, "VOLUNTEERS" WERE SOLICITED, UNDER THE GUISE OF TESTING "SUMMER CLOTHING" AND WITH THE ATTRACTIVE PROMISE OF EXTRA WEEKEND LIBERTY PASSES.

ONCE COMMITTED TO THE PROGRAM, THESE 17 AND 18-YEAR OLD TRAINEES SUDDENLY "CEASED TO BE VOLUNTEERS." THEY WERE FITTED WITH GAS MASKS AND SUITS, AND ORDERED INTO GAS CHAMBERS FOR REPEATED EXPOSURE TO LETHAL GASES. DOCUMENTATION CONFIRMS THAT THE TESTS WENT BEYOND STUDYING THE EFFECTIVENESS OF THE CLOTHING, AND MOVED INTO A STUDY OF HOW MUCH EXPOSURE A MAN COULD TAKE, THE INFAMOUS "MAN-BREAK" TEST. IN MANY CASES, THE PROTECTIVE EQUIPMENT FAILED.

WHEN THEY WERE NO LONGER NEEDED, OR WHEN THEY WERE TOO SICK TO CONTINUE, THE MEN WERE SENT BACK TO THEIR POSTS WITHOUT PROPER MEDICAL FOLLOW-UP. THEY WERE SWORN TO SECRECY AND THREATENED WITH COURTS MARTIAL IF THEY REVEALED THE TRUE NATURE OF THEIR EXPOSURE TO ANYONE, EVEN TO THEIR OWN PHYSICIANS. GIVEN THE CLASSIFIED STATUS OF THIS TEST PROGRAM, THE RECORD-KEEPING ABOUT WHO PARTICIPATED, LEVELS OF EXPOSURE AND INJURIES SUSTAINED IS HORRIBLY INCOMPLETE AND SOMETIMES NON-EXISTENT.

AFTER DECADES OF SILENCE, THESE MEN BECAME ILL AND SOME VENTURED TO SPEAK OUT ABOUT WHAT THEIR GOVERNMENT HAD DONE TO THEM. NOT ONLY HAD THEY BEEN LIED TO, BUT THEY HAD BEEN USED AS HUMAN GUINEA PIGS AND THEN DISCARDED WHEN THEY SOUGHT REDRESS -- AND ASSISTANCE FOR THEIR MEDICAL PROBLEMS -- THEY WERE REBUFFED. FIRST CAME THE DENIAL, THEN THE STONEWALLING, THEN THE "GEE, WE WISH WE COULD HELP, BUT . . ." ACCORDING TO VA RULES, IN ORDER TO RECEIVE COMPENSATION FOR A DISABILITY, YOU HAD TO SHOW THAT THE MEDICAL PROBLEM WAS THE RESULT OF YOUR SERVICE. IN THE CASE OF THE MUSTARD GAS VICTIMS, WHO HAD NO PAPER TRAIL FOR THEIR PLIGHT, THIS WAS PRACTICALLY IMPOSSIBLE, A TRAGIC CATCH-22.

BUT A FEW PERSISTED. USING COMPUTERS, TELEPHONES AND THEIR FREEDOM OF INFORMATION RIGHTS AS U.S. CITIZENS, THEY GATHERED BOXES AND BOXES OF RECORDS AND WAS ABLE TO PIECE TOGETHER ENOUGH EVIDENCE TO SHOW THAT THOUSANDS OF MEN HAD INDEED BEEN USED AS HUMAN GUINEA PIGS.

FINALLY, AFTER NATIONAL MEDIA ATTENTION, IN 1991 THE VA BEGAN TO CHANGE THE RULES AND COMMISSIONED A LONG-TERM STUDY INTO HEALTH PROBLEMS ASSOCIATED WITH EXPOSURE TO LETHAL GASES. IN 1993, WITH THE RELEASE OF THAT STUDY, ENTITLED "VETERANS AT RISK," THE DEPARTMENT OF DEFENSE OFFICIALLY RELEASED ALL PARTICIPANTS OF THESE TESTS FROM THEIR OATH OF SECRECY. AND, AS I MENTIONED EARLIER, JUST LAST MONTH, THE PROPOSED NEW RULES FOR EXPANDING THE LIST OF ILLNESSES WERE PUBLISHED IN THE FEDERAL REGISTER.

WE HAVE HEARD FROM HUNDREDS OF MEN AND THEIR FAMILIES. THEY ALL TELL SIMILAR TALES OF LIES, DECEPTION AND BETRAYAL. THEY NEED MEDICAL HELP; THEY WANT RECOGNITION; THEY DESERVE RESPECT AND GRATITUDE.

TODAY WE KNOW THAT GOVERNMENT'S USE OF UNWITTING SUBJECTS FOR POTENTIALLY HARMFUL STUDIES WAS NOT LIMITED TO THE MILITARY IN TIMES OF ACTUAL WAR. ENERGY SECRETARY HAZEL O'LEARY HAS SAID THAT GOVERNMENT HAS AN OBLIGATION TOWARD RADIATION VICTIMS -- I AGREE. BUT I THINK GOVERNMENT HAS AN OBLIGATION TOWARD ALL VICTIMS OF SECRET TESTS.

THE DISCUSSION ABOUT COMPENSATION BEYOND TREATMENT FOR MEDICAL AILMENTS AS A RESULT OF SECRET GOVERNMENT TESTS WILL BE ONGOING TODAY. I SEEK YOUR HELP IN TAKING AN IMPORTANT INTERIM STEP -- ENSURING THAT THE VETERANS WHO PARTICIPATED IN THESE TESTS RECEIVE THE OFFICIAL GOVERNMENT COMMENDATION THEY HAVE EARNED. HR 1055, WHICH NOW HAS 60 COSPONSORS, INCLUDING THE CHAIRMAN OF THE HOUSE VETERANS AFFAIRS COMMITTEE, INSTRUCTS THE SECRETARY OF DEFENSE TO:

- ISSUE AN APPROPRIATE COMMENDATION "IN HONORARY RECOGNITION OF THE INDIVIDUAL'S SPECIAL SERVICE, LOYALTY, AND CONTRIBUTION TO THE UNITED STATES;"
- NOTIFY TEST VICTIMS OF THE EXPOSURE THEY SUFFERED, THE POSSIBLE HEALTH EFFECTS RESULTING FROM THAT EXPOSURE AND THE LIKELY OPTIONS FOR MEDICAL TREATMENT.

- * MAKE AVAILABLE TO THE SECRETARY OF VETERANS AFFAIRS ANY RELATED RECORDS AND INFORMATION.

WHILE THE DEPARTMENT OF DEFENSE AND THE DEPARTMENT OF VETERANS AFFAIRS, AS WELL AS THE PRESIDENT, HAVE ALL PLEDGED TO WORK TOWARD THE SECOND AND THIRD REQUIREMENTS OF HR 1055, THERE IS NO MANDATE OR TIMETABLE FOR THIS TO OCCUR AND THE MATTER OF AN OFFICIAL COMMENDATION REMAINS IN QUESTION. HENCE, I ASK YOUR SUBCOMMITTEE'S FAVORABLE CONSIDERATION AND SPEEDY ACTION ON HR 1055.

THE TWO MAJOR CONCERNS RAISED BY MY COLLEAGUES ABOUT THIS LEGISLATION INVOLVED NUMBERS AND COST PROJECTIONS. REGARDING THE NUMBERS OF VETERANS THAT COULD BE ELIGIBLE UNDER HR 1055, THERE ARE ONLY ROUGH ESTIMATES. WE KNOW THAT AT LEAST 1700 MEN PARTICIPATED IN THE NAVY'S FULL-BODY TEST PROGRAM AT NRL IN ANACOSTIA, BUT THERE IS EVIDENCE THAT OTHER TESTS (INVOLVING "PATCH" EXPOSURE AND "FIELD" EXPOSURE) WERE CONDUCTED BY THE OTHER BRANCHES OF THE MILITARY AT DIFFERENT LOCATIONS. AS FOR THE COST OF IMPLEMENTING HR 1055, THIS IS A COMMENDATION BILL, NOT A COMPENSATION BILL. THERE WOULD, OF COURSE, BE INCREMENTAL COSTS ASSOCIATED WITH ISSUING THE COMMENDATION, LOCATING THE VETERANS AND INVOLVING THEM IN EXISTING VA MEDICAL PROGRAMS -- BUT THERE IS NO PROVISION IN HR 1055 FOR A "LUMP SUM" OF BENEFITS PER VETERAN.

IN CLOSING, MR. CHAIRMAN, I HAVE BEEN STRUCK BY THE REMARKABLE LOYALTY TO THE UNITED STATES GOVERNMENT AND PRIDE IN THEIR SERVICE THESE VETERANS SHOW, EVEN DESPITE THE YEARS OF DENIALS AND BETRAYAL. ASIDE FROM SEEKING MUCH-NEEDED MEDICAL AND DISABILITY ASSISTANCE, WHAT THEY REALLY LONG FOR IS RECOGNITION -- AND A THANK YOU FROM THE GOVERNMENT THEY SERVED. THAT'S CERTAINLY THE LEAST WE CAN AND SHOULD DO FOR THESE BRAVE MEN.

THANK YOU. I'D BE HAPPY TO ANSWER ANY QUESTIONS.

Mr. SKELTON, Ms. Fites.

**STATEMENT OF JEANNE B. FITES, DEPUTY ASSISTANT
SECRETARY FOR REQUIREMENTS AND RESOURCES**

Ms. FITES. Mr. Chairman and Members of the committee, thank you for the opportunity for me to tell you what the Department of Defense is doing to identify and support military or civilian personnel who were exposed to chemical weapons agents as a part of Defense research programs during and after World War II.

First, I want you to know we share your concern, your indignation and your frustration. I wish I could tell you today that we have identified everyone exposed. I can't. I can only tell you what we have done, what we are continuing to do and what we hope to accomplish.

As Representative Goss referred to, Secretary Perry released individuals from many oaths of secrecy last March and directed us to locate all of the records of these experiments, to declassify those that were classified and to identify the individuals exposed. We established a task force of senior representatives from across the Department and the military services to guide and monitor the effort. This effort is under the Assistant Secretary of Defense for Personnel and Readiness, Dr. Edwin Dorn, because of the critical personnel and compensation issues. So I am qualified to talk to you about the records search, not the scientific details of the experiments.

At first, our effort focused on two things. One, a definition of the kinds of data we are seeking on our testing programs and on the individuals exposed; and, second, identifying the places that this information could be found.

Unfortunately, we don't have a file we can go to on a particular base that says chemical weapons experiments. The information is very old, and it is scattered across the country.

We worked with representatives of the Department of Veterans Affairs—

Mr. SKELTON, Ms. Fites, I realize this is rude, but I think in order for us to make that vote, let me interrupt you right at this point. We will ask you and Mr. Goss to come back, and we will have the opportunity then to ask questions, if you don't mind. I just hate for us to miss it.

Ms. FITES. Fine.

[Recess.]

Mr. SKELTON. We will reconvene.

Ms. Fites, you were in the middle of your testimony before you were so rudely interrupted. We will ask you to proceed. I am sure that Representative Goss will reappear shortly.

Ms. FITES. I will just briefly summarize the rest of my testimony.

We have found five major records holding sites that have records relevant to the issue: Edgewood Arsenal, the Naval Research Lab in Maryland, Dugway Proving Ground, the Army Chemical School Library in Alabama, Rocky Mountain Arsenal and the University of Chicago. We are sure there are other sites, and we are continuing to look.

Let me tell you a little bit about what we found. We visited most of the sites, and I have a list of sites that we visited that we will leave with you today describing what we found there.

(The following information was received for the record:)

CONFIRMED RECORDS REPOSITORY CONTENTS

DUGWAY PROVING GROUND

Technical Library hold over 60,000 documents.
Records holding area contains over 400 boxes of material including scientific notebooks (over 8,000 paper records).

ABERDEEN PROVING GROUND/EDGEWOOD ARSENAL

8,465 linear feet paper.
29 linear feet index cards.
6,776 reels of microforms.
288 gigabytes electronic records.
Some of this documentation is located at Rocky Mountain Arsenal.

U.S. ARMY TRAINING COMMAND CHEMICAL CENTER FORT MCCLELLAN, AL

735 linear feet paper.
Large library collection of books, manuals, etc.

U.S. ARMY MEDICAL RESEARCH AND DEVELOPMENT COMMAND, FORT DETRICK, MD.

100 linear feet of paper.
7,000 sets of microfiche.
200 minutes of film media.

NAVAL RESEARCH LABORATORY

11 scientific notebooks from 1942-1945 (2,300 names extracted).
Large volume of technical reports, papers, etc.

WASHINGTON NATIONAL RECORDS CENTER, SUTHLAND, MD

13 boxes of Army Surgeon General files.
Over 100 linear feet of Army Chemical Corps records.

NATIONAL PERSONNEL RECORDS CENTER, ST. LOUIS, MO

Extensive collection of personnel and organizational files from early 1900's to present.
Extensive collection of morning reports and unit information.

UNIVERSITY OF CHICAGO

82 boxes of records from Vice President for Special Projects from WWII (DOI) contracts.

Ms. FITES. In general, the records aren't indexed or sorted. There are thousands of linear feet of paper in filing cabinets, boxes, thousands of sets of microfiche, and we have to go through all of this page by page with somebody knowledgeable reading it and seeing if there is stuff to be declassified. It is a very complex, time-intensive effort, but we are committed to doing it.

We also have done an analysis from computerized files of experiments and sites and will make available to you that information, too.

[The Battelle Preliminary Draft Report is retained in committee files.]

(The following information was received for the record:)

The
American
Legion



• WASHINGTON OFFICE • 1608 "K" STREET, N.W. • WASHINGTON, D.C. 20543 2022 •
• (202) 637-3772 •

January 24, 1994

Honorable Mike Kreidler
U.S. House of Representatives
1535 Longworth House Office Building
Washington, DC 20515

Dear Representative Kreidler:

The American Legion appreciates your introduction of H.R. 3273, the Military Reserve Retirement Fairness Act. The American Legion believes the eight year minimum requirement for former active duty service personnel to serve with the selected reserves is excessive. The current law could deter enlistees with more than 12 years of active service from seeking a reserve component retirement.

Additionally, since the drawdown in military personnel force levels may continue to be a frequently used defense budget reduction option, an eight year reserve commitment will likely be a disincentive to career motivated servicemen and women in today's all-volunteer service environment. It is a risk this nation should not take.

The Legion is sincerely grateful for your continued interest and support.

Sincerely,

Steve Robertson, Director
National Legislative Commission



Non Commissioned Officers Association of the United States of America

225 N. Washington Street • Alexandria, Virginia 22314 • Telephone (703) 549-0311

November 1, 1993

The Honorable Mike Kreidler
U.S. House of Representatives
1333 Longworth House Office Building
Washington, D.C. 20515

Dear Mr. Kreidler:

The Non Commissioned Officers Association of the USA (NCOA) appreciates your introducing H.R. 3273, the Military Reserve Retirement Fairness Act, which would repeal the minimum eight-year reserve service requirement. The Association fully supports this initiative.

As you stated in your floor remarks on Wednesday, October 13, 1993, the eight-year reserve service requirement has fulfilled its purpose. It is also clear that this requirement now serves as a disincentive to future reserve affiliation for individuals with more than twelve years active military service. By any measure, the requirement is counter productive to the goal of enhancing reserve component readiness, and thereby overall military readiness, with highly talented individuals being forced to leave the active components.

H.R. 3273, which would allow qualification for reserve retirement after completion of any combination of active and reserve service totaling 20 years, is a step in the right direction. However, the Association believes that another, more compelling barrier exists which dissuades members from voluntarily moving from active to reserve service. Repealing the minimum eight-year service requirement would do little towards attracting to the reserve components those individuals who have been separated from active service under either the Special Separation Benefit (SSB) or Voluntary Separation Incentive (VSI) programs of 10 USC 1174a and 1175, respectively.

For no reason other than mandatory active force reductions, active careers are being terminated. Yet many of the individuals being forced to leave the active components are being sought, on a priority placement basis, for affiliation in the reserve components. It is widely recognized that the talent being forced to leave active military service is precisely, in many cases, the skills and experience needed to increase reserve component readiness.

Chartered by the United States Congress

November 1, 1993
The Honorable Mike Kreidler
Page 2

As you are aware, a member who has received SSB or VSI and subsequently qualifies for retired pay shall have deducted from each payment of such retired or retainer pay so much of such pay as is based on the service for which he received the separation pay until the total amount deducted equals the total amount of separation pay. A recipient of VSI who is also entitled to basic pay for active or reserve service, or compensation for inactive duty training, may elect to have a reduction in the voluntary separation incentive payable for the same period in an amount not to exceed the amount of the basic pay or compensation received for that period. If a VSI recipient so elects, then the deduction to retired pay described in the first sentence of this paragraph shall be reduced accordingly.

The SSB and VSI programs were constructed with a very clear and distinct purpose. Both programs were designed to ease the transitional and readjustment problems associated with the abrupt termination of an active military career. Subsequent affiliation in the reserve components does not lessen the hardship, turmoil, and readjustment realities of transitioning from military to civilian life. It escapes all logical reasoning why anyone who was awarded SSB or is receiving VSI would affiliate in the reserve components with the penalty of full recoupment of those awards upon reaching retired pay eligibility at age 60. The cost is simply too great and is at odds with the purpose for which SSB and VSI are awarded.

NCOA fully supports the effort you have undertaken with H.R.3273. The Association requests that you also consider introducing legislation to overturn the overly harsh penalties to reserve participation outlined above.

Sincerely,


Larry B. Rhea
Deputy Director
of Legislative Affairs



ASSOCIATION OF THE UNITED STATES ARMY

3455 WILSON BOULEVARD, ARLINGTON, VIRGINIA 22201-3321 (703) 641-4300

31 January 1994

The Honorable Mike Kreidler
U.S. House of Representatives
Washington, DC 20515

Dear Mr. Kreidler:

The Association of the United States Army (AUSA) wishes to congratulate you for your leadership in sponsoring H.R. 3273, the Military Reserve Retirement Fairness Act.

H.R. 3273 provides relief from an inequity that has become more apparent with the advent of the Total Force. Military personnel have become more transient in their service between the components of the armed forces, and you have insightfully crafted legislation to correct a retirement inequity that affects the Guard and Reserve.

You have seized upon an inequity that is caused when service personnel transfer to the reserves with less than eight years remaining for entitlement to reserve retirement. Knowledgeable people know that the requirement for serving the last eight years of service in the reserves is outdated because of personnel policies in effect today.

AUSA is pleased to offer its support to your proposal and will work with you to assure passage of the legislation during the second session of the 103d Congress. Please call upon us if we may be of assistance.

Sincerely,

ERIK Q. JOHNSON
Colonel, USA Ret.
Director, Government and Public Affairs



PREPARED STATEMENT OF JEANNE B. FITES

Mr. Chairman and Members of the Committee:

Thank you for the opportunity to tell you what the Department of Defense is doing to identify and support military or civilian personnel who were exposed to chemical weapons agents as part of Defense research programs during and after World War II. First, I want you to know that we share your concern, your indignation, and your frustration. I have heard the stories told by witnesses at several hearings. I have read some of the test descriptions in the National Academy of Sciences report and in other documents, and members of my staff have personally called and talked to some of these individuals. I wish I could tell you today that we have identified everyone exposed. I cannot. I can only report to you what we have done, what we are doing, and what we can hope to accomplish.

On March 9, 1993, Dr. Perry directed the Department to take immediate steps to determine the extent of the potential human exposure to chemical weapons agents through our testing program and to identify the individuals exposed. He immediately declassified all relevant information concerning chemical weapons testing programs that were conducted prior to 1968, and directed the Department to begin the declassification process for all programs since 1968. He also released any individuals who participated in testing, production, transportation, or storage associated with any chemical weapons research from any oaths of secrecy or non-disclosure restrictions concerning their participation in such testing. We established a task force of senior representatives from OSD and the Military Departments to guide and monitor the effort. Because of the critical personnel and compensation issues, oversight of the effort rests with the Assistant Secretary of Defense for Personnel and Readiness, Dr. Edwin Dorn.

Our first efforts focused on two things: first, a definition of the kinds of data we were seeking on the testing programs and on the individuals exposed; and second, identification of places where such information would be found. Unfortunately, there is

Ms. FITES. But one of the best sources of information are individuals themselves that feel that they were in an experiment and they have been wronged, and we would really encourage you to have your staffs encourage people to come forward. Anybody that comes to you, if you give us the information on the person, we promise to follow up on that.

Mr. SKELTON. Thank you very much.

no central repository for information concerning historical data on our chemical weapons testing programs.

The task force worked with representatives from Veterans Affairs to ensure that we would collect information that would support their efforts to appropriately identify and compensate veterans exposed. The Military Departments sent out messages throughout the Department asking for information on the testing programs, exposures, and locations of records containing such information.

In addition to the National Archives in Suitland and St. Louis, we have so far identified five major DoD records holding sites and one University site where large volumes of records are stored. They are: Edgewood Arsenal, in Maryland; the Naval Research Laboratory, in Maryland; Dugway Proving Ground, in Utah; the Army Chemical School Library, in Alabama; Rocky Mountain Arsenal, in Colorado; and the University of Chicago. We also believe that additional records are almost certainly stored at other contractor facilities and universities that we have not yet identified.

Let me tell you a little bit about what we have found. Members of the task force have visited most of the sites. I have a list of the sites we visited that I will leave with you today. It briefly describes the kinds of records at each location. In general, these records are not indexed or sorted. They consist of thousands of linear feet of paper in filing cabinets or boxes, and thousands of sets of microfiche. They are in historical library collections, warehouse holding areas, and technical libraries. The files also contain weapons schematics, technical drawings, and operational directions as well as scientific formulae. Personnel information can sometimes be extracted from scientific notebooks, operational orders and plans, administrative correspondence, technical reports, personnel rosters, or medical records. Because of national security, foreign diplomacy, and personal privacy issues, review of this information can only be completed by personnel with appropriate security clearances and technical background, as well as

knowledge of personnel issues. Each piece of paper in every collection must be reviewed page by page.

The records at the contractor-operated Chemical and Biological Information Analysis Center at Edgewood are completely automated. We contracted with them to perform a key words search on their records. We recently received a preliminary report from them that contains over 2,000 entries for about 500 sites. The sites include locations where chemical and biological agents were tested, produced, stored, or shipped. But we know this list is incomplete. Our preliminary manual review at other sites has resulted in identification of three human test sites that we did not know about last year and which are not in the automated files.

One of our best sources of information is correspondence from veterans and others who participated in or know something about the tests. We have followed up on individual claims forwarded to us from Veterans Affairs and on phone conversations and letters. These contacts have resulted in identification of additional storage and testing sites. For instance, VA forwarded to us a request for validation on a claim of a US veteran who handled and transported chemicals in India. Experts at Edgewood Arsenal were able to identify the mustard and phosgene canisters in the photos. In addition, the photos confirmed for DoD that mustard was stored at the site. We also located a previously unidentified test site, a Navy Base at Harts Island, New York, through documentation provided by a participant. The documentation indicated that many volunteers for the tests were solicited from individuals in disciplinary barracks.

We now have about 4,000 names of individuals who may have been exposed. We do not have complete information on all of them and not all of them are confirmed test subjects. The first 2,300 names came from the Naval Research Laboratory at the beginning of our effort. Not long after that, an archivist at Suitland who read about our

effort in the newspaper provided about 700 names. The rest of the names have trickled in or been extracted from documents in the DoD repositories

We have shared our experiences and knowledge gained with the DoD members of the interagency group researching radiation testing. Much of the work we have done is also applicable to their effort. For instance, the same kinds of information must be extracted for personnel involved in those tests. In addition, some of the DoD repositories that we have found also contain information on these programs.

The Department is committed to supporting these individuals, and we will continue to pursue review of records and follow-up on letters from veterans and personal conversations with veterans and former DoD employees.

This concludes my formal statement. Thank you.

Mr. SKELTON, Mr. Kyl.

Mr. KYL, Thank you.

Just a question or two. Do you have the personnel and other resources necessary to do the search in a fashion that we would both agree would be timely?

Ms. FITES, Nobody ever has enough resources to do things. We have a lot of resources put against it. It will still take a while to get through all of these records. We are committed to getting it done, and I can't at this time forecast when we will be finished.

Mr. KYL, But there is nothing in particular that you would be asking us for in order to make sure you could get the work accomplished?

Ms. FITES, No.

Mr. KYL, OK, What is the Defense Department's position on the bill that Mr. Goss came to testify in behalf of?

Ms. FITES, I apologize to tell you we don't have a Defense Department position yet, but I am committed to going back and seeing that you get one shortly.

Mr. KYL, All right. Thank you.

In connection with that, I would be interested to get your evaluation as to any distinctive factors different from what you are doing today that would be required by that legislation. Do you see anything that would significantly alter what you are currently doing?

Ms. FITES, No.

Mr. KYL, So adopting that legislation would not be a significant departure from what you are already committed to doing?

Ms. FITES, No, it would not.

Mr. KYL, OK, Thank you very much.

For the benefit of Mr. Goss who just arrived, the testimony was just concluded, and I ascertained two things I think that are important: number one, that the Defense Department is committed to proceeding to obtain all of the information and at this point wouldn't ask for any additional resources to accomplish that task; and, second, it doesn't see any significant difference between the task that they are committed to performing right now and that which is called for in your legislation. They will favor us with their official view on the legislation as soon as they can come to a conclusion as to what that is.

Mr. GOSS, Thank you very much, Mr. Kyl. That is welcome news.

Mr. SKELTON, Any other questions?

I have one.

Mr. Lancaster, do you have a question?

Mr. LANCASTER, Please go ahead, Mr. Chairman. I do have questions.

Mr. SKELTON, All right. I will ask this to Mrs. Fites.

Do you feel it should be the responsibility of the Department of Defense to notify each individual exposed to mustard gasses in connection to testing or do you feel it should be the responsibility of the individual to file a claim with the Department of Veterans Affairs?

Ms. FITES, We first have to identify what individuals were exposed. We have a commitment to notifying the individuals we find that are exposed, and we would then tell them how to apply to the Department of Veterans Affairs if they have a problem.

Mr. SKELTON. Thank you.

Mr. Lancaster.

Mr. LANCASTER. When Secretary Perry issued his memo with regard to these individuals who were exposed to chemical weapons testing, he apparently made access available to those persons. What kind of response have you had from people exposed? Has there been a large number who have asked for information?

Ms. FITES. There hasn't been a large number to date, but we do continue to get questions from people, and we try our best to answer their questions and to refer them to the appropriate place to apply for compensation.

For example, if there are civilians, they would go to the Department of Labor instead of the Department of Veterans Affairs, and we try to provide them all of the information we have, and we try to search through any records we can find to find out if they corroborate what they are saying.

Mr. LANCASTER. Were most of the individuals, in fact, subject to testing or are you finding a lot of people who have ungrounded fears?

Ms. FITES. I can't say we have found anyone that has ungrounded fears. We have not been able to confirm in all cases. We haven't been able to find records of experiments for all cases. But we are continuing to look.

Mr. LANCASTER. Do you have any sort of proactive program to actually notify the more than 4,000 people whom you have identified by your search thus far that you have found were subject to testing and need to follow up?

Ms. FITES. We will have—we have not notified them yet because we are still in the verification stage and entering the names onto the database.

Mr. LANCASTER. You are not doing it as you find them, but are going to wait until you have completed the research?

Ms. FITES. No. Once we get the 4,000 that we have identified now up on computers and cross-linked to other files, we will start trying to notify them, and then we will continue to add names as we get more information.

Mr. LANCASTER. Now, Secretary Perry's memo and this legislation speaks only to chemical exposure

Ms. FITES. Right.

Mr. LANCASTER. How about these other people who were subjected to testing, like LSD, to say nothing of nuclear testing? Is there to be a similar program of searching the records and notifying them when they might not otherwise be aware of that testing?

Ms. FITES. I believe you are aware of the major interagency effort on the radiation testing.

Mr. LANCASTER. Right.

Ms. FITES. We are working very closely with them. As we go through these boxes of records, anything else we find we are going to document and catalog and identify the people to the extent that we can.

Mr. LANCASTER. How about the LSD people? That is really separate from the radiation experiments.

Ms. FITES. I know we have found some of the LSD files. I really haven't seen them myself so I don't know what is in them.

Mr. LANCASTER. But at this point there is no focused examination of the records nor any program that is specifically focusing on other experiments other than chemical and radiation?

Ms. FITES. No. But we are trying to capture the information so that we can decide what to do with it. We don't—we are concerned about all of this. We want to right this kind of cold war legacy to the extent that we can.

Mr. LANCASTER. One question, if I may, Mr. Chairman, of Representative Goss.

Mr. SKELTON. You may.

Mr. LANCASTER. Your legislation speaks only to mustard gas. How about other exposures that might be equally debilitating? Should we not at the same time that we are addressing mustard gas address testing for other hazardous substances that military personnel may have been exposed to?

Mr. GOSS. Indeed we should; and, in fact, we are.

I testified last week before Chairman Bryant's, judiciary subcommittee, which is in fact, looking at the full range of testing including drugs, radiation lewisite and other agents.

Mr. LANCASTER. But your legislation speaks only to mustard.

Mr. GOSS. Mine speaks primarily to mustard because that is what the great evidence has been for the victims who have come forward. It is not meant to exclude anybody else. It was meant to speak to that area primarily because that was the area of testing that was claimed by people who were very inarticulate. What they were saying is we participate in some testing and we are not quite sure what it was.

Then some of the more aware of those victims who finally came out from underneath this veil of secrecy started to say things that caused other people to think in their minds that they, too, may have been involved. Some of those tests apparently involved lewisite so we have lewisite victims.

We had a ship log from Bari, Italy which indicated the casualties by who handled what when. It is however, a very narrow line to cross because we don't want to arbitrarily rule anything out.

Because we have already gotten some relief for some individuals who came forward early, as we found we had a class of people that was big enough here to provide legislation for as a class. We also discovered that there is a compensation question.

At about the same time that this all began to emerge, the revelations about radiation testing and other types of testing emerged. Of course, previously we had Agent Orange and the whole downwinders thing. So it had a series of things in line of things that have happened here and various approaches to deal with it.

All I have tried to isolate out in this particular legislation are really two things. one, the cooperation of the Defense Department to find the files and notify the people. We have made great strides in that. The other is to say thank you for what you have done. We recognize what you have done. We recognize you are a victim, and we are offering you commendation in the grateful thanks of your Nation. That is what we are trying to accomplish in this.

That does not mean additional things are not going to happen. That is only the scope of this legislation.

Mr. LANCASTER. Thank you.

Mr. SKELTON. Any other questions of these witnesses?

If not, we certainly thank you for your testimony and also your patience in coming back.

Our next bill is H.R. 3273, which has been introduced by Congressman Mike Kreidler. For the record, without objection, I would like for my opening statement and the opening statement of Ranking Member John Kyl to also be put into the record in full.

[The following information was received for the record:]

PREPARED STATEMENT OF HON. IKE SKELTON

This afternoon we begin the first in our series of subcommittee hearings for the fiscal year 1995 authorization cycle. As soon as I have had the opportunity to consult with Mr. Kyl, we'll firm up a hearing agenda from now through early May, when mark up is currently scheduled.

Today we have two items on the agenda: H.R. 1055, introduced by Congressman Porter Goss, concerning individuals exposed to mustard gas during World War II, and H.R. 3273, introduced by Congressman Mike Kreidler, concerning Reserve retirement. In each case, we will receive testimony, first, from the sponsor of the legislation and, second from a Department of Defense witness. I should note for the record that the Veterans' Affairs Committee has previously held hearings on mustard gas testing, and the Judiciary Committee held a hearing on the broader issue of human testing early last week.

Our first witnesses are Congressman Goss and Ms. Jeanne Fites, the Deputy Assistant Secretary of Defense for Requirements and Resources. They will be followed by Congressman Kreidler and Mr. Frank Rush, representing the Assistant Secretary of Defense for Reserve Affairs.

We welcome each of you and look forward to your testimony.

PREPARED STATEMENT OF HON. JON KYL, A REPRESENTATIVE FROM ARIZONA,
RANKING MINORITY MEMBER, MILITARY FORCES AND PERSONNEL SUBCOMMITTEE

Thank you Mr. Chairman, I, too, join you in welcoming our colleagues, Mr. Goss and Mr. Kreidler, as well as the DOD witnesses, to testify today.

Mr. Goss has been an active and effective advocate for veterans, particularly those exposed to chemical weapons as part of U.S. Government testing during World War II. I applaud his efforts and look forward to his testimony.

Mr. Kreidler seeks to change the law related to Reserve retirement in order to remove a potential inequity created for military personnel who leave Active Duty with 13 to 19 years of service who wish to join the Reserve components. Mr. Kreidler, as a member of the Army Reserve yourself, your expert testimony is welcome.

Mr. Chairman, since any further elaboration by me will only delay presentation of worthy issues to the subcommittee, I recommend that we now hear from today's witnesses.

Mr. SKELTON. At this point we welcome our colleague and Mr. Frank Rush.

Mr. Kreidler.

STATEMENT OF HON. MIKE KREIDLER, A REPRESENTATIVE
FROM WASHINGTON

Mr. KREIDLER. Thank you very much, Mr. Chairman.

Before you, you have H.R. 3273, a bill I introduced and have labeled the Military Reserve Retirement Fairness Act. It repeals the requirement that reservists who have Active Duty time serve at least 8 years in the Reserves in order to qualify for a pension. That effectively means that if you served 13, 15 or 19 years on Active Duty, left the active Duty military and then went to the Reserves that you would still be obligated to serve 8 years in the Reserves.

For example, if you had 19 years in the Army, Active Duty military, then left the military, voluntarily or otherwise, you would be obligated then to serve 8 years in the Reserves in order to be quali-

fied for a pension at age 60. That, in effect, means that you would have served a total of 27 years.

I am a reservist. I served Active Duty and as a reservist for a total of 20 years, but that would not be the same requirement for somebody who had over 13 or more years of Active Duty time. They would have to serve more than I did.

The requirement probably made sense in a different era, but this is a different time. At one time we were talking about the Cold War. Today, we obviously, are in a different frame of mentality. We are looking at downsizing the military. We are looking at some budgetary constraints that are certainly forcing some new realities upon this Congress and this country.

Today, we find that the career opportunities for somebody in the military are not what they were a few years back. It means that you have limited opportunities for promotion in many cases and can, indeed, be passed over and asked to leave far short of reaching the 20 years of Active Duty time.

Sometimes you can also see the handwriting on the wall whereby you are looking at a situation where you know you are not going to be able to see a promotion and some opportunities ahead of you, and, therefore, you leave the active Duty military. But if you leave with 13 or more years of Active Duty time, you are going to serve more than the 20 years that is required of people like myself.

Also, Reserve units are difficult to come by—particularly if you are a senior non-commissioned officer or a senior officer—and trying to get into a Reserve slot is not an easy position to attain. By requiring additional time, you are, obviously, filling those slots up with people who are trying to get their total number of years so that they might qualify for a pension.

Qualifying for a Reserve pension means that you do not get any benefits until the age of 60. You are going to have a minimum of 20 years, more than 20 years, obviously, if you have more than 13 years of Active Duty time but a minimum of 20 years to qualify.

There is one provision that the Department of Defense has done that allows individuals up to 15 years of Active Duty time to retire early. This early requirement program is on a selective basis, as I am sure this committee well knows. At the same time, for those individuals who are serving on Active Duty who may have been ousted from the military for one reason or another, reduction in force, inability to be promoted in their position, whatever it might be, but have 13 or more years, there still is this 8-year requirement.

My bill here is one that comes forward with the idea that the times have changed. It is time to remove that 8-year requirement and give these individuals an opportunity to obtain benefits that would have been available to them much more readily in a different time than what we have now with the downsizing of the military.

In support of H.R. 3273, I have letters from the Military Coalition, the American Legion, Noncommissioned Officers Association, and the Association of the U.S. Army that I would like to submit for the record, Mr. Chairman.

Mr. SKELTON. Without objection.

Mr. KREIDLER. I appreciate the chance to come here and present this bill, Mr. Chairman, and we would certainly hope that it can be acted upon.

Mr. SKELTON. Thank you very much. Obviously, you have given a lot of thought and effort in this regard.

PREPARED STATEMENT OF HON. MIKE KREIDLER

Mr. Chairman and members of the subcommittee, I greatly appreciate your willingness to consider by bill HR 1271, the Military Reserve Retirement Fairness Act.

HR 1271 would repeal a provision of current law that requires a military reservist to serve 8 years, in addition to any period of regular service, in order to qualify for retirement benefits.

This requirement means that a person who has spent 11, 15, or even 19 years in active service, and then transfers to the reserves, must spend an additional 8 years in reserve status before qualifying for any retirement benefits at all. For example, a 19-year veteran, who transfers, would have to serve a total of 27 years before qualifying for benefits.

Mr. Chairman, I became aware of this situation when a former serviceman approached me last summer and told me about this problem. I was surprised to hear that there was such a rule and it didn't seem fair to me.

I have no doubt that the 8-year requirement made sense at one time, when the Defense Department was trying to retain career personnel for a full 20 years of active service. But today's military is dramatically different. In response to tremendous political changes in the world, the United States has been forced to reduce military spending as part of our effort to reduce the deficit.

However, a painful consequence of this spending reduction is the need to reduce personnel. Many of these men and women made a decision at a young age to make the military their career. I think everyone in this room will agree that the military is not an easy career. The burdens of service go beyond the job itself -- from the toll on family life to frequent dislocation and uncertainty about the future.

Today the 8-year requirement only works a hardship on men and women who would rather stay in active service, but instead must spend additional years in the reserve component to qualify for the pension benefits they have earned. At the same time, the eight-year requirement discourages voluntary movement from active to reserve status -- the wrong incentive when downsizing is required.

Page 2

This bill would entitle those retiring from the reserve component to benefits, upon reaching the age of 60, after any combination of active and reserve service totaling 20 years. Benefits would continue to be based on the current point system that recognizes the difference between active and reserve service.

Mr. Chairman, in today's world, the 8-year requirement only penalizes the men and women who have served our country with honor and hoped to do so for 20 years or longer. The Military Reserve Retirement Fairness Act would replace this penalty with a demonstration of our good faith commitment to the men and women of our armed services.

Mr. Chairman, I have received letters of support for HR 3273 from The Military Coalition, The American Legion, the Non Commissioned Officers Association, and the Association of the United States Army. I ask that they be included in the record.

I sincerely hope this legislation will earn your support and, again, I appreciate your willingness to review HR 3273. Thank you.



T H E M I L I T A R Y C O A L I T I O N

201 North Washington Street
Alexandria, Virginia 22304

February 4, 1994

The Honorable Mike Kreidler
U.S. House of Representatives
1535 Longworth House Office Building
Washington, D.C. 20515

Dear Representative Kreidler:

The Military Coalition, (roster enclosed) a consortium of military and veterans' associations representing 3.75 million members of the seven uniformed services, is writing to state our strong support for H.R. 3273, the Military Reserve Retirement Fairness Act. The Coalition appreciates your introducing this long overdue piece of legislation to repeal the minimum eight-year reserve service requirement.

For no reason other than mandatory active force reductions, active careers are being terminated. Yet, many of the individuals being forced to leave the active components are sought on a priority placement basis for affiliation and continued military service in the reserve components. It is widely recognized that many of the talented people involuntarily leaving active military service possess the skills and experience needed to increase reserve component readiness.

The Coalition believes that the eight-year minimum reserve service requirement has outlived its useful purpose. By any measure, the requirement is counter-productive to the goal of enhancing reserve component readiness, and thereby overall military readiness. It serves as a deterrent to the highly experienced and talented individuals with over twelve years of service now being forced to leave active service who might otherwise be attracted to the reserve components.

The Coalition believes that the Military Reserve Retirement Fairness Act which allows qualification for reserve retirement after completion of any combination of active and reserve service totaling 20 years is a positive measure to maximize military readiness.

Sincerely,

Paul W. Arcari
Colonel, USAF (Ret)
The Retired Officers Assn
Co-Chairman
(703) 549-2311

Michael Ouellette
Sergeant Major, USA (Ret)
Non Commissioned Officers Assn
Co-Chairman
(703) 549-0311

Enclosure

Mr. SKELTON. Let me ask this question before we go to our next witness, if I may. Have you attempted to cost this out or is there any way you could do that?

Mr. KREIDLER. We requested CBO to give us an estimate. Their preliminary one was that they thought it was relatively inconsequential, but, as we all well know, the Congressional Budget Office is somewhat overwhelmed these days and are not as timely as they might have been on other occasions to give us the accurate numbers as they see it.

Mr. SKELTON. I am sure the other Members will have questions for you in just a moment.

Mr. SKELTON. Mr. Frank Rush.

**STATEMENT OF FRANK RUSH JR., PRINCIPAL DIRECTOR,
MANPOWER AND PERSONNEL, OFFICE OF THE ASSISTANT
SECRETARY OF DEFENSE FOR RESERVE AFFAIRS**

Mr. RUSH. Thank you, Mr. Chairman. I am pleased to be here today to discuss H.R. 3273. I do have a short prepared statement which I would ask be placed in the record.

Mr. SKELTON. Without objection.

Mr. RUSH. With your permission, I will summarize briefly.

This Nation's Reserve retirement system remains the only such system in the world. Since its enactment in 1948, it has served this Nation and our armed forces well. It is a major factor in the success of our National Guard and Reserve Forces.

Reserve retired pay does begin at age 60 for those who qualify. Qualification requires 20 good years of service, years in which 50 points have been earned by the member, and that the last 8 years of service be in a Reserve component. The requirement that the last 8 years of qualifying service be in a Reserve component was intended to provide an incentive for members of the Reserve to perform continuous Reserve service.

The House report on the 1948 act which authorized our Reserve retirement system stated that the 8-year provision was, and I quote, essential in order to avoid the possibility that personnel separated from the regular service who are lacking one or 2 years necessary to qualify for regular retirement shall not be permitted to avail themselves of Reserve retirement benefits merely by serving in the Reserve for one or 2 years after separation from the regular service.

The Department of Defense believes that the 8-year requirement remains sound and that a change to this long-standing requirement is not necessary in order to help us manage the drawdown.

Thank you, Mr. Chairman.

Mr. SKELTON. Thank you, Mr. Rush.

PREPARED STATEMENT OF FRANCIS M. RUSSI, JR.

Mr. Chairman and members of the subcommittee, I am very pleased to appear before you today to discuss H.R. 3273, the Military Reserve Retirement Fairness Act. H.R. 3273 would amend title 10, U.S. Code to revise the requirements for eligibility under chapter 67 of that title for receipt of retired pay for nonregular service in the Armed Forces. The bill would change the service requirements for eligibility for retired pay for nonregular service by eliminating the current requirement that the last 8 years of qualifying service for retirement must be service in a Reserve component. With this revision, the law would no longer ensure that individuals

qualifying for Reserve retirement had completed substantial amounts of Reserve service and had made a significant contribution to the Reserves.

A review of the legislative history and subsequent interpretations of section 1331(a) of title 10, U.S. Code, makes clear that the current statutory requirement that the last 8 years of qualifying service be in a Reserve component was intended to provide an incentive to members of the Reserve components to perform continuous Reserve service. This provision is essential in order to avoid the possibility that personnel separated from Regular service who are lacking 1 or 2 years necessary to qualify for retirement based on their active service not be permitted to avail themselves of Reserve retirement benefits merely by serving in the Reserves for a short period following separation from Regular service.

H.R. 3273 would apply only to Members who complete 20 years of service after the date of its enactment. Temporary authority, codified as section 1331a of title 10 and effective through fiscal year 1999, authorizes qualification for nonregular retirement at age 60 for certain members of the Selected Reserve after 15 (vice 20) years of qualifying service. This temporary authority has caused some to question if the 8 year requirement should be modified. The Department has considered this possibility and concluded that a change to the long-standing, 8-year requirement is not essential to manage the drawdown. We believe that the rationale for the 8 year requirement remains sound and that the very substantial program of voluntary and involuntary separation benefits, temporary early retirement authority, and transition benefits and assistance which have been put in place provide substantial fairness to those members leaving active service during this period.

It should also be noted that this legislation would have PAYGO cost implications, by increasing outlays from the Military Retirement Fund. Therefore, if the bill were enacted, its deficit effects could contribute to a sequester of mandatory programs.

Mr. SKELTON. Mr. Kyl.

Mr. KYL. Thank you, Mr. Chairman.

I would, first of all, pose a question to my colleague. I am not sure I understand what it is about the situation today that is different from the past. I understand during a drawdown period where we are trying to reach a level there may be some dislocation or disruptions in certain ranks during certain years. In each of our services it hasn't been easy to calibrate the number of people with years and service of different grades.

But once you achieve a level of stability, which ought to be about this year in terms of the drawdown, what is it that makes the situation different than it was in years past, before this ramped period of drawdown? People aren't being artificially asked to leave the service after this year. So I am not sure I understand what is different now than, say, in the 1960s or 1970s or 1980s.

Mr. KREIDLER. Well, certainly, right now promotion to senior positions is more difficult and the chances of being passed over now are greater. I guess you will reach a point of some sort of stability here where you are stabilizing the forces, but that certainly isn't the case right now. I can assure you there are many people that are sitting out there right now that are trying to complete 20 years. Even if they reach a stable position there just plain aren't going to be as many slots, and that is going to continue for a number of years ahead of us for those senior positions, whether they are commissioned or noncommissioned officers. As a reservist, I know that is going to be in place for several years to come until perhaps there is some degree of stability that is reinstated.

It is certainly true today, and it will be true for some time in the future.

Mr. KYL. Is there any period of time less than 8 years but more than one year that would be appropriate? Is there any sliding scale concept here that might also be applied?

Mr. KREIDLER. Well, I think we need to look at the very different situations that apply to different MOs or different job categories in the military. I think the military already has identified some of those jobs and are offering the early retirement for those right now. They only extended an early retirement selectively to servicemen with up to 15 years of Active Duty time.

Obviously, we see a number of individuals who are looking at either being passed over or facing a reduction in force that is going to require them to leave the military. This is not voluntary on their part. They are being told to leave the military. There are certainly a number of places where you see some excess supply of whatever personnel we are talking about.

Mr. KYL. In that regard, though, isn't the Reserve the mirror image of the active Duty force? In other words, could you end up with an awful lot of high-ranking officers going into the Reserve, people that have gotten in 17, 18, 19 years Active Duty and then have 1, 2, 3 or 4 years left? They are high-ranking. The Reserves don't necessarily need a whole bunch of high-ranking people. So it skews the composition of the Reserves at that point. What is your response to that?

Mr. KREIDLER. I think you are looking at something that is going to happen and is happening anyway. What we are talking about here are individuals that are leaving voluntarily because they either have been passed over for promotion or are looking at a dead end ahead of them, that says in a couple of years I am not going to be promoted and, therefore, I better opt now to get out. Maybe the economy is a little bit better today than it will be tomorrow, whatever the reason is. Or there is a reduction in force across the board, regardless of the promotion opportunities that affected you.

Those individuals are coming out of the military and are going to look to the Reserves for assignment if they want to have a pension.

I don't think knocking that out is going to dramatically change whether they look to complete—the number of years, prerequisite years for retirement with benefits at age 60 or not. So I don't see it making any difference in the raw numbers of individuals who are going to be there. Albeit, you are absolutely correct, they are going to be more senior individuals.

Mr. KYL. Could I ask Mr. Rush to respond to the same questions that I have asked my colleague here, particularly starting with the question of what makes the situation different, say, in 1995 than it was in 1980 or 1985?

Mr. RUSH. Well, the one difference is the drawdown, and the second difference is the number of members who are leaving the service under the various separation benefits that have been provided by this committee and the Congress for active and Reserve Forces, particularly the voluntary separation incentive and the special separation benefit.

Now, while those are set up to be payments in lieu of qualifying for retirement, there is no restriction on affiliating with the Reserves. In fact, since January of 1992 through the end of the last fiscal year, there have been about 14,000 officers and 64,000 enlisted members who have separated and received the voluntary separation incentive, which is a stream of payments that—for twice

the number of years of Active Duty that the member has served, or the special separation benefit, which is a lump sum payment based upon the Member's pay grade and their years of service.

Of those, about 18 percent of the officers and 20 percent of the enlisted members are now serving in the selected Reserve. The great majority of those have less, as you might expect, less than 15 years of active service. The total number with more than 15 years of active service—who have received either the voluntary separation incentive or the special separation benefit—is about 1,000.

In terms of the qualification and the 8-year rule, 8 years is not a magic number, but it still seems to us to make sense to require a member to have served a substantial period of time in a Reserve component in order to qualify for Reserve retirement at age 60.

Mr. KYL. Thank you.

Mr. KREIDLER. If I might add, arguably, that is not the reason it is there. It is to try to retain individuals on Active Duty. It is not to dissuade them from qualifying for a pension. It is to try to keep them to stay on Active Duty in their more senior years, short of getting the 20 qualifying years. Is that correct?

Mr. RUSH. The Reserve retirement?

Mr. KREIDLER. Yes. I mean the active Duty.

Mr. KYL. One of the reasons for the 8-year requirement is an incentive to stay in Active Duty.

Mr. RUSH. The 8 year requirement, yes, is twofold: continuous Reserve service, substantial period of Reserve service, and not to leave Active Duty simply because of a civilian employment opportunity or an unfavorable assignment or some other reason and then qualify for a retirement in any event.

Mr. SKELTON. Mr. Lancaster.

Mr. LANCASTER. If a person has received benefits of whatever kind; and then this bill is enacted into law; would a person then subsequently qualify for retirement as a reservist? How would they interface? Would there be any payback of those separation benefits or would they stand to benefit in both ways?

Mr. RUSH. Since the early 1960s, readjustment pay, severance pay, separation pay, including the voluntary separation incentives, all require a payback if a member qualifies for either an Active Duty retirement or any Reserve retirement, any purely military retirement. That payback is factored in so that the retired pay is reduced by the percentage of the pay that was based upon the active service until such time as the entire amount is paid back.

Mr. LANCASTER. Now, Mr. Kreidler, you have indicated that with the drawdown pretty much behind us now; that the people who will take advantage of this prospectively in the future are those who have perhaps been passed over or otherwise see that their future in the active force is not what it might be. Are these people who haven't made it on Active Duty the kind of people that we want to recruit into our Reserve program and allow them to take up slots when that might be taken up by a more highly-qualified person who is in the lower ranks of the Reserves who will not have the opportunity for promotion because a higher-ranking person has filled that billet through this method?

Mr. KREIDLER. Well, you still face the same kind of review in the Reserves.

Mr. LANCASTER. But they are already there. They are already an E-7, and you have an E-6 who is highly motivated, well-trained, has done a good job as a reservist, but their billet now is filled by this person who has come off of Active Duty who didn't make an E-9, and they are not going to be able to be promoted into that slot. Aren't we limiting some of the opportunities for promotion that our reservist might have otherwise?

Mr. KREIDLER. We are doing that already just with the drawdown and with the number of individuals coming out. I don't think you are going to impact those numbers of those individuals who are going to wind up in that position trying to seek a slot in the Reserves in order to qualify for a pension. They are going to be there one way or another, just because they have got enough Active Duty time already, and they are looking toward what do I need to do to qualify for a pension.

That is one reason why I think the CBO initially didn't see much of a cost impact.

Mr. LANCASTER. But does the Reserve program need more high-ranking officers and enlisted personnel at the present time? Is there not more than adequate numbers either in the pipeline in the Reserve program or those who would come in without this additional incentive of being able to retire without 8 years of duty in Reserves?

Mr. KREIDLER. Those of us who are in senior positions would say, no, there is plenty already. There is enough competition to keep us all there. But this legislation is not going to impact those numbers. We are not going to see more senior commissioned and noncommissioned officers lined up trying to seek Reserve slots with your retirement removed or if it is there.

Mr. LANCASTER. But I think you would. Because I think people who might say, well, if I could just serve 3 years and get a greater retirement, they might do that. But if they are facing 8 years, they would say, I am not going to do 8 years. I will just chuck it.

But I think you are going to have more people seeking billets in the Reserve if your legislation should pass. So I think you are going to clog the system.

Mr. KREIDLER. I think you will see a change. I don't mean to minimize it, but I don't see it as being a consequential number because we are looking at the individuals who would be toward the more senior end of the teams, let's say. I mean, they have got 15, 16 or 17 years in. Those individuals have a significant reason to want to seek a Reserve assignment, and the higher their number gets, the more beneficial it is to them.

If they have got 19 years of Active Duty time and need only one year then to qualify for a pension, they are going to serve that 8 years because if you take a look at what that pension is worth to them at age 60, they are going to do it whether they have to do 8 years or whether they do one year. The absolute numbers impact for those who would qualify is relatively low.

I was in a parade this last summer and that was really where I became aware of this 8-year requirement. I may have heard of it before, but it didn't really stick with me before this.

As I was sitting in the back of a convertible waiting for the parade to start, a guy walked up to me, and he identified himself as

a Reserve officer who had put in his 8 years after being passed over for promotion after 16 good years. He says, I thought I would be able to go in and put in 4 years in Reserves. Then I found out they had an 8-year requirement for me. He says, I put in the 8 years. I have got 24 good years, actually 25, he said. But, he says, it just didn't seem fair to me.

That is when I started to become aware of it. I don't think it will make a difference to most of these individuals. I don't think we will see a glut of new people coming.

Let me just say that on the issue of 8 years of continuous Reserve time, I don't want to diminish that as perhaps being something that would be considered a factor, as Mr. Rush has put forward, but I am not aware of that being a major issue.

When you wind up in the Reserves, particularly in the more senior positions, you are looking for billets or assignments wherever you can. You hop into a non-pay slot in a control group. You come back. You hope to catch a unit here. I know people that go halfway across the country to try to stay in a pay slot because it is more likely they can get promoted if they are in a slot like that.

So I am not sure the benefit here of continuous 8 years, of what that really represents, because you are really not, so to speak, in one assignment and so forth. Sometimes it is advantageous, the more Active Duty time they have had, because they have had senior experience behind them.

Mr. LANCASTER. Thank you.

Thank you, Mr. Chairman.

Mr. SKELTON. Thank you.

Mr. Rush, let me ask you. As currently written, the legislation applies only to individuals who complete 20 years of service after the effective date are leaving Active Duty, both voluntarily and involuntarily, and are joining the Reserves in order to qualify for retirement. Are we likely to receive complaints about inequitable treatment?

Mr. RUSH. I think, Mr. Chairman, that our experience has been that whenever you add a new benefit or change an entitlement or qualification procedure and you do it prospectively, that you always get cards and letters from those who went before, and who, for whatever reason, hadn't qualified and believe that it is only fair that that provision should apply to them as well.

Mr. SKELTON. Thank you very much.

Mr. KREIDLER. Mr. Chairman, if I could maybe respond to that, too.

I would just like to say that my impression is you would probably have less complaints about that as opposed to many of the other benefits, only because the individuals would seek extra time because of the requirement, but earn points for that period of time. Therefore, their pension is going to reflect a slightly higher positive gain.

So sometimes they don't complain quite as readily. They have got at least something at the end of the pipeline as a result, as opposed to some of the others where we go prospective.

The only prospective aspect is to say that individuals from this point forward would only be required to have 20 good years active

and Reserve as the bill is written, so it really isn't affecting somebody. If they have got that 20 years in, then they would be eligible.

Mr. KYL. Mr. Chairman, this is an intriguing issue which I hadn't thought of. I can see a lot of pros, a lot of cons, and think that this is something we want to look at very carefully. I appreciate you bringing it to our attention.

In one respect, I think a lot of the changes are behind us. Yet, in another respect, I think there are a lot of prospective changes. Just the mere fact that we have a much lower total number of Reserves and, therefore, units and, therefore, locations and, therefore, billets of one kind or another. That is another interesting aspect of this. It is not as easy to find a good place in the Reserves as it used to be with a more robust Reserve contingent. Also, the nature of the mission of the Guard and Reserve may be changing somewhat in relation to the kind of activation strategies that may be under study right now.

All of this has to be put into the mix, and raises some very interesting questions, so I appreciate you bringing it to our attention.

Mr. SKELTON. Mr. Rush, Mike, we thank you very, very much for being with us. We also thank our other witnesses, Ms. Fites, Mr. Goss, for your patience because of the vote. Certainly excellent of you to come over. We appreciate it.

[Whereupon, at 3:40 p.m., the subcommittee was adjourned.]

[The following prepared statement was submitted for the record:]

PREPARED STATEMENT OF CHIEF MASTER SGT. JAMES E. LOKOVIC, USAF (RET.),
DIRECTOR, MILITARY AND GOVERNMENT RELATIONS

Mr. Chairman and distinguished committee members, on behalf of the Air Force Sergeants Association (AFSA), I thank you for the opportunity to present our views. The legislative objectives being addressed by your committee are of special interest and concern to AFSA's 167,000 members.

We stand firmly in support of H.R. 3273, the Military Reserve Retirement Fairness Act. This legislation seeks to amend the current law that requires a military reservist to serve at least 8 years, in addition to any period of regular service, in order to qualify for retirement benefits.

This requirement means that a person who has completed a period of active service—regardless of the number of years—and then transfers to the Reserves, must spend an additional 8 years in reserve status before qualifying for any retirement benefits at all. For example, an 18-year Active Duty veteran who transfers from Active to Reserve status would have to serve a total of 26 years before qualifying for retirement benefits. This situation is clearly unfair.

We do feel the 8 year requirement made sense at one time, when the Defense Department was strongly encouraging career personnel to complete a full 20 years of active service. But, those days are behind us. In response to new political and economic realities, at home and abroad, the United States has been forced to reduce military spending and the size of our military establishment.

We believe all here recognize the extraordinary burdens our young men and women pledge to accept as part of a military career—from the toll on family life to frequent dislocation and uncertainty about the future, and to the commitment to sacrifice their lives, if called upon, to protect our great Nation.

The 8 year requirement clearly discourages voluntary movement from Active to Reserve status—the wrong message to send during a period of downsizing. Additionally, the 8 year requirement creates a hardship on men and women who would rather stay in Active service but, instead, must spend additional years in the Reserve component to qualify for the pension benefits they have earned.

H.R. 3273 would entitle those retiring from the Reserve component to benefits, upon reaching the age of 60, after any combination of Active and Reserve service totaling 20 years. We note that benefits would continue to be based on the current point system that recognizes the difference between Active and Reserve service. H.R. 3273 rewards what is earned, nothing more.

Mr. Chairman, in today's world, the 8 year requirement penalizes the men and women who have served our country with faith and honor. The Military Reserve Retirement Fairness Act would demonstrate to our members, and all active and retired military members, good faith and commitment to their well-being and an appreciation of their contribution to the security of our country.

In closing, Mr. Chairman, thank you for considering AFSA's views as you and your committee continue to examine fair, effective ways to adjust current laws to meet the requirements of the post-Cold War world.



OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
PERSONNEL AND READINESS

CHEMICAL WEAPONS EXPOSURE STUDY UPDATE

JULY 1993

Prepared for:

Staff & Members
House Committee on Veterans' Affairs

Prepared by:

Office of the Director, Information Resources Management
Office of the Assistant Secretary of Defense
(Personnel & Readiness)

(703) 696-8710

QASD (P&R)

DEPARTMENT OF DEFENSE

CHEMICAL WEAPONS EXPOSURE STUDY

UPDATE FOR JULY 1993

SECTION ONE

CHEMICAL WEAPONS SITE LOCATION DATABASE

SECTION TWO

CHEMICAL WEAPONS TEST DOCUMENT REPOSITORIES

SECTION THREE

CHEMICAL WEAPONS EXPOSURE PERSONNEL DATABASE

SECTION FOUR

ATTACHMENTS

SECTION ONE

CHEMICAL WEAPONS SITE LOCATION DATABASE

SUMMARY

CHEMICAL WEAPONS EXPOSURE SITE DATABASE

The attached Site Location Database Summary was compiled by the Chemical Warfare/Chemical and Biological Defense Information Analysis Center (CBIAC). CBIAC is under the direction of Defense Technical Information Center (DTIC).

The Database Summary includes 117 entries, some of which are duplicate due to names changes or reorganizations (example; Camp Detrick is listed, as is the current organization Fort Detrick).

The sites where most of the testing using human subjects was conducted, and where most of the records originated or are still stored are:

Edgewood Arsenal, MD
Dugway Proving Ground, UT
Naval Research Laboratory, MD
Fort Detrick, MD
Fort McClellan, AL

Sites where field testing was conducted, or where documented incidents of exposure have been found, are listed below. The sites with an asterisk denote sites that are no longer in use:

*Bushnell Field, FL
*San Jose Island, Panama (also listed as Fort Clayton)
*Camp Sibert, AL
Huntsville Arsenal, AL
*Horn Island Installation, MS
Tooele Army Depot, UT
Great Lakes Naval Training Center, IL

REPORT

CW

SITE LOCATION

DATABASE

SUMMARY



*The Chemical Warfare/
Chemical and Biological
Defense Information Analysis
Center is a DoD information
analysis center operated by
Battelle Memorial Institute*

SITE NAME	OPERATOR	CITY	STATE	CTRY	ACTIVITY	REMARKS	SITE ID	NS
COLTS BECK NAVAL PIER	NAVY	EARLE	NJ	UNITED STATES	TRANSPORT		ENS	
CRANE ARMY AMMUNITION ACTIVITY	ARMY		IA	UNITED STATES	TRANSPORT		CAA	
CRANE NAVAL AMMUNITION DEPOT	NAVY	CRANE	IN	UNITED STATES	TRANSPORT		ENAD	
DESERET CHEMICAL WARFARE DEPOT			UT	UNITED STATES	TRANSPORT, STORAGE		DESERET	
DOW CHEMICAL COMPANY	INDUSTRIAL	PITTSBURGH	CA	UNITED STATES	TRANSPORT		DOY	
DUCWAY PROVING GROUND	ARMY		UT	UNITED STATES	TRANSPORT, ROTBE	H	DPO	
EDGEWOOD ARSENAL	ARMY	EDGEWOOD	MO	UNITED STATES	TRANSPORT, STORAGE, PRODUCTION, ROTBE	H	EA	
EL TORO MARINE CORPS AIR STATION	MARINE CORPS		CA	UNITED STATES	TRANSPORT		TORO	
ELMENDORF AIR FORCE BASE	AIR FORCE		AK	UNITED STATES	TRANSPORT		ELM	
ENVIRONMENTAL TECHNOLOGIES GROUP, INC.	OTHER	BALTIMORE	MD	UNITED STATES	ROTBE			
FALLON NAVAL AIR STATION	NAVY		NY	UNITED STATES	TRANSPORT		FALL	
FIRELANDS PLANT	ARMY	FOSTORIA	OH	UNITED STATES	PRODUCTION			
FORT BRAGG	ARMY		NC	UNITED STATES	TRANSPORT		BRAG	
FORT CHURCHILL		RIVERS		MANITIBA CANADA	TRANSPORT		FCA	
FORT CLAYTON	ARMY			PANAMA CANAL ZONE	TRANSPORT, ROTBE	TROPICAL TEST CENTER H	CZ	
FORT DETRICK	ARMY		MD	UNITED STATES	ROTBE, SPECIAL PROJECTS	FORMERLY KNOWN AS CAMP DETRICK H	CAMP DETRICK	
FORT GREELEY	ARMY		AK	UNITED STATES	TRANSPORT, ROTAE	ARCTIC TEST CENTER H	GAX	
FORT MCCLELLAN	ARMY	GAZOSON	AL	UNITED STATES	TRANSPORT, STORAGE, TRAINING	FORMERLY KNOWN AS CAMP DETTRICK H	FORT MCCLELLAN	
FORT RICHARDSON	ARMY		AK	UNITED STATES	TRANSPORT		FR	

SITE/AREA	TYPE NAME	BRANCH/OPERATION	CITY	STATE	CTRY	ACTIVITY	REMARKS	DATE	W5
FORT STEWART		ARMY		GA	UNITED STATES	TRANSPORT			FTST
GEOMET TECHNOLOGIES, INC.		OTHER	GAITHERSBURG	MO	UNITED STATES	ROTAE			
GERMANY--VARIOUS SITES					GERMANY	TRANSPORT, STORAGE	RETROGRADE PROGRAM		
GRIMM ARMY AIR FIELD		ARMY	FORT RNDY	KY	UNITED STATES	TRANSPORT			GAAF
GRANITE PEAK INSTALLATION			TROBLE	VT	UNITED STATES	SPECIAL PROJECTS			
GREAT LAKES NAVAL TRAINING CENTER		NAVY		IL	UNITED STATES	TRAINING, ROTAE	H		
GULF CHEMICAL WARFARE DEPOT			HUNTSVILLE	AL	UNITED STATES	TRANSPORT, STORAGE			OCVD
HARTSDORF ARMY AMMUNITION PLANT		ARMY		WV	UNITED STATES	TRANSPORT, STORAGE			HAAP
HORN ISLAND INSTALLATION		ARMY	PASCAGOULA	MS	UNITED STATES	ROTAE, SPECIAL PROJECTS, PRODUCTION, STORAGE	H		
HUNTSVILLE ARSENAL		ARMY	HUNTSVILLE	AL	UNITED STATES	PRODUCTION, STORAGE	H		
ITT RESEARCH INSTITUTE		OTHER	CHICAGO	IL	UNITED STATES	ROTAE			
JOHNSTON ATOLL					UNITED STATES	TRANSPORT, STORAGE, DISPOSAL			JA
KANAWHA PLANT		ARMY	SOUTH CHARLESTON	WV	UNITED STATES	PRODUCTION			
KEYPORT NAVAL TORPEDO STATION		NAVY		VA	UNITED STATES	TRANSPORT			KEY
LETTERKENNY BROWARCE DEPOT		ARMY		PA	UNITED STATES	TRANSPORT			L0D
LEXINGTON-BLUE GRASS DEPOT ACTIVITY		ARMY	RICHMOND	KY	UNITED STATES	TRANSPORT, STORAGE			L8DA
LITTLE ROCK AIR FORCE BASE		AIR FORCE	LITTLE ROCK	AR	UNITED STATES	TRANSPORT			LAAVB
LBS ALAMITOS NAVAL AIR STATION		NAVY	LBS ALAMITOS	CA	UNITED STATES	TRANSPORT			LALN
LIMAHOMBE NAVAL MAGAZINE		NAVY		HI	UNITED STATES	TRANSPORT			LLL
MADDILL ARMY AIR BASE		ARMY	TAMPA	FL	UNITED STATES	TRANSPORT			MAAB

SITE NAME	AGENCY	CITY	STATE	COUNTRY	ACTIVITY	REMARKS	FILE SYMBOL
WARDWELL PLANT		NEW MARTINSVILLE	WV	UNITED STATES	PRODUCTION		
WALESTER ARMY AMMUNITION PLANT	ARMY		OK	UNITED STATES	TRANSPORT		WMA
WIDWEST RESEARCH INSTITUTE	OTHER	KANSAS CITY	MO	UNITED STATES	ROTAE		
WISA RESEARCH CORPORATION	OTHER	EVANS CITY	PA	UNITED STATES	ROTAE		
MUSCLE SHOALS PHOSPHATE DEVELOPMENT WORKS	ARMY	MUSCLE SHOALS	AL	UNITED STATES	PRODUCTION		MSPOW
WAVAJO ARMY DEPOT	ARMY		AZ	UNITED STATES	TRANSPORT		WAZ
NAVAL MAGAZINE	NAVY		GA	UNITED STATES	TRANSPORT		NAV9
NAVAL WIRE DEPOT	NAVY	YORKTOWN	VA	UNITED STATES	TRANSPORT		WMD
NAVAL RESEARCH LABORATORIES	NAVY	WASHINGTON	DC	UNITED STATES	ROTAE	H	NRL
NAVAL WEAPONS STATION	NAVY	CONCORD	CA	UNITED STATES	TRANSPORT		CSW
NAVY AMMUNITION DEPOT-EULE	NAVY	ELIZABETH	NJ	UNITED STATES	TRANSPORT	POINT OF DEPARTURE FOR SEA DISPOSAL OPERATION CHASE	
NEW ORLEANS PORT OF ENTRY		BRAITHWAITE	LA	UNITED STATES	TRANSPORT		NOPE
NEW RIVER MARINE CORPS AIR FIELD	MARINE CORPS		NC	UNITED STATES	TRANSPORT		NRAP
NEWPORT ARMY AMMUNITION PLANT	ARMY	NEWPORT	TN	UNITED STATES	TRANSPORT, STORAGE, PRODUCTION		NAAP
PENDLETON MUNICIPAL AIRPORT	OTHER		VA	UNITED STATES	TRANSPORT		PMBA
PHILLIPS ARMY AIR FIELD	ARMY	ANDERSON PROVING GROUND	SD	UNITED STATES	TRANSPORT		PAAF
PINE BLUFF ARSENAL	ARMY	PINE BLUFF	AR	UNITED STATES	TRANSPORT, STORAGE, PRODUCTION		PBA
POPE AIR FORCE BASE	AIR FORCE	POPE	NC	UNITED STATES	TRANSPORT		PAFB
PUEBLO DEPOT ACTIVITY		PUEBLO	CO	UNITED STATES	TRANSPORT, STORAGE		PUDA
QUANTICO MARINE CORPS AIR FIELD	MARINE CORPS	QUANTICO	VA	UNITED STATES	TRANSPORT		QUAF

SITE NAME	USE NAME	USE/OPERATION	CITY	STATE	CTR	ACTIVITY	ADDRESS	SITE	IND
RAHWAY ARSENAL			RAHWAY	NJ	UNITED STATES	TRANSPORT		RAH	
RIVERS ISLAND		OTHER		NY		NOTAE			
ROCKY MOUNTAIN ARSENAL		DENVER		CO	UNITED STATES	TRANSPORT, DISPOSAL, PRODUCTION		ROA	
SAN BERNARDINO LOADING PLANT			SAN BERNARDINO	CA	UNITED STATES	PRODUCTION			
SAN JACINTO BRONZE DEPOT			HOUSTON	TX	UNITED STATES	TRANSPORT		SJD	
SAN JOSE ISLAND					PANAMA CANAL ZON	NOTAE			
SAVANNA BRONZE DEPOT			SAVANNA	IL	UNITED STATES	TRANSPORT		SVDD	
SEAL BEACH NAVAL WEAPONS STATION		NAVY		CA	UNITED STATES	TRANSPORT		SBCA	
SMALL BOAT NET STORAGE BASIN		NAVY	CHARLESTON	SC	UNITED STATES	TRANSPORT		SSSB	
SOUTHERN RESEARCH INSTITUTE		OTHER	BIRMINGHAM	AL	UNITED STATES	NOTAE			
SRI INTERNATIONAL		OTHER	WENLO PARK	CA	UNITED STATES	NOTAE			
ST. LOUIS PLANT		ARMY	EAST ST. LOUIS	IL	UNITED STATES	PRODUCTION			
SUFFIELD TEST CENTER			RALSTON		ALBERTA CANADA	TRANSPORT, STORAGE, NOTAE		SUF	
SUNNY POINT NAVAL PIER		NAVY	SUNNY POINT	NC	UNITED STATES	TRANSPORT		SUN	
THEODORE NAVAL MAGAZINE		NAVY	MOBILE	AL	UNITED STATES	TRANSPORT		TMD	
TIMBLE ARMY DEPOT		ARMY	TOOLE	UT	UNITED STATES	TRANSPORT, STORAGE, DISPOSAL		TEAD	
TRAVIS AIR FORCE BASE		AIR FORCE		CA	UNITED STATES	TRANSPORT		TAFB	
TRUITECH, INC.		OTHER	RIVERHEAD	NY	UNITED STATES	NOTAE			
TULALIP BACKUP STORAGE DEPOT			TULALIP	WA	UNITED STATES	TRANSPORT		TUL	
TURLOCK PLANT			TURLOCK	CA	UNITED STATES	PRODUCTION			

SITE/INC	HELM NAME	VERB/DISPLACEMENT	CITY	STATE	CNTY	ACTIVITY	HELMARKS	SITE #	IND
UNATILLA DEPOT ACTIVITY			HEMISTON	DR	UNITED STATES	TRANSPORT, STORAGE		UNDA	
UNIVERSITY OF CHICAGO		UNIVERSITY	CHICAGO	IL	UNITED STATES	ROTHE			
UPPER KIPAPA MILITARY RESERVATION				HI	UNITED STATES	TRANSPORT		UNMI	
VIGOR PLANT		ARMY	TERRE HAUTE	IN	UNITED STATES	SPECIAL PROJECTS	H		
WAINWRIGHT ARMY AIR FIELD		ARMY	FORT WAINWRIGHT	AK	UNITED STATES	TRANSPORT		WAAP	
WIDDEY ISLAND NAVAL AIR STATION		NAVY		RI	UNITED STATES	TRANSPORT		WID0	
WRIGHT ARMY AIR FIELD		ARMY		GA	UNITED STATES	TRANSPORT		WRAF	
YUMA TEST STATION			YUMA	AZ	UNITED STATES	TRANSPORT		YTS	

SECTION TWO

CHEMICAL WEAPONS TEST

DOCUMENT REPOSITORIES

OASD (P&R)

WASHINGTON NATIONAL RECORDS CENTER, SUITLAND, MD

13 BOXES OF ARMY SURGEON GENERAL FILES

OVER 1000 LINEAR FEET OF ARMY CHEMICAL CORPS RECORDS

ARCHIVIST LOCATED AND PROVIDED 690 MEDICAL CARDS FROM
MUSTARD GAS EXPERIMENTS CARRIED OUT AT ABERDEEN
PROVING GROUND, MD; BUSHNELL FIELD, FL; DUGWAY PROVING
GROUND, UT

A LIST OF OFFICERS, AND PICTORIAL HISTORY OF THE SAN JOSE
PROJECT, PANAMA, WAS ALSO LOCATED.

*(This project included testing of mustard gas
penetration of protective clothing, and through jungle
canopy/foilage.)*

Attachment A Sample of Medical Treatment Cards

OASD (P&R)

NATIONAL PERSONNEL RECORDS CENTER, ST. LOUIS, MO

EXTENSIVE COLLECTION OF PERSONNEL AND ORGANIZATIONAL
FILES FROM EARLY 1900'S TO PRESENT

RECORDS INCLUDE TECHNICAL TEST INFORMATION, CONTRACT
INFORMATION, PERSONNEL AND MEDICAL RECORDS

PERSONNEL RECORDS INCLUDE MILITARY AND CIVILIANS

U.S. ARMY PERSONNEL RECORDS 1912-60 BURNED IN 1973

U.S. AIR FORCE PERSONNEL RECORDS 1947-63 BURNED

U.S. NAVY PERSONNEL & MEDICAL RECORDS IN TACT

WWII CIVILIAN PERSONNEL RECORDS AVAILABLE BY EMPLOYING
INSTALLATION

EXTENSIVE COLLECTION (MICROFICHE) OF MORNING REPORTS

- Attachment B Sample Page from Records Location Report
- Attachment C Sample Documentation Found in Individual
Research & Experimentation File

OASD (P&R)

DOGWAY PROVING GROUND TECHNICAL LIBRARY

EXTENSIVE COLLECTION OF OVER 60,000 DOCUMENTS ON
CHEMICAL WARFARE CATALOGED ON CBINFONET DATABASE

OVER 10,000 DOCUMENTS HAVE BEEN IMAGED ONTO OPTICAL
DISKS

LOCATED INFORMATION ON TESTS, DATES, SITES, AND AGENTS
BUT NO PERSONNEL IDENTIFIERS

OBTAINED TWO ACCIDENT REPORTS ON CIVILIAN EMPLOYEES
EXPOSED TO CHEMICAL AGENT THROUGH INDUSTRIAL ACCIDENT

Attachment D Copy of Accident Report on Mustard Burn

OASD (P&R)

FISHER LIBRARY, ARMY CHEMICAL WEAPONS SCHOOL
FT. McCLELLAN, AL

LOCATED SOURCE DOCUMENTS USED FOR WWII REPORTS GENERATED
BY DEFENSE TECHNICAL INFORMATION CENTER AND CHEMICAL/
BIOLOGICAL INFORMATION ANALYSIS CENTER

SOURCE DOCUMENTS CITED 28,000 CIVILIAN EMPLOYEES IN
CHEMICAL WEAPONS SERVICE AT HEIGHT OF WWII

NO APPARENT PERSONNEL RECORDS OR ROSTERS

OASD (P&R)

ABERDEEN PROVING GROUND/EDGEWOOD ARSENAL, MARYLAND

ABERDEEN PROVING GROUND/EDGEWOOD ARSENAL IS REPOSITORY
FOR LARGE COLLECTION OF U.S. ARMY CHEMICAL WEAPONS
TESTING PROGRAM RECORDS

COLLECTION INCLUDES 100 LINEAR FEET OF PAPER RECORDS

7,000 SETS OF MEDICAL RECORDS ON MICROFICHE

DEFENSE TECHNICAL INFORMATION CENTER, ALEXANDRIA, VA
CHEMICAL/BIOLOGICAL INFORMATION ANALYSIS CENTER, EDGEWOOD

SPECIAL REPORTS PRODUCED FOR US BY CBIAC AT THE
DIRECTION OF DTIC:

CHEMICAL WEAPONS SITE LOCATION SUMMARY DATABASE

CHEMICAL WARFARE SERVICE UNITS WWII

TRANSPORT OF CHEMICAL WEAPONS 1946-1986

Attachment E *Extract of Report on Chemical Warfare Service
Units (This information can be used to trace
individuals assigned to units via use of
Morning Reports)*

OASD (P&R)

NAVAL RESEARCH LABORATORY, ANACOSTIA, MD

NAVAL RESEARCH LAB HAS EXTRACTED APPROXIMATELY 2300
NAMES OF MILITARY TEST SUBJECTS FROM 11 SCIENTIFIC
NOTEBOOKS KEPT DURING 1942-45

MOST OF THESE TEST SUBJECTS CAME FROM THE NAVAL
TRAINING CENTER AT BAINBRIDGE, MD

THESE RECORDS WERE KEPT BY THE LAST NAME ONLY, IN MOST
CASES. A FEW HAVE FIRST NAME OR INITIALS. THERE WERE
NO SERVICE NUMBERS, ONLY PARTICIPANT NUMBER AND IN SOME
CASES THE NUMBER OF THE TRIAL THEY PARTICIPATED IN

Attachment F Sample of the 50 pages of names extracted
from NRL Researcher Notebooks

OASD (P&R)

UNIVERSITY OF CHICAGO LIBRARY, CHICAGO, IL

THIS RECORDS COLLECTION INCLUDES 82 BOXES FROM THE
OFFICE OF THE VICE PRESIDENT FOR SPECIAL PROJECTS
AT UNIVERSITY OF CHICAGO

IT CONTAINS RECORDS FOR THE YEARS 1940-1969

TWO BOXES HAVE BEEN TAGGED FOR POTENTIAL TEST
INFORMATION ON MUSTARD GAS TESTS

THIS COLLECTION HAS NOT BEEN REVIEWED

SECTION THREE

CHEMICAL WEAPONS EXPOSURE

PERSONNEL DATABASE

OASD (P&R)

CHEMICAL WEAPONS EXPOSURE PERSONNEL DATABASE

(MAINTAINED BY DEFENSE MANPOWER DATA CENTER)

DATABASE CONSISTS OF FOLLOWING INFORMATION FIELDS:

NAME, BRANCH OF SERVICE

SERVICE OR SOCIAL SECURITY NUMBER

AGE, RANK, OR GRADE IF CIVILIAN

AGENT EXPOSED TO (MUSTARD, LEWISITE, LSD)

PROJECT NAME, START & END DATE

EXPOSURE TYPE (CHAMBER OR FIELD TEST, ACCIDENT)

MILITARY UNIT

LOCATION OF DOCUMENTATION/RECORD

DOCUMENT/RECORD TYPE (MEDICAL, PERSONNEL)

690 NAMES HAVE BEEN ENTERED FROM MEDICAL CARDS FROM 1944-45
(BUSHNELL, EDGEWOOD ARSENAL, DUGWAY PROVING GROUND)

270 NAMES HAVE BEEN FORWARDED FROM SPECIAL COMMENDATION
ORDER 152 DATED 25 JUNE 1944

2300 NAMES FROM NAVAL RESEARCH LAB HAVE BEEN FORWARDED
FOR ENTRY INTO DATABASE (WWII MUSTARD GAS TESTS)

300 MEDICAL RECORDS HAVE BEEN LOCATED AT NPRC, ST. LOUIS
(EXPERIMENTS FROM LATE 1960'S USING LSD, CANNOBINAL,
VARIOUS HALLUCINOGENICS)

800 ADDITIONAL MEDICAL RECORDS FROM SAME TEST PERIOD HAVE
BEEN TRACED TO U.S. ARMY MICROFICHERD DOCUMENTS LOCATED
AT ABERDEEN PROVING GROUND (ORIGINAL MEDICAL RECORDS WERE
INTERFILED WITH PERSONNEL RECORDS IN ST. LOUIS)

3200 NAMES HAVE BEEN SENT TO DMDC FOR THE DATABASE

Attachment G Copy of Army Letter Directing Full Records
Search 1993

The SAS System

10:39 Wednesday, June 30, 1993 2

OBS	BRANCH	SSN	SVCNUM	DOB	ACC	RANK	AGENTS	ILOC	STATE	ZIP
27	A		34925415		19	PVT	H	BUSHNELL	FL	
28	A		31268730			PFC	H	BUSHNELL	FL	
29	A		31805808		26		YESICANT	EDGEWOOD ARSENAL	MO	
30	A		19182325		28	PVT	H	BUSHNELL	FL	
31	A		19042161			T/3	CLASSIFIED	DUGWAY	UT	
32	A		31457264			PVT	GAS	EDGEWOOD ARSENAL	MO	
33	A		42013111		25	PVT	GAS	EDGEWOOD ARSENAL	MO	
34	A		19049966			SGT	CLASSIFIED	EDGEWOOD ARSENAL	MO	
35	A		6394492		26	T/8	H	BUSHNELL	FL	
36	A		6394492		26	T/8	MOBILE CWS UNIT	BUSHNELL	FL	
37	A		31297293		24	LST SGT	CLASSIFIED	DUGWAY	UT	
38	A		31297293		24	LST SGT	OC CWS	DUGWAY	UT	
39	A		39008575			T/4	CLASSIFIED	DUGWAY	UT	
40	A		39008575			T/4	OC CWS	DUGWAY	UT	
41	A		39277358		20	PVT	GAS	EDGEWOOD ARSENAL	MO	
42	A		36481726			TEC 5	H	BUSHNELL	FL	
43	A		31327872		37	PVT				
44	A		31849079		20	PVT	GAS	EDGEWOOD ARSENAL	MO	
45	A		31730179			PVT	H	BUSHNELL	FL	
46	A		39680713		24	PFC	CLASSIFIED	DUGWAY	UT	
47	A		33203219			PVT	GAS	EDGEWOOD ARSENAL	MO	
48	A		32957192		19	PVT	GAS	EDGEWOOD ARSENAL	MO	
49	A		32269034		21	PFC	H VAPOR	EDGEWOOD ARSENAL	MO	
50	A		32957596		19	PVT	GAS	EDGEWOOD ARSENAL	MO	
51	A		34176620		27	SGT	H	BUSHNELL	FL	
52	A		19052369			PFC	CLASSIFIED	DUGWAY	UT	
OBS	PROJECT	BEGDATE	ENDDATE	EXPTYPE	NARRATIV	UNIT	SLOC	DOCTYPE	DOGRUP	
27	BUSHNELL	441005	441207		YES		SUITLAND	MEDICAL		
28	BUSHNELL	440226	440311	FIELD TRIALS	YES		SUITLAND	MEDICAL		
29	BUSHNELL	440824		CHAMBER TEST	YES		SUITLAND	MEDICAL		
30	BUSHNELL	440819	441117	TRIAL TEST	YES	6 M T B	SUITLAND	MEDICAL		
31	BUSHNELL	450202	450411	TEST	YES	DPG MOBILE CWS UNIT	SUITLAND	MEDICAL		
32	BUSHNELL	000824		TEST	YES	TSU 9770 CWS DET/4 MED DIV	SUITLAND	MEDICAL		
33	BUSHNELL	440516		TEST	YES	26 M T B CP GT	SUITLAND	MEDICAL		
34	BUSHNELL	440516		TEST	YES	169TH CML SC CO CWS	SUITLAND	MEDICAL		
35	BUSHNELL	440605	440925	TEST	YES	9770 CWS DET/4 MED DIV OC C	SUITLAND	MEDICAL		
36	BUSHNELL	440605	440925	TEST	YES	125TH CHEMPROCCO	SUITLAND	MEDICAL		
37	BUSHNELL	440609		TEST	YES	125TH CHEMPROCCO	SUITLAND	MEDICAL		
38	BUSHNELL	440609		TEST	YES	121ST CWS	SUITLAND	MEDICAL		
39	BUSHNELL	441209		TEST	YES	121ST CWS	SUITLAND	MEDICAL		
40	BUSHNELL	441209		TEST	YES	TSU 9770 CWS DET/4 MED DIV	SUITLAND	MEDICAL		
41	BUSHNELL	441209		TEST	YES	TSU 9770 CWS DET/4 MED DIV	SUITLAND	MEDICAL		
42	BUSHNELL	441209		TEST	YES	PP12 SGT/0000	SUITLAND	MEDICAL		

ATTACHMENTS

- A - Sample of Medical Treatment Cards
- B - Sample Page from Records Location Report
- C - Sample Documentation Found in Individual Research and Experimentation File
- D - Copy of Accident Report on Mustard Burn
- E - Extract of Report on Chemical Warfare Service Units (*This information can be used to trace individuals assigned to units via use of Morning Reports*)
- F - Sample of the 50 pages of names extracted from NRL Researcher Notebooks
- G - Copy of Army Letter Directing Full Records Search 1993

Dugway, VT 8/44

VOLUNTEER, MEDICAL DIVISION, CC-CNS

1. LAST NAME: [REDACTED] 2. FIRST NAME AND MIDDLE INITIAL: [REDACTED] A. S. S. NO. 11006252

3. GRADE: Cpl. 4. COMPONENT: BCU 5. SERVICE: 49 NOV

14. DATE OF ARRIVAL: 5 AUG. 1944

15. DATE OF LEAVING: 12 SEPT. 1944

This man volunteered and participated in tests conducted by the Medical Division, CC-CNS at Dugway Proving Ground, Tooele, Utah, 5 AUG - 31 AUG 1944.

The details of these tests are classified information, filed in the Office of the Chief, Medical Division, CC-CNS.

16. LINE OF DUTY: NOT REQUIRED

17. INJURY, ILLNESS, OR OTHER: No injury and no illness was produced, discharged no disease.

21. SIGNATURE: [Signature] 11/21
Medical Corps, U. S. Army.

Edgewood

A

Volunteer, Med. Div., CC-CNS

1. LAST NAME: [REDACTED] 2. FIRST NAME AND MIDDLE INITIAL: [REDACTED] A. S. S. NO. 11006252

3. GRADE: Lt. Col. 4. COMPONENT: 54th T. B. Co. Art. 5. SERVICE: 25

14. DATE OF ARRIVAL: Arrived Edgewood 24 Aug.

15. DATE OF LEAVING: Departed Edgewood

This man volunteered and participated in tests conducted by the Medical Division, CC-CNS at Edgewood Arsenal.

L.C.D. YES

16. LINE OF DUTY: NOT REQUIRED

17. INJURY, ILLNESS, OR OTHER: Exposed to vesicant agent in the man chamber while wearing portable protective clothing, & gas masks.

Developed slight erythema of back & chest.

21. SIGNATURE: [Signature] Medical Corps, U. S. Army.

A

211

NATIONAL ARCHIVES AND RECORDS ADMINISTRATION
 LOCATION REPORT (07)
 ST. LOUIS NATIONAL PERSONNEL RECORDS CENTER (NPR-GPR)

07/19/81

AC	BEGINNING LOCATION	ENDING LOCATION	ACCESSION NUMBER	SUB GRP	VOL	SP	ASTR	C	AUTO	DISP	DISPOSAL AUTHORITY	DISP DATE	SERIES DESCRIPTION
X	V1-04-01-7-6	V1-04-01-9-1	338-78-0236	VLT	8	S	S	A	Y	AR345/220/180	H	U	ARSE REDSTONE ADM 55
X	V1-04-01-9-2	V1-04-02-1-2	338-78-0237	VLT	13	S	S	A	Y	340-18/1304/14	H	U	ARSE REDSTONE TECH REPT 4554
X	V1-04-02-1-3	V1-04-02-4-2	338-78-0238	VLT	18	S	S	A	Y	340-18/1304/14	H	U	ARSE REDSTONE TECH REPT 54
X	V1-04-02-4-3	V1-04-02-5-1	338-78-0239	VLT	5	S	S	A	Y	AR345/220/180	H	U	ARSE REDSTONE ADM 5152
X	V1-04-02-5-2	V1-04-02-5-3	338-78-0240	VLT	2	S	S	A	Y	340-18/228/01A	H	U	PRVG GRD WHITE SANDS HIST BKGRD 82
X	V1-04-02-5-4	V1-05-01-5-2	338-78-0241	VLT	97	S	S	A	Y	340-18/1304/14	H	U	PRVG GRD WHITE SANDS TECH REPT 6465
X	V1-05-01-5-3	V1-05-01-5-6	338-78-0242	VLT	4	S	S	A	Y	340-18/1304/14	H	U	PRVG GRD WHITE SANDS TECH REPT 5261
X	V1-05-01-6-1	V1-05-01-6-4	338-78-0243	VLT	4	S	S	A	Y	340-18/228/01A	H	U	PRVG GRD WHITE SANDS HIST BKGRD 150
X	V1-05-01-6-5	V1-05-02-3-6	338-78-0244	VLT	44	S	S	A	Y	340-18/1304/14	H	U	PRVG GRD WHITE SANDS TECH REPT 6062
X	V1-05-02-4-1	V1-05-02-4-1	338-78-0245	VLT	1	S	S	A	Y	340-18/501/01A	H	U	PRVG GRD WHITE SANDS INSTR 60
X	V1-05-02-4-2	V1-05-02-4-4	338-78-0246	VLT	3	S	S	A	Y	340-18/1304/14	H	U	PRVG GRD WHITE SANDS TECH REPT 5458
X	V1-05-02-4-5	V1-06-01-5-5	338-78-0247	VLT	127	S	S	A	Y	340-18/1304/14	H	U	PRVG GRD WHITE SANDS TECH REPT 6063
X	V1-06-01-5-6	V1-06-03-1-6	338-78-0248	VLT	109	S	S	A	Y	340-18/1304/14	H	U	PRVG GRD WHITE SANDS TECH REPT 5163
X	V1-06-03-4-1	V1-06-03-4-3	338-78-0249	VLT	3	S	S	A	Y	AR345/220/202/11	H	U	PRVG GRD WHITE SANDS OPER PROG 5058
X	V1-06-03-4-4	V1-06-03-5-1	338-78-0250	VLT	4	S	S	A	Y	340-18/1304/14	H	U	PRVG GRD WHITE SANDS TECH REPT 5154
X	V1-06-03-5-2	V1-06-03-5-3	338-78-0251	VLT	2	S	S	A	Y	340-18/1301/01A	H	U	PRVG GRD WHITE SANDS INSTR 5158
X	V1-06-03-5-4	V1-06-03-6-1	338-78-0252	VLT	4	S	S	A	Y	340-18/1304/14	H	U	PRVG GRD WHITE SANDS TECH REPT 5150
X	V1-06-03-6-2	V1-06-03-6-2	338-78-0253	VLT	1	S	S	A	Y	AR345/220/180	H	U	PRVG GRD WHITE SANDS ADM 57
X	V1-06-03-6-3	V1-06-03-7-3	338-78-0254	VLT	7	S	S	A	Y	340-18/1301/01A	H	U	PRVG GRD WHITE SANDS INSTR 5357
X	V1-06-03-7-4	V1-06-03-7-4	338-78-0255	VLT	1	S	S	A	Y	340-18/1301/01A	H	U	PRVG GRD WHITE SANDS INSTR 5356
X	V1-06-03-7-5	V1-06-03-8-1	338-78-0256	VLT	3	S	S	A	Y	AR345/220/180	H	U	PRVG GRD WHITE SANDS ADM 5155
X	V1-06-03-8-2	V1-06-03-8-5	338-78-0257	VLT	4	S	S	A	Y	AR345/220/180	H	U	PRVG GRD WHITE SANDS ADM 4654
X	V1-06-03-8-6	V1-06-03-8-6	338-78-0258	VLT	1	S	S	A	Y	AR345/220/180	H	U	PRVG GRD WHITE SANDS ADM 5255
X	V1-06-03-9-1	V1-07-01-7-2	338-78-0259	VLT	50	S	S	A	Y	340-18/1304/14	H	U	PRVG GRD WHITE SANDS TECH REPT 4655
X	V1-07-01-7-3	V1-07-01-7-3	338-78-0260	VLT	1	S	S	A	Y	AR345/220/180	H	U	PRVG GRD WHITE SANDS ADM 4654
X	V1-07-01-7-4	V1-07-01-7-5	338-78-0261	VLT	14	S	S	A	Y	340-18/1304/14	H	U	PRVG GRD WHITE SANDS TECH REPT 4658
X	V1-07-02-F-1	V1-07-02-F-4	338-78-0262	VLT	4	S	S	A	Y	340-18/1304/14	H	U	PRVG GRD WHITE SANDS TECH REPT 5152
X	V1-07-02-F-5	V1-07-02-5-4	338-78-0263	VLT	30	S	S	A	Y	340-18/1301/01A	H	U	ARSE EDGEWOOD INSTR 4514
X	V1-07-02-5-5	V1-07-03-2-2	338-78-0264	VLT	40	S	S	A	Y	340-18/1301/01A	H	U	ARSE EDGEWOOD INSTR 4516
X	V1-07-03-2-3	V1-07-03-3-3	338-78-0265	VLT	7	S	S	A	Y	340-18/1304/14	H	U	ARSE ROCK ISLAND TECH REPT 5159
X	V1-07-03-3-4	V1-07-03-6-5	338-78-0266	VLT	20	S	S	A	Y	340-18/1304/14	H	U	HARRY DIAMOND LAB TECH REPT 4459
X	V1-07-03-6-6	V1-07-03-8-2	338-78-0267	VLT	9	S	S	A	Y	340-18/1304/14	H	U	BIO LAB FT DETRICK TECH REPT 5084
X	V1-07-03-8-3	V1-07-03-8-3	338-78-0268	VLT	1	S	S	A	Y	340-18/211/03	H	U	BIO LAB FT DETRICK OPER PROG 6061
X	V1-07-03-8-4	V1-07-04-F-6	338-78-0270	VLT	1	S	S	A	Y	340-18/1301/14	H	U	ARSE EDGEWOOD TECH REPT 6061
X	V1-07-04-1-1	V1-07-04-3-1	338-78-0271	VLT	13	S	S	A	Y	340-18/1304/14	H	U	ARSE EDGEWOOD TECH REPT 5155
X	V1-07-04-3-2	V1-07-04-6-2	338-78-0272	VLT	13	S	S	A	Y	340-18/1301/01A	H	U	ARSE EDGEWOOD INSTR 4367
X	V1-07-04-6-3	V1-07-04-7-6	338-78-0273	VLT	16	S	S	A	Y	AR345/220/180	H	U	ARSE EDGEWOOD ADM 4667
X	V1-07-04-8-1	V1-07-04-8-4	338-78-0274	VLT	4	S	S	A	Y	AR345/220/180	H	U	ARSE EDGEWOOD ADM 4863
X	V1-07-04-8-5	V1-07-04-9-4	338-78-0276	VLT	6	S	S	A	Y	340-18/502/01B	H	U	ARSE EDGEWOOD INTEL/DATA 5080
X	V1-07-04-9-5	V1-08-01-1-4	338-78-0276	VLT	12	S	S	A	Y	340-18/1304/14	H	U	BIO LAB FT DETRICK TECH REPT 5903
X	V1-08-01-1-5	V1-08-01-1-6	338-78-0277	VLT	1	S	S	A	Y	340-18/501/01A	H	U	BIO LAB FT DETRICK INSTR 5903
X	V1-08-01-2-1	V1-08-01-2-3	338-78-0278	VLT	3	S	S	A	Y	340-18/1304/14	H	U	BIO LAB FT DETRICK TECH REPT 507
X	V1-08-01-2-4	V1-08-01-2-4	338-78-0279	VLT	1	S	S	A	Y	340-18/211/03	H	U	BIO LAB FT DETRICK OPER PROG 6061
X	V1-08-01-2-5	V1-08-01-2-6	338-78-0280	VLT	2	S	S	A	Y	340-18/1304/14	H	U	BIO LAB FT DETRICK TECH REPT 5880
X	V1-08-01-3-1	V1-08-01-3-1	338-78-0281	VLT	1	S	S	A	Y	340-18/1304/14	H	U	BIO LAB FT DETRICK TECH REPT 5860
X	V1-08-01-3-2	V1-08-01-4-3	338-78-0282	VLT	8	S	S	A	Y	340-18/1304/14	H	U	BIO LAB FT DETRICK TECH REPT 5860
X	V1-08-01-4-4	V1-08-01-4-5	338-78-0283	VLT	1	S	S	A	Y	340-18/211/03	H	U	BIO LAB FT DETRICK OPER PROG 6060
X	V1-08-01-5-1	V1-08-01-5-2	338-78-0284	VLT	3	S	S	A	Y	AR345/220/180	H	U	BIO LAB FT DETRICK ADM 588
X	V1-08-01-7-2	V1-08-01-7-2	338-78-0285	VLT	1	S	S	A	Y	340-18/220/180	H	U	BIO LAB FT DETRICK ADM 587
X	V1-08-01-7-3	V1-08-01-7-3	338-78-0286	VLT	1	S	S	A	Y	340-18/1304/14	H	U	BIO LAB FT DETRICK TECH

VX Study
PAM CE 12/27/60

VOLUNTEER'S PARTICIPATION AGREEMENT
U. S. ARMY CHEMICAL RESEARCH AND DEVELOPMENT LABORATORIES
U. S. ARMY CHEMICAL CENTER, MARYLAND

[Redacted Name]

UOL # 1880

NAME _____

Age _____ Race _____ Grade _____ Serial No. _____

Organization _____

Name of Nearest Relative _____

Address of Nearest Relative _____

Telephone Number of Nearest Relative _____

I, _____, have received, read and understand a document entitled, "Medical Research Volunteer Program," copy of which is annexed hereto, and that the general nature of the experiments I have volunteered to participate in have been explained from the standpoint of possible hazards to my health. It is my understanding that the experiments are so designed, based on the results of animal and previous human experimentation, that the anticipated results will justify the performance of the experiment. I understand further that experiments will be so conducted as to avoid all unnecessary physical and mental suffering and injury, and that I will be at liberty to request that the experiments be terminated at any time if in my opinion I have reached the physical or mental state where continuation of the experiments becomes undesirable.

I recognize that in the pursuit of certain experiments transitory disfigurement may occur and when such reactions seem especially likely to occur I will be so advised. I recognize, also, that under these circumstances, I must rely upon the skill and wisdom of the physician supervising the experiment to institute whatever medical or surgical measures are indicated to protect me.

There has been no coercion, element of fraud or deceit, undue moral suasion or other adverse pressure brought to bear in my volunteering for this duty. I have done so of my own free will, completely aware of all hazards, rewards and recognition involved.

DATE: 13 January 1961 WITNESS: Medical Officer 1/12/61
SIGNED: [Signature] WITNESS: 1/12/61 Sgt [Signature]

R

TEST SUMMARY

11C

1 RA 12 207 472
RA

NAME _____

RANK _____ S.N. _____

TYPE OF TEST

DATE

- 1. TP 1710 Sum 17 Sept 19 1960
- 2. TP 17093 (Skill) 26 Sept Thru 76
- 3. TP 1710 Sum 17 Sept 1960
- 4. TP-1171A - Kansas 2551 15 Thru 28 1960

5. _____ SP4 5216 RA 12 207 472
Company A 75th Engineer Bn, Fort George G Meade, Maryland

6. _____
Part 2, SO #174, DA, Bqs, 75th Engineer Battalion (Const),
Fort George G. Meade, Maryland 20755, 22 August 1960.

REPORTED: 2 September 1960

RELEASED: 3 Nov 68

7. _____

8. _____

The medical records of this volunteer have been reviewed and he is hereby released from the Human Volunteer Program.

Date 10/1/68

[Signature]
Medical Officer

26 June 1981

MEMORANDUM FOR RECORD

SUBJECT: Mustard Agent Exposure - [REDACTED]

WD-9 *Lynn
Angleton*

1. This MFR has been written from the last available information as of COB 25 June 1981.

2. On Monday, 22 June 1981, at approximately 1245 hours, a surveillance group of five personnel started operations inside Building 2005 to collect 5 one liter samples of mustard using SOP SDSTE 356, dated 2 April 1981.

3. The transfer team consisted of:

[REDACTED] Team Leader
[REDACTED] Safety Man

4. The work area for the Building 2005 operation is seen in Figure 1 with 4 workers inside Building 2005 and the safety man outside. The layout for the mustard transfer is shown in Figure 2 with the following major items present:

a. The mustard ton container located on a ton container cradle. The cradle allows for rocking of the ton container and places the ton container about 24 inches above the floor.

b. A decon container filled with STB slurry under the ton container valves.

c. The one liter container to be filled and the ton container valve protector filled with decon under it.

d. Two bubbler locations.

e. A decon shuffle box for boot decon before exiting building.

f. The agent transfer mechanism attached to the ton container. The system is similar to the unit shown in Figure 3. Figure 4 shows the schematic of the unit used. The system allowed for gravity filling and nitrogen purge.

REPORT E

SERVICE RECORDS OF CHEMICAL WARFARE SERVICE UNITS WORLD WAR II



*The Chemical Warfare
Chemical and Biological
Defense Information Analysis
Center is a DoD information
analysis center operated by
Battelle Memorial Institute*

Excerpts from CB-011335

APPENDIX H-1—CHEMICAL MORTAR BATTALIONS

Unit designation (1)	Date activated (2)	TRAINING			OVERSEAS SERVICE			INACTIVATION OR DISBANDMENT		CONVERSION OR REDESIGNATION	
		From (3)	To (4)	Place (5)	From (6)	To (7)	Theater (8)	Date (9)	Place (10)	Date (11)	Comments (12)
1, Co A*	C10 Apr 31	30 Apr 31	12 Mar 42	Schofield Barracks, Hawaii	30 Apr 31	12 Mar 42	HD			24 Feb 30 C12 Mar 42	Activated as 2d Sep Cml Co 91 Cml Co (Mtx)
2, Co A*	16 Apr 35	16 Apr 35 17 Jan 42 10 Jul 42 21 Feb 43	16 Jan 42 9 Jul 42 21 Feb 43 14 May 43	Edgewood Arsenal, Md. Ft. Bragg, N. C. Carolina Maneuver Area Cp. Pickett, Va.	8 Jun 43 10 Jul 43 15 Aug 44	5 Jul 43 14 Aug 44 26 Jul 46	NATO MTO ETO	26 Jul 46	Germany	24 Nov 43 31 Dec 44	Only Hq & Hq Co & Co A were activated in 1935. The remain- ing units of the bn were activated 1 Jan 42.
3	1 Jan 42	1 Jan 42 7 Apr 42 10 Jul 42 27 Oct 43	3 Apr 42 28 Jul 42 25 Oct 42 16 Apr 43	Ft. Benning, Ga. Ft. Bliss, Tex. Louisiana Maneuver Area Ft. Bliss, Tex.	28 Apr 43 30 Jul 43 15 Aug 44	10 Jul 43 15 Aug 44 2 Jan 46	NATO MTO ETO	2 Jan 46	Cp. Patrick Henry, Va.	24 Nov 43 11 Mar 45	
71	C21 Nov 44	21 Nov 44 25 Nov 44	24 Nov 44 7 Jul 45	Cp. Stewart, Ga. Cp. Shelby, Miss.	12 Jul 45	17 Jan 46	SWPA	18 Jan 46	Seattle, Wash.	20 Nov 43 30 Apr 45	Activated as 479 CA Bn (Sep) Redesignated as 479 AAA AW Bn
72	C 7 Dec 44	7 Dec 44 2 Dec 44	1 Dec 44 1 Jun 45	Ft. Leonard Wood, Mo. Cp. Shelby, Miss.	6 Jun 45	18 Apr 46	MIDPAC	18 Apr 46	Oahu, Hawaii	10 Apr 43 1 Apr 44	Activated as 560 CA Bn (Sep) Redesignated as 560 AAA AW Bn
80*	30 Jun 44	30 Jun 44	15 Jan 45	Cp. Swift, Tex.	17 Jan 45	30 Jan 46	SWPA	1 Feb 46	Cp. Stoneman, Calif.	4 Mar 45	
81	25 Apr 42	24 Apr 42 4 Apr 43 7 May 43 12 Jun 43 31 Jul 43 9 Aug 43	2 Apr 43 4 May 43 10 Jun 43 31 Jul 43 9 Aug 43 14 Oct 43	Ft. D. A. Russell, Tex. Louisiana Maneuver Area Cp. Gordon Johnston, Fla. Cp. Pickett, Va. Cp. Bradford, Va. Cp. Pickett, Va.	22 Oct 43	2 Sep 43	ETO	7 Nov 45	Ft. Leonard Wood, Mo.	22 Feb 45	

3

APPENDIX H-4—CHEMICAL SMOKE GENERATOR COMPANIES

Unit designation	Date activated (1)	TRAINING			OVERSEAS SERVICE			INACTIVATION OR DISBANDMENT		CONVERSION OR REDESIGNATION	
		From (2)	To (4)	Place (5)	From (6)	To (7)	Theater (8)	Date (9)	Place (10)	Date (11)	Comments (12)
67	8 Jun 42 25 Nov 44	1 Aug 42 3 Apr 45		Cp. Haan, Calif. Cp. Sibert, Ala.	3 Sep 42 12 Apr 45	21 Nov 44 10 Nov 46	CZ SWPA	10 Nov 46	Philippines		
68	1 Jun 42 25 Nov 44	1 Jun 42 3 Apr 45		Cp. Haan, Calif. Cp. Sibert, Ala.	3 Sep 42 12 Apr 45	21 Nov 44 25 Jan 46	CZ SWPA	25 Jan 46	Okinawa		
69	30 Jun 42	1 Jul 42 18 Oct 43		Cp. Haan & Burbank, Calif. Cp. Edwards, Mass.	11 Dec 42 27 Jul 43	27 Jul 43 6 Sep 44	NATO	26 Nov 45	Cp. Patrick Henry, Va.		
70(N)	25 May 42	25 May 42	1 Sep 43	Sault Ste Marie, Mich.	25 Sep 43	11 Nov 44	SWPA	10 Nov 44	New Guinea		
71(N)	25 May 42	25 May 42 21 Dec 44 28 Mar 45	22 Dec 44 16 Jun 45	Edgewood Arsenal, Md. Cp. Sibert, Ala. Cp. Gordon Johnston, Fla.	27 Jun 45 25 Jan 46	27 Jun 45 25 Jan 46	SWPA	25 Jan 46	Okinawa		
72(N)	25 May 42	25 May 42 26 Oct 43 14 Apr 44 16 Jul 44	20 Oct 43 17 Apr 44 12 Jul 44 25 Jul 44	Ft. Lewis, Seattle, Wash. Cp. Sibert, Ala. Edgewood Arsenal, Md. Ft. Lewis, Wash.						23 Jul 44	1512 Engr Dump Truck Co
73(N)	1 Jun 42	1 Jun 42 13 Jun 42 8 Oct 42 28 Oct 42 29 Mar 44	11 Jun 42 8 Oct 42 22 Oct 43 28 Mar 44 31 Mar 44	Cp. Haan, Calif. Cp. S. L. Obispo, Calif. Santa Monica, Calif. Cp. Sibert, Ala. Co. Claiborne, La.						23 Mar 44	1368 Engr Dump Truck Co
74(N)	20 Jul 42	20 Jul 42 28 Oct 43 20 Apr 44	22 Oct 43 19 Apr 44 15 Sep 44	Cp. S. L. Obispo & Burbank, Calif. Cp. Sibert, Ala. Cp. Gordon Johnston, Fla.	15 Sep 44 4 Apr 46	4 Apr 46	ETO	5 Apr 46	Cp. Kilmer, N. J.		

7

APPENDIX H-5—CHEMICAL COMPANIES, AIR OPERATIONS—Continued

Unit designation (1)	Date activated (2)	TRAINING			OVERSEAS SERVICE			INACTIVATION OR DISBANDMENT		CONVERSION OR REDESIGNATION	
		From (3)	To (4)	Place (5)	From (6)	To (7)	Theater (8)	Date (9)	Place (10)	Date (11)	Comments (12)
832	15 Mar 43	15 May 43 11 Apr 43	10 Apr 43 18 Dec 43	Daniel Fld, Ga. Cp. Sibert, Ala.				1320 Dec 43	Maxon, Ga.		
833	15 Mar 43	15 Mar 43 11 Apr 43 27 Dec 43 1 Feb 44 15 Mar 44	10 Apr 43 26 Dec 43 28 Jan 44 15 Mar 44 1 May 44	Daniel Fld, Ga. Cp. Sibert, Ala. Greenville AAB, S. C. H. Smart Aprt, Ga. Dale Masberry Fld, Fla.				01 May 44	Barkedale Fld, La.		
834	15 Mar 43	15 Mar 43 11 Apr 43	10 Apr 43 18 Dec 43	Daniel Fld, Ga. Cp. Sibert, Ala.				020 Dec 43	H. Smart Aprt, Ga.		
835	15 Mar 43	15 Mar 43 16 May 43 18 Jan 44 5 Feb 44 18 Mar 44 1 Apr 44 7 Jun 44 7 Oct 44	15 May 43 18 Jan 44 5 Feb 44 18 Mar 44 31 Mar 44 3 Jun 44 2 Oct 44 14 Oct 44	Daniel Fld, Ga. Cp. Sibert, Ala. H. Smart Aprt, Ga. Greenville AAB, S. C. H. Smart Aprt, Ga. Barkedale Fld, La. Portland AAB, Ore. Barkedale Fld, La.				018 Oct 44	Barkedale Fld, La.		
836	15 Mar 43	15 Mar 43 16 May 43	15 May 43 18 Dec 43	Daniel Fld, Ga. Cp. Sibert, Ala.				020 Dec 43	H. Smart Aprt, Ga.		
837	15 Mar 43	15 Mar 43 16 May 43	15 May 43 18 Dec 43	Daniel Fld, Ga. Cp. Sibert, Ala.				020 Dec 43	H. Smart Aprt, Ga.		
838	15 Mar 43	15 Mar 43 16 May 43	15 May 43 18 Dec 43	Daniel Fld, Ga. Cp. Sibert, Ala.				020 Dec 43	H. Smart Aprt, Ga.		
839	15 Mar 43	15 Mar 43 16 May 43	15 May 43 18 Dec 43	Daniel Fld, Ga. Cp. Sibert, Ala.				020 Dec 43	H. Smart Aprt, Ga.		
840	15 Mar 43	15 Mar 43 16 May 43	15 May 43 18 Dec 43	Daniel Fld, Ga. Cp. Sibert, Ala.				020 Dec 43	H. Smart Aprt, Ga.		

E

NRL CHEMICAL WARFARE VOLUNTEERS

F

as of July 13, 1993

Aaland, [REDACTED] (Book # 5044) (p. 307a) Dec/Jan 44)
 Abatemarco (Book # 5044) (p. 307a)
 Abernethy (Book # 2912) (exp. 23.6)
 Acosta (Book # 5641) (1006)
 Adair (Book # 5641) (1027)
 Adameit, R.A. (Book # 2912) (exp. 15.25)
 Adams (Book # 4211) (192)
 Adams (Book # 4211) (324)
 Adams (Book # 4211) (371)
 Adams (Book # 5445) (802)
 Adams (Book # 5156) (463- also book 5044)
 Adams, [Charles W.] (Book # 5156) (Mar/Apr 45)
 Adams, J.W. (Book # 5156) (625)
 Adams, [R.] (Book # 5044) (315)
 Adams, Robert E. (Book # 2912) (exp. 22.11)
 Addertion (Book # 5445) (864)
 Addleman (Book # 4211) (200)
 Adkins (Book # 5156) (764)
 Agolini (Book # 5156) (563)
 Akers, J. (Book # 2912) (exp. 9)
 Ajagra (Book # 5445) (pg. 591- also in book 4296, exp. 24)
 Albanowski, F J. (Book # 2912) (exp. 9)
 Alben (Book # 5044) (p. 339)
 Albertine (Book # 5641) (1007)
 Albertson (Book # 5156) (561)
 Albright (Book # 5044) (316)
 Alexander (Book # 4491) (p. 267)
 Alexander (Book # 4211) (41)
 Alexander (Book # 5641) (1121)
 Alexander (Book # 4296) (exp. 4)
 Allen (Book # 4491) (30)
 Allen, [John William] (Book # 5445) (865) {247-29-21}
 Allen, [Maurice C. Jr.] (Book # 5156) (619) {247-07-64}
 Alligood, A.T. (Book # 2912) (exp. 7)
 Allred (Book # 5156) (534)
 Alvers (Book # 5641) (1008)
 Amory, Lloyd R. (Book # 2912) (exp. 4)
 Anderson (Book # 5641) (1149)
 Anderson, Bruce O. (Book # 5156) (774- also in book 5445)
 Anderson, George W. (Book # 5156) (775- also in book 5445)
 Andrews (Book # 5641) (1185)
 Andrews (Book # 2912) (exp. 21.13)
 Andrews (Book # 4296) (exp. 8)
 Ansell (Book # 5044) (317)
 Anthony (Book # 4491) (53)

Note- The information in []
 was located and inserted in
 1993. Also, all records of full
 names newly inserted can be
 found in CW-116 folder (these
 are not in the scientific
 notebooks on file).

Book #4296 represents arm
 chamber tests

** These names were listed in
 scientific notebook #2931 being
 involved in either the treatment
 or cleaning of protective fabric.
 These names were added to this
 list in March 1993.



DEPARTMENT OF THE ARMY
ADMINISTRATIVE ASSISTANT TO THE SECRETARY
WASHINGTON, D.C. 20310-0105



21 May 1993

MEMORANDUM FOR ASSISTANT SECRETARY OF THE ARMY
(INSTALLATIONS, LOGISTICS AND ENVIRONMENT)
ASSISTANT SECRETARY OF THE ARMY
(MANPOWER AND RESERVE AFFAIRS)
ASSISTANT SECRETARY OF THE ARMY
(RESEARCH DEVELOPMENT AND ACQUISITION)
DEPUTY CHIEF OF STAFF FOR PERSONNEL

SUBJECT: Chemical/Biological Weapons Research Programs
Using Human Test Subjects

The Deputy Secretary of Defense has requested that the Department of the Army conduct a comprehensive search for all records relating to chemical/biological weapons research programs using human test subjects (enclosure 1). This includes records on the exposure or potential exposure of humans to chemical/biological material during the research, development test, and evaluation (RDTE) or production, transportation, storage, training and/or disposal of such material.

In accordance with this, please prepare a report for submission to my office containing the following information: a. the number of records located by media, and b. the estimated cost to prepare a database covering all pertinent records at each location. The information required by enclosure 1 is to be used in determining the data requirements for the database.

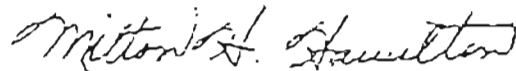
The number of records located by media should be listed in the following categories: 1. paper records, 2. index, punch, or aperture cards, 3. microforms or other machine-readable forms, including dosimetry badges, 4. electronic records, and 5. other.

The cost estimate for the database preparation should include the following information: 1. number of personnel required, 2. salary costs, 3. cost for preparation if contracted out, 4. estimated time to complete, and 5. workload impact on your organization.

G

A starting point for your search may be files on biological/chemical warfare which have been retired to Federal Records Centers and which are "frozen" by the Chemical/Biological Warfare Moratorium on Destruction of Records (enclosure 2). The Moratorium, put into effect by the National Archives and Records Administration (NARA) in the 1979/1980 time period, does not encompass all areas which fall under the Deputy Secretary's request above but does mandate the retention of many files within the biological/chemical arena. The NARA freeze code for this action is CBW.

The suspense date for this action is 10 June 1993. A negative response is required. Any questions should be addressed to my point of contact for this matter, Marc Vassaneili, who may be reached at 697-6900.

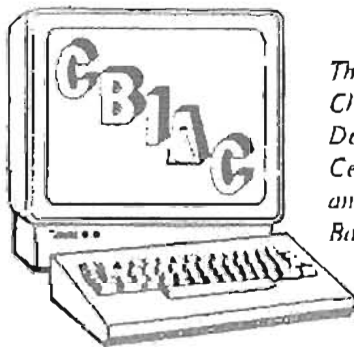


Milton B. Hamilton

Enclosures

REPORT

SERVICE RECORDS OF CHEMICAL WARFARE SERVICE UNITS WORLD WAR II



*The Chemical Warfare
Chemical and Biological
Defense Information Analysis
Center is a DoD information
analysis center operated by
Battelle Memorial Institute*

Excerpts from CB-011335



Battelle

... Putting Technology To Work

2 467-111 u SG Co

Appendix H

CHEMICAL WARFARE SERVICE, UNIT DATA, WORLD WAR II

This appendix is composed of sixteen tables which list pertinent data on chemical warfare units in World War II. These units correspond to those listed in Table 9 of the text.

There is a table for each type of unit in Table 9 except for chemical depot companies and chemical base depot companies which are combined in one table.

Key to Table Format

- Column 1. "N" indicates Negro unit.
- Column 2. "C" (conversion) or "R" (redesignation) before activation date denotes unit previously existing in another type or service. Activation information appears in Columns 11 and 12.
- Column 5. All zone of interior stations, except ports of embarkation, are listed as training stations.
- Columns 6 & 7. In some cases where conversion and/or redesignations occurred overseas, the over-all overseas service dates are given regardless of changes in unit status since information on specific overseas locations is not available.
- Column 8. a. In some cases, the place of inactivation or disbandment, Column 10, is not located in the theater given in Column 8. In this situation, the given theater is that in which a unit either performed the major portion of its active service or where unit activity in a subsequent theater, except for date and place of inactivation or disbandment, is not clearly documented.
- b. Abbreviations:
- | | |
|--------|---------------------------|
| AD | Alaskan Department |
| CDC | Caribbean Defense Command |
| CZ | Canal Zone |
| ETO | European Theater |
| HD | Hawaiian Department |
| I-B | India-Burma Theater |
| MIDPAC | Mid-Pacific Area |
| MTO | Mediterranean Theater |
| NATO | North African Theater |
| PR | Puerto Rico |
| SWPA | Southwest Pacific Area |

Columns 9&10. Unless otherwise noted all units were inactivated. "D" indicates disbandment. If a unit were converted or redesignated no information is given in either column. For units existing in 1946, precise dates of inactivation or disbandment are not given: "existing in 1946" is entered in Column 9, and last known location is given in Column 10

Column 11. a. "C" or "R" before date indicates unit conversion or redesignation to another type or service. See Column 2 for original activation.
 b. Absence of a symbol ("C" or "R") indicates a date of original activation in another type or service. In this case, conversion or redesignation information is entered in Column 1. See explanatory note on Columns 1 and 2.

Column 12. a. When a date appears in Column 11 without any information in Column 12, see footnotes.

b. Abbreviations:

AAA	Anti Aircraft Artillery	Maint	Maintenance
Am	Ammunition	Mbl	Mobile
Avn	Aviation	Mort	Mortar
AW	Automatic Weapons	Mtz	Motorized
Bn	Battalion	Opns	Operations
CA	Coast Artillery	Ord	Ordnance
Cml	Chemical	Plat	Platoon
Co	Company	POA	Pacific Ocean Areas
Comp	Composite	Proc	Processing
Decon	Decontamination	QM	Quartermaster
Det	Detachment	Regt	Regiment
Engt	Engineer	Sep	Separate
FA	Field Artillery	SG	Smoke Generator
Gen	General	Sup	Supply
Hq	Headquarters	Svc	Service
Lab	Laboratory	TD	Tank Destroyer

TABLE 9—CHEMICAL WARFARE SERVICE UNITS ACTIVE DURING WORLD WAR II*
(AS OF DATES INDICATED)

Unit	31 Dec 41 ^a	30 Jun 42	31 Dec 42	30 Jun 43	31 Dec 43	30 Jun 44	31 Dec 44	30 Jun 45	15 Aug 45 (1 st Day)	1 Sep 45 ^b
Total.....	14	98	197	289	264	263	269	283	294	298
Chemical Mortar Battalions.....	2	6	6	10	11	21	25	25	32	32
Chemical Mortar Companies.....	3	3	3	2	2	2	3	3	7	11
Chemical Smoke Generator Battalions.....	0	0	0	0	0	4	6	5	5	5
Chemical Smoke Generator Companies.....	0	11	28	40	40	33	25	24	22	22
Chemical Companies Air Operations.....	0	45	66	99	57	47	49	50	50	50
Chemical Depot Companies (Aviation).....	0	7	12	14	20	20	20	20	20	20
Chemical Maintenance Companies (Aviation).....	0	0	12	14	6	6	3	3	3	3
Chemical Depot Companies.....	2	5	8	16	23	23	17	18	18	18
Chemical Base Depot Companies.....	0	0	0	0	0	9	10	11	11	11
Chemical Maintenance Companies.....	2	5	9	14	15	16	17	18	18	18
Chemical Decontamination Companies.....	2	7	19	26	29	17	13	12	12	12
Chemical Processing Companies.....	1	4	22	36	36	36	39	36	36	36
Chemical Service Battalions.....	0	0	0	0	0	0	0	3	3	3
Chemical Composite Service and General Service Companies.....	0	2	6	10	16	15	19	20	20	20
Chemical Composite Service Platoons and Detachments.....	0	0	0	0	0	5	14	27	29	29
Chemical Laboratory Companies.....	2	3	6	8	7	7	7	8	8	8
Chemical Composite Battalions.....	0	0	0	0	0	2	2	0	0	0

* Data on individual units may be found in Appendix H.

^a All units shown in this column activated prior to 7 December 1941.^b Japanese signed surrender terms.

Source: Historical Data Cards, AGO.

units were authorized for ground forces and recommended a ratio of seven chemical service companies per field army.³ Arrangements then projected for constituting air chemical service units under the current 84-group AAF program were considered satisfactory.

On the combat side the picture was gloomy. Only two chemical mortar battalions had been authorized—and they were a considerable distance from activation. Yet it was clear that if an adequate complement of service troops was needed in connection with defense against enemy gas attack, weapons troops in substantial numbers were just as necessary for retaliation. The two went hand in hand in any balanced gas warfare program.

³ Memo, C CWS for ACOFS G-4, 13 Dec 41, sub: Adequacies of Service Troops. CWS 387/758 (12-13-41).

REPLACEMENT

In comparison mobilization at the time had been chronic development of a program began to vie with troop program. It was to follow a rapid, eventually ambitious

The strength of the program and 12,068 enlisted men and by the end of the war chemical troops had enlisted men. It was and 105 air chemical units of twenty-two sharp increases in

The policy on replacements in 1942 made Army training of these replacements were made for these battalions and air forces and Officer Candidate requirements for the remainder of the program for the more realistic changes give the CWS g:

Entry of the program presented an interesting. If the preparatory center system were centers would be

⁴ See above, Chapter

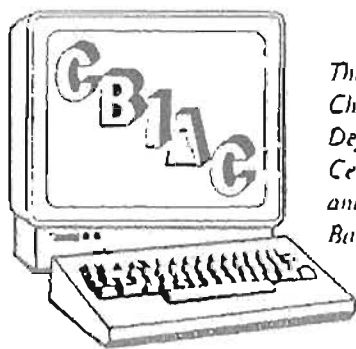
APPENDIX H-1—CHEMICAL MORTAR BATTALIONS

Unit designation (1)	Date activated (2)	TRAINING			OVERSEAS SERVICE			INACTIVATION OR DISBANDMENT		CONVERSION OR REDESIGNATION	
		From (3)	To (4)	Place (5)	From (6)	To (7)	Theater (8)	Date (9)	Place (10)	Date (11)	Comments (12)
1, Co A*	C30 Apr 33	30 Apr 31	12 Mar 42	Schofield Barracks, Hawaii	30 Apr 31	12 Mar 42	HD			24 Feb 20 C12 Mar 42	Activated as 2d Sep Cml Co. 91 Cml Co (Mtx)
2, Co A*	16 Apr 35	16 Apr 35 17 Jan 42 10 Jul 42 21 Feb 43	16 Jan 42 9 Jul 42 21 Feb 43 24 May 43	Edgewood Arsenal, Md. Ft. Bragg, N. C. Carolina Maneuver Area Cp. Pickett, Va.	8 Jun 43 10 Jul 43 15 Aug 44	5 Jul 43 14 Aug 44 26 Jul 46	NATO MTO ETO	26 Jul 46	Germany	24 Nov 43 31 Dec 44	Only Hq & Hq Co & Co A were activated in 1935. The remaining units of the bn were activated 1 Jan 42.
3	1 Jan 42	1 Jan 42 7 Apr 42 30 Jul 42 27 Oct 42	3 Apr 42 28 Jul 42 25 Oct 42 16 Apr 43	Ft. Benning, Ga. Ft. Bliss, Tex. Louisiana Maneuver Area Ft. Bliss, Tex.	28 Apr 43 10 Jul 43 15 Aug 44	10 Jul 43 15 Aug 44 2 Jan 46	NATO MTO ETO	2 Jan 46	Cp. Patrick Henry, Va.	24 Nov 43 11 Mar 45	
71	C21 Nov 44	21 Nov 44 25 Nov 44	24 Nov 44 7 Jul 45	Cp. Stewart, Ga. Cp. Shelby, Miss.	12 Jul 45	17 Jan 46	SWPA	18 Jan 46	Seattle, Wash.	20 Nov 42 30 Apr 43	Activated as 479 CA Bn (Sep) Redesignated as 479 AAA AW Bn
72	C 7 Dec 44	7 Dec 44 2 Dec 44	1 Dec 44 1 Jun 45	Ft. Leonard Wood, Mo. Cp. Shelby, Miss.	6 Jun 45	18 Apr 46	MIDPAC	18 Apr 46	Oahu, Hawaii	10 Apr 43 1 Apr 44	Activated as 560 CA Bn (Sep) Redesignated as 560 AAA AW Bn
80*	30 Jun 44	30 Jun 44	15 Jan 45	Cp. Swift, Tex.	27 Jan 45	30 Jan 46	SWPA	1 Feb 46	Cp. Stoneman, Calif.	4 Mar 45	
81	25 Apr 42	24 Apr 42 4 Apr 43 7 May 43 12 Jun 43 31 Jul 43 31 Jul 43 9 Aug 43	2 Apr 43 4 May 43 10 Jun 43 31 Jul 43 9 Aug 43 14 Oct 43	Ft. D. A. Russell, Tex. Louisiana Maneuver Area Cp. Gordon Johnston, Fla. Cp. Pickett, Va. Cp. Bradford, Va. Cp. Pickett, Va.	22 Oct 43	2 Sep 45	ETO	7 Nov 45	Ft. Leonard Wood, Mo.	22 Feb 45	

82	25 Apr 42	25 Apr 42 10 Mar 43 26 Apr 43	8 Mar 43 25 Apr 43 12 Jun 43	Ft. Bliss, Tex. Louisiana Maneuver Area Cp. Swift, Tex.	28 Jun 43	1946	SWPA	Existing in 1946	In Japan	16 Mar 45
83	10 Jun 42	10 Jun 42	19 Apr 43	Cp. Gordon, Ga.	28 Apr 43 10 Jul 43 15 Aug 44	5 Jul 43 12 Aug 44 25 Nov 45	NATO MTO ETO	26 Nov 45	Boston, Mass.	31 Dec 44
84	5 Jun 42	5 Jun 42	18 Apr 43	Cp. Rucker, Ala.	28 Apr 43 8 Jan 44	ca. Jan 44 25 Sep 45	NATO MTO	25 Sep 45	Italy	8 Nov 44
85	5 Jun 43	5 Jun 43 2 Dec 43	2 Dec 43 1 Jul 44	Ft. D. A. Russell, Tex. Cp. Swift, Tex.	28 Jul 44	31 May 46	SWPA	31 May 46	Philippines	17 Dec 44
86	17 May 43	17 May 43	11 Apr 44	Cp. Swift, Tex.	14 Apr 44	10 Jul 45	ETO	Existing in 1946	At Cp. Campbell, Ky.	15 Feb 45
87	22 May 43	22 May 43 3 Feb 44	31 Jan 44 24 Mar 44	Cp. Rucker, Ala. Tennessee Maneuver Area	31 Mar 44	2 Aug 45	ETO	6 Nov 45	Ft. Benning, Ga.	26 Apr 45
88	29 May 43	29 May 43 2 Feb 44 26 Feb 44	1 Feb 44 25 Feb 44 16 Apr 44	Cp. Rucker, Ala. Tennessee Maneuver Area Cp. Rucker, Ala.	30 Apr 44	28 Dec 45	SWPA	29 Dec 45	Cp. Anza, Calif.	15 Feb 45
89	15 Nov 43	15 Nov 43 8 Apr 44 20 Sep 44	5 Apr 44 18 Sep 44 16 Nov 44	Cp. Roberts, Calif. Cp. Carson, Colo. Cp. Gruber, Okla.	2 Dec 44	5 Jul 45	ETO	29 Oct 45	Ft. Jackson, S. C.	17 Dec 44
90	10 Feb 44	10 Feb 44 16 Oct 44	15 Oct 44 22 Oct 44	Ft. Bragg, N. C. Cp. Kilmer, N. J.	22 Oct 44	6 Jul 45	ETO	20 Feb 46	Ft. Jackson, S. C.	3 Dec 44
91	15 Feb 44	15 Feb 44 4 Apr 44	3 Apr 44 2 Oct 44	Cp. Robinson, Ark. Cp. Swift, Tex.	11 Oct 44	10 Jul 45	ETO	Existing in 1946	At Ft. Lewis, Wash.	22 Feb 45
92	9 Feb 44	9 Feb 44	17 Jun 44	England	9 Feb 44	3 Aug 45	ETO	27 Oct 45	Cp. S. L. Obispo, Calif.	15 Dec 44
93	24 Mar 44	24 Mar 44 19 Aug 44 25 Aug 44 4 Oct 44 17 Oct 44	19 Aug 44 25 Aug 44 3 Dec 44 16 Oct 44 9 Jan 45	Cp. Rucker, Ala. Ft. Benning, Ga. Cp. Rucker, Ala. Cp. Sibert, Ala. Cp. Shelby, Miss.	18 Jan 45	4 Jul 45	ETO	20 Oct 45	Ft. Bragg, N. C.	18 Nov 44

REPORT

SERVICE RECORDS OF CHEMICAL WARFARE SERVICE UNITS WORLD WAR II



*The Chemical Warfare/
Chemical and Biological
Defense Information Analysis
Center is a DoD information
analysis center operated by
Battelle Memorial Institute*

Excerpts from CB-011335

2 + 66-4-1 () SG Co

Appendix H

CHEMICAL WARFARE SERVICE, UNIT DATA, WORLD WAR II

This appendix is composed of sixteen tables which list pertinent data on chemical warfare units in World War II. These units correspond to those listed in Table 9 of the text.

There is a table for each type of unit in Table 9 except for chemical depot companies and chemical base depot companies which are combined in one table.

Key to Table Format

- Column 1. "N" indicates Negro unit.
- Column 2. "C" (conversion) or "R" (redesignation) before activation date denotes unit previously existing in another type or service. Activation information appears in Columns 11 and 12.
- Column 5. All zone of interior stations, except ports of embarkation, are listed as training stations.
- Columns 6 & 7. In some cases where conversion and/or redesignations occurred overseas, the over-all overseas service dates are given regardless of changes in unit status since information on specific overseas locations is not available.
- Column 8. a. In some cases, the place of inactivation or disbandment, Column 10, is not located in the theater given in Column 8. In this situation, the given theater is that in which a unit either performed the major portion of its active service or where unit activity in a subsequent theater, except for date and place of inactivation or disbandment, is not clearly documented.
- b. Abbreviations:
- | | |
|--------|---------------------------|
| AD | Alaskan Department |
| CDC | Caribbean Defense Command |
| CZ | Canal Zone |
| ETO | European Theater |
| HD | Hawaiian Department |
| I-B | India-Burma Theater |
| MIDPAC | Mid-Pacific Area |
| MTO | Mediterranean Theater |
| NATO | North African Theater |
| PR | Puerto Rico |
| SWPA | Southwest Pacific Area |

Columns 9&10. Unless otherwise noted all units were inactivated. "D" indicates disbandment. If a unit were converted or redesignated no information is given in either column. For units existing in 1946, precise dates of inactivation or disbandment are not given: "existing in 1946" is entered in Column 9, and last known location is given in Column 10

Column 11. a. "C" or "R" before date indicates unit conversion or redesignation to another type or service. See Column 2 for original activation.
 b. Absence of a symbol ("C" or "R") indicates a date of original activation in another type or service. In this case, conversion or redesignation information is entered in Column 1. See explanatory note on Columns 1 and 2.

Column 12. a. When a date appears in Column 11 without any information in Column 12, see footnotes.

b. Abbreviations:

AAA	Anti Aircraft Artillery	Maint	Maintenance
Am	Ammunition	Mbl	Mobile
Avn	Aviation	Mort	Mortar
AW	Automatic Weapons	Mtz	Motorized
Bn	Battalion	Opns	Operations
CA	Coast Artillery	Ord	Ordnance
Cml	Chemical	Plat	Platoon
Co	Company	POA	Pacific Ocean Areas
Comp	Composite	Proc	Processing
Decon	Decontamination	QM	Quartermaster
Det	Detachment	Regt	Regiment
Engr	Engineer	Sep	Separate
FA	Field Artillery	SG	Smoke Generator
Gen	General	Sup	Supply
Hq	Headquarters	Svc	Service
Lab	Laboratory	TD	Tank Destroyer

TABLE 9—CHEMICAL WARFARE SERVICE UNITS ACTIVE DURING WORLD WAR II*
(AS OF DATES INDICATED)

Unit	31 Dec 41 ^b	30 Jun 42	31 Dec 42	30 Jun 43	31 Dec 43	30 Jun 44	31 Dec 44	30 Jun 45	15 Aug 45 (V-J Day)	3 Sep 45 ^c
Total.....	14	98	197	289	264	261	269	285	294	298
Chemical Mortar Battalions.....	2	6	6	10	11	21	25	25	32	32
Chemical Mortar Companies.....	3	3	3	2	2	2	3	3	7	11
Chemical Smoke Generator Battalions.....	0	0	0	0	0	4	6	5	5	5
Chemical Smoke Generator Companies.....	0	11	28	40	40	33	25	24	22	22
Chemical Companies Air Operations.....	0	45	66	99	57	47	49	50	50	50
Chemical Depot Companies (Aviation).....	0	7	12	14	20	20	20	20	20	20
Chemical Maintenance Companies (Aviation).....	0	0	12	14	6	6	3	5	5	3
Chemical Depot Companies.....	2	5	8	16	25	25	17	18	18	18
Chemical Base Depot Companies.....	0	0	0	0	0	9	10	11	11	11
Chemical Maintenance Companies.....	2	5	9	14	15	16	17	18	18	18
Chemical Decontamination Companies.....	2	7	19	26	29	17	13	12	12	12
Chemical Processing Companies.....	1	4	22	36	36	36	39	36	36	36
Chemical Service Battalions.....	0	0	0	0	0	0	0	3	3	3
Chemical Composite Service and General Service Companies.....	0	2	6	10	16	15	19	20	20	20
Chemical Composite Service Platoons and Detachments.....	0	0	0	0	0	5	14	27	29	29
Chemical Laboratory Companies.....	2	3	6	8	7	7	7	8	8	8
Chemical Composite Battalions.....	0	0	0	0	0	2	2	0	0	0

* Data on individual units may be found in Appendix II.

^b All units shown in this column activated prior to 7 December 1941.

^c Japanese signed surrender terms.

Source: Historical Data Cards, ACO.

units were authorized for ground forces and recommended a ratio of seven chemical service companies per field army.⁸ Arrangements then projected for constituting air chemical service units under the current 84-group AAF program were considered satisfactory.

On the combat side the picture was gloomy. Only two chemical mortar battalions had been authorized—and they were a considerable distance from activation. Yet it was clear that if an adequate complement of service troops was needed in connection with defense against enemy gas attack, weapons troops in substantial numbers were just as necessary for retaliation. The two went hand in hand in any balanced gas warfare program.

⁸ Memo, C CWS for ACOIs G-4, 13 Dec 41, sub: Adequacies of Service Troops. CWS 381/258 (12-13-41).

REPLACEMENT

In comparison, mobilization at the had been chronic development of a troop program. It to follow a rapid eventually ambitious

The strength and 12,068 enlisted and by the end of chemical troop be enlisted men. It and 105 air chemi tion of twenty-two sharp increases n

The policy on 1942 made Arm training of these replacements wer ments for these b and air forces r. Officer Candidate quirements for ne the remainder of to both individu: program for the more realistic ch give the CWS g:

Entry of the presented an im ing. If the prepa center system we centers would b

⁹ See above, Chap:

APPENDIX H-1—CHEMICAL MORTAR BATTALIONS

Unit designation (1)	Date activated (2)	TRAINING			OVERSEAS SERVICE			INACTIVATION OR DISBANDMENT		CONVERSION OR REDESIGNATION	
		From (3)	To (4)	Place (5)	From (6)	To (7)	Theater (8)	Date (9)	Place (10)	Date (11)	Comments (12)
1, Co A*	C30 Apr 31	30 Apr 31	12 Mar 42	Schofield Barracks, Hawaii	30 Apr 31	12 Mar 42	HD			24 Feb 20 C12 Mar 42	Activated as 2d Sep Cml Co 91 Cml Co (Mex)
2, Co A*	16 Apr 35	16 Apr 35 17 Jan 42 10 Jul 42 21 Feb 43	16 Jan 42 9 Jul 42 21 Feb 43 24 May 43	Edgewood Arsenal, Md. Ft. Bragg, N. C. Carolina Maneuver Area Cp. Pickett, Va.	8 Jun 43 10 Jul 43 15 Aug 44	5 Jul 43 14 Aug 44 26 Jul 46	NATO MTO ETO	26 Jul 46	Germany	24 Nov 43 31 Dec 44	Only Hq & Hq Co & Co A were activated in 1935. The remaining units of the bn were activated 1 Jan 42.
3	1 Jan 42	1 Jan 42 7 Apr 42 30 Jul 42 27 Oct 42	3 Apr 42 28 Jul 42 25 Oct 42 16 Apr 43	Ft. Benning, Ga. Ft. Bliss, Tex. Louisiana Maneuver Area Ft. Bliss, Tex.	28 Apr 43 10 Jul 43 15 Aug 44	10 Jul 43 15 Aug 44 2 Jan 46	NATO MTO ETO	2 Jan 46	Cp. Patrick Henry, Va.	24 Nov 43 11 Mar 45	
71	C21 Nov 44	21 Nov 44 25 Nov 44	24 Nov 44 7 Jul 45	Cp. Stewart, Ga. Cp. Shelby, Miss.	12 Jul 45	17 Jan 46	SWPA	18 Jan 46	Seattle, Wash.	20 Nov 42 30 Apr 43	Activated as 479 CA Bn (Sep) Redesignated as 479 AAA AW Bn
72	C 7 Dec 44	7 Dec 44 2 Dec 44	1 Dec 44 1 Jun 45	Ft. Leonard Wood, Mo. Cp. Shelby, Miss.	6 Jun 45	18 Apr 46	MIDPAC	18 Apr 46	Oahu, Hawaii	10 Apr 43 1 Apr 44	Activated as 560 CA Bn (Sep) Redesignated as 560 AAA AW Bn
80*	30 Jun 44	30 Jun 44	15 Jan 45	Cp. Swift, Tex.	27 Jan 45	30 Jan 46	SWPA	1 Feb 46	Cp. Stoneman, Calif.	4 Mar 45	
81	25 Apr 42	24 Apr 42 4 Apr 43 7 May 43 12 Jun 43 31 Jul 43 9 Aug 43	2 Apr 43 4 May 43 10 Jun 43 31 Jul 43 9 Aug 43 14 Oct 43	Ft. D. A. Russell, Tex. Louisiana Maneuver Area Cp. Gordon Johnston, Fla. Cp. Pickett, Va. Cp. Bradford, Va. Cp. Pickett, Va.	22 Oct 43	2 Sep 45	ETO	7 Nov 45	Ft. Leonard Wood, Mo.	22 Feb 45	

82	25 Apr 42	15 Apr 42 10 Mar 43 26 Apr 43	8 Mar 43 25 Apr 43 12 Jun 43	Ft. Bliss, Tex. Louisiana Maneuver Area Cp. Swift, Tex.	28 Jun 43	1946	SWPA	Existing in 1946	In Japan	16 Mar 45
83	10 Jun 42	10 Jun 42	19 Apr 43	Cp. Gordon, Ga.	28 Apr 43 10 Jul 43 15 Aug 44	5 Jul 43 12 Aug 44 21 Nov 45	NATO MTO ETO	26 Nov 45	Boston, Mass.	31 Dec 44
84	5 Jun 42	5 Jun 42	18 Apr 43	Cp. Rucker, Ala.	28 Apr 43 8 Jan 44	ca. Jan 44 25 Sep 45	NATO MTO	25 Sep 45	Italy	8 Nov 44
85	5 Jun 43	5 Jun 43 2 Dec 43	2 Dec 43 1 Jul 44	Ft. D. A. Russell, Tex. Cp. Swift, Tex.	28 Jul 44	31 May 46	SWPA	31 May 46	Philippines	17 Dec 44
86	17 May 43	17 May 43	11 Apr 44	Cp. Swift, Tex.	14 Apr 44	10 Jul 45	ETO	Existing in 1946	At Cp. Campbell, Ky.	15 Feb 45
87	22 May 43	22 May 43 3 Feb 44	31 Jan 44 24 Mar 44	Cp. Rucker, Ala. Tennessee Maneuver Area	31 Mar 44	2 Aug 45	ETO	6 Nov 45	Ft. Benning, Ga.	26 Apr 45
88	29 May 43	29 May 43 2 Feb 44 26 Feb 44	1 Feb 44 25 Feb 44 16 Apr 44	Cp. Rucker, Ala. Tennessee Maneuver Area Cp. Rucker, Ala.	30 Apr 44	28 Dec 45	SWPA	29 Dec 45	Cp. Anza, Calif.	15 Feb 45
89	15 Nov 43	15 Nov 43 8 Apr 44 20 Sep 44	5 Apr 44 18 Sep 44 16 Nov 44	Cp. Roberts, Calif. Cp. Carson, Colo. Cp. Gruber, Okla.	2 Dec 44	5 Jul 45	ETO	29 Dec 45	Ft. Jackson, S. C.	17 Dec 44
90	10 Feb 44	10 Feb 44 16 Oct 44	15 Oct 44 22 Oct 44	Ft. Bragg, N. C. Cp. Kilmer, N. J.	22 Oct 44	6 Jul 45	ETO	20 Feb 46	Ft. Jackson, S. C.	3 Dec 44
91	15 Feb 44	15 Feb 44 4 Apr 44	3 Apr 44 2 Oct 44	Cp. Robinson, Ark. Cp. Swift, Tex.	11 Oct 44	10 Jul 45	ETO	Existing in 1946	At Ft. Lewis, Wash.	22 Feb 45
92	9 Feb 44	9 Feb 44	17 Jun 44	England	9 Feb 44	3 Aug 45	ETO	27 Oct 45	Cp. S. L. Obispo, Calif.	15 Dec 44
93	24 Mar 44	24 Mar 44 19 Aug 44 25 Aug 44 4 Oct 44 17 Oct 44	19 Aug 44 25 Aug 44 3 Oct 44 16 Oct 44 9 Jan 45	Cp. Rucker, Ala. Ft. Benning, Ga. Cp. Rucker, Ala. Cp. Sibert, Ala. Cp. Shelby, Miss.	18 Jan 45	4 Jul 45	ETO	20 Oct 45	Ft. Bragg, N. C.	18 Nov 44

M E D I A A D V I S O R Y

For further information:

contact Marilyn Mitchell-Thompson

Public Affairs Officer, Pueblo

Depot Activity, (719) 549-4235,

cellular: (719) 566-8025, or home

(719) 947-3658.

P U E B L O
D E P O T
A C T I V I T Y

FOR IMMEDIATE RELEASE

PUEBLO DEPOT ACTIVITY, PUEBLO, COLORADO - August 24, 1994 -

During a routine inspection Tuesday, air inside one of the chemical storage structures registered a low level of agent presence.

Vents on the storage structure were immediately closed and an air filter placed on the structure which contains mustard-filled 105mm projectiles stored in a palletized configuration.

Chemical munitions workers wearing appropriate protective clothing entered the structure to look for the source of agent presence. The source could not be found prior to darkfall and the workers left the structure, sealing and replacing the filter.

Wearing appropriate protective clothing, chemical munitions workers reentered the structure this morning to continue searching for the source of the leak.

Two methods of finding the leaking chemical munition are being used. The first method is visual. If that proves unsuccessful, the palletized chemical munitions will be isolated under plastic; air inside the plastic will be monitored until the source is found.

-more-

2-2-2-2-2 Chemical Munitions Storage

Once the leaking munition is located, it will be overpacked in a steel container and placed in storage in the state-approved hazardous waste storage structure inside the chemical storage area.

The air filter will remain on the structure with routine air monitoring performed until sampling confirms no agent presence.

No release of agent was made to the environment outside the storage structure. There was never any off-post hazard; all workers responded in a professional, expert manner. This type of expertise and professionalism is the standard this depot always displays while providing safe storage of nearly 10 percent of the nation's chemical stockpile.

As part of an on-going program to keep the media and the public advised regarding storage of chemical munitions, this increases the number of leaking chemical munitions since 1986 from ten to eleven.

* * *

M E D I A A D V I S O R Y

For further information:

contact Marilyn Mitchell-Thompson
Public Affairs Officer, Pueblo
Depot Activity, (719) 549-4135,
cellular (719) 568-8025, or home
(719) 947-3658.

P U E B L O
D E P O T
A C T I V I T Y

FOR IMMEDIATE RELEASE

FUEBLO DEPOT ACTIVITY, FUEBLO, COLORADO - August 23, 1994 -
Today, depot chemical munitions workers at Pueblo Depot Activity
located a single leaking 105mm projectile causing agent presence
inside the storage structure.

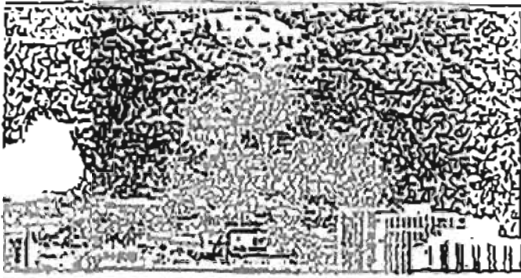
This leaking chemical munition was overpacked in a steel
container. All contamination was cleaned up and the pallets and
plastic were sealed in barrels. The air inside the storage structure
will continue to be monitored to insure there are no additional
leaking rounds. The air filter will continue to operate until air
monitoring shows there is no more agent presence.

Chemical munitions workers responded in an outstanding manner
displaying expertise and dedication:

There was no release of agent to the environment outside the
storage structure. There was never any off-post hazard.

Again, the detection and containerization of this leaking
munition increases the number of leaking chemical munitions since
1986 from ten to eleven.

* * *



GAZETTE TELEGRAPH

PAGE

B4

DATE

Aug. 25, 1994 *Thursday*

Army responds to tiny mustard-gas leak

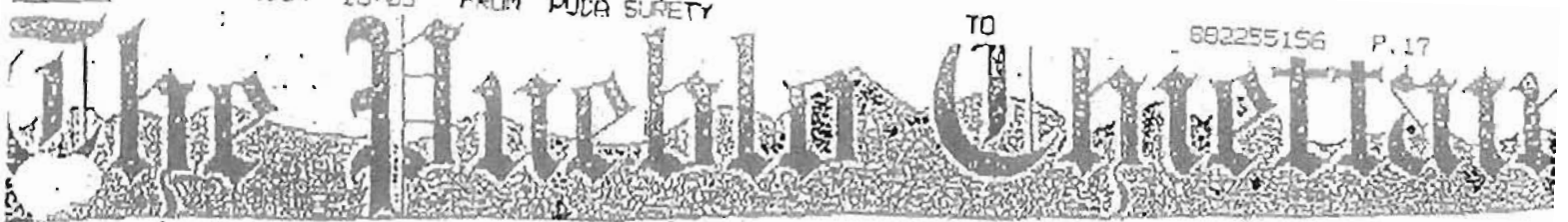
Gazette Telegram

A trace of mustard gas was discovered Tuesday inside a chemical-weapon storage igloo at the Army depot in Pueblo. Officials believe it leaked from one of the 103 mm projectiles stored inside, but workers have not been able to find the source.

Vents on the igloo have been sealed and an air filter installed to prevent the escape of any chemicals. Officials say no release has been detected outside

the structure, nor is there any danger to the surrounding community.

Workers wearing protective clothing continued the search for a leak Wednesday, covering each weapon with plastic and monitoring the air surrounding it for traces of chemical agent. When the leaking weapon is found, it will be packed in a steel container and put in a state-approved hazardous-waste storage area.



PAGE

5B

DATE September 25, 1994 DAY Tuesday

PUEBLO BRIEFS

PDA workers seek source of leak

During a routine inspection Tuesday, air inside one of the chemical storage structures at the Pueblo Depot Activity registered a low level of agent presence.

Vents on the storage structure immediately were closed and an air filter was placed on the structure, which contains mustard-filled 105mm projectiles.

Chemical munitions workers wearing protective clothing entered the structure and were busy Wednesday searching for the leak.

No release of agent was made to the environment outside the storage structure, PDA officials said Wednesday.

P R E S S R E L E A S E

For further information:

P U E B L O
D E P O T
A C T I V I T Y

contact Marilyn Mitchell-Thompson
Public Affairs Officer, Pueblo
Depot Activity, (719) 549-4135,
cellular (719) 568-8025, or home
(719) 947-3658.

FOR IMMEDIATE RELEASE

PUEBLO DEPOT ACTIVITY, PUEBLO, COLORADO - Sept. 16, 1994 - On Aug. 25, Raymond R. Jenkins, a chemical munitions worker at Pueblo Depot Activity, was working inside a chemical munitions storage structure and was possibly exposed to a minimal amount of mustard agent. The low level of exposure is not expected to have any residual affects on the individual.

At the time, the employee was assisting in isolating the source of mustard agent detected inside the structure.

The cause of the possible exposure was found to be from a disconnected air line on Mr. Jenkins' self-contained breathing apparatus. However, when the loose air line was discovered the employee immediately left the structure. We suspect human error caused this problem.

Medical attention was promptly provided to him by depot medical personnel. He was monitored and decontaminated, and placed under medical observation before being transported to Evans Army

-more-

2-2-2-2-2 Pueblo Depot Activity-Jenkins

Community Hospital and released on Aug. 26. He was readmitted to Evans on Aug. 29 after complaining of hoarseness and headaches and discharged on Sept. 1 and has returned to work. He will continue to receive medical follow-up.

All operational procedures in the use of protective equipment and storage operations are being reviewed and corrective actions will be taken to reduce the possibility of this occurring again.

In over 40 years of chemical storage, this is the first incident resulting in a lost-time injury during chemical storage operations.

* * *

The Pueblo Chieftain

PAGE Front DATE Sept. 17, 1994 DAY Saturday

PDA

Worker may have suffered exposure to mustard gas

By CHRIS WOODKA
The Pueblo Chieftain

A worker may have been briefly exposed to mustard agent stored at the Pueblo Depot Activity during a cleanup operation last month, officials confirmed Friday.

Raymond R. Jenkins, a chemical munitions worker at PDA, was part of a 10-person team cleaning up a leak on Aug. 25 in one of the 100 concrete bunkers where mustard-gas weapons are stored at PDA.

During the cleanup, his air line on a self-contained breathing apparatus became disconnected. He left the area immediately.

PDA officials at the time reported that there were no off-site leaks, but did not mention possible worker injuries.

However, PDA officials confirmed the incident after a question by *The Pueblo Chieftain* resulting from an anonymous tip.

Jenkins was wearing a special suit designed to protect workers from exposure to chemicals, said Marilyn Mitchell-Thompson, PDA public affairs officer.

"We suspect human error caused this problem," she said.

Ms. Mitchell-Thompson said several people are involved in putting on and sealing each suit and Jenkins was not necessarily at fault. "All the equipment had been tested that day, so we don't know what went wrong."

Jenkins was given medical attention by the physician's assistant on duty at PDA at the time, monitored for traces of remaining agent and decontaminated. He was taken to Evans Army Community Hospital and released the next day. He was readmitted to Evans on Aug. 29 after

complaining of hoarseness and headaches and again released the next day. Jenkins returned to work and will receive medical follow-up.

"The low level of exposure is not expected to have any residual effects on the individual," Ms. Mitchell-Thompson said in a press release.

Jenkins left Friday morning on a previously planned vacation and could not be reached for comment.

The leaking weapon was removed from the storage area and contained in a steel canister. It was the 11th leaking weapon found at PDA since 1986. Every storage Please see Gas, Page 2A

Gas

Continued from Page 1A
Area has an air monitor that is set off if any trace of mustard agent is found.

"All operational procedures in the use of protective equipment and storage operations are being reviewed and corrective actions will be taken to reduce the possibility of this occurring again," Ms. Mitchell-Thompson said.

This is the first incident resulting in a lost-time injury during chemical storage operations in 40 years of chemical storage at PDA.

The Army plans to build an incinerator at PDA beginning in 1996 with the goal of destroying the estimated 13,500 tons of weapons stored at PDA by 2002. The estimated cost of the entire program is \$700 million to \$1 billion.

DUGWAY PROVING GROUND, Utah -- Dugway Proving Ground will conduct two tests of components for the Biological Integrated Detection System (BIDS) beginning with simulant work in August 1993.

The BIDS will be a box mounted on a High Mobility Multipurpose Wheeled Vehicle (HMMWV) and equipped with a detector suite employing a variety of complementary biological detection technologies. BIDS will provide soldiers in the field advanced warning of a biological threat. This warning will signal the need to don protective clothing and masks. Detection is a critical part of the United States' biological defense program.

*First
TEST*

One test will be of the Advanced Concept Model of the Bio-Chemical Detector (ACM-BCD). The ACM-BCD is a portable, automatic, point-sampling biological agent aerosol detector. It is designed to continuously sample the ambient air and to detect the presence of specific pathogen and toxin aerosols. Upon detection, the ACM-BCD will sound an alarm and display the type of agent and the relative concentration on a built-in display.

Dugway Proving Ground will test only the biological detector module, one of two modules of the ACM-BCD. The chemical detector module will not be tested at this time.

Testing of the ACM-BCD will be conducted in four phases:

Phase One will be the Simulant Liquid Phase Sensitivity Test to be conducted in the Baker Test Facility with at least 20

trials each using the simulants Bacillus subtilis var. niger (BG) and MS2 coliphage (MS2). Objectives of this phase are to establish the sensitivity threshold and to provide insight into the predictability of the system's response. No specific safety controls or protection are required for testing with simulants.

Phase Two will consist of Simulant Chamber Testing with at least 20 trials to be conducted in the Simulant Exposure Chamber located in Baker Test Facility using simulants BG and MS2 as aerosols. The purposes of this phase are to evaluate the ACM-BCD and associated components under controlled environmental conditions and to determine the threshold-detection level of the BIDS for the selected biological simulants.

Phase Three will consist of Field Simulant Testing with at least 20 outdoor aerosol trials using BG only. The simulant will be disseminated using a micronair[®] generator. All persons downwind of the simulant will be required to wear a particle filter mask.

Phase Four will be the Agent Liquid Phase Sensitivity Tests. Testers will conduct at least 20 trials each using Bacillus anthracis (strain Ames), a virulent strain that causes anthrax; and botulinum toxin A, which causes food poisoning, as liquid challenges only. This phase will be conducted using biosafety level 2 guidelines as established by the Centers for Disease Control.

2ND TEST
The second test for the BIDS will be the test of the Non-Developmental Items (NDI) which will also begin with simulant work in August.

The NDI to be tested include an aerosol particle counter/sizer, a liquid particle counter/sizer, a particle sampler, a manual antibody-based detector, a bioluminescence analyzer, and a detection ticket system. A description of each follows:

XM2 collector. There are one XM2 aerosol and two modified aerosol collectors in the BIDS, each with a specific purpose. One provides an air stream for the aerosol particle counter/sizer; one provides a liquid sample for the bioluminometer, Flow Cytometer, Threshold System, and SMART detection kit; the other provides a liquid sample for laboratory analysis.

Bioluminometer. The bioluminometer uses bioluminescence to detect the presence of biological materials. The XM2 collector provides a liquid sample which is added to a reagent ticket. If ATP (a product of biological respiration) is present, the sample will emit light. The Bioluminometer provides a digital read out to indicate the presence of biological material.

Aerosol particle counter/sizer. This device analyzes the airstream for particles within a predetermined size range. While it will not distinguish between pathogenic and other particulate matter, it is the first component in the system which will indicate the presence of an aerosol representative of a biological attack. An alarm will sound indicating the presence of particles in the desired size range.

Flow cytometer. The Flow Cytometer detects the presence of bacterial cells using single particle light scattering and

fluorescent measurements. The XM2 collector provides a liquid sample. When a dye is added to the sample and bacteria are present, specific fluorescent energy will be measured and displayed on a computer monitor. The Flow Cytometer will distinguish bacterial cells from other types of biological and non-biological particles.

Threshold System. Detection is based on the pH change produced by the hydrolysis of an enzyme substrate. A computer is used to read the output from the sensor and determines whether specific pathogens are present.

SMART detection kit. The SMART detection kit changes color indicating the presence of specific pathogens. Detection is based on antibody-antigen interaction.

This test also will be conducted in four phases, with Phases One through Three being identical to those for the ACM-BCD test.

In addition to the pathogens and toxins to be used in Phase Four of the ACM-BCD test, the NDI test will also include staphylococcal enterotoxin B (SEB), a toxin; and a vaccine strain of Yersinia pestis as liquid challenges using biosafety level 2 guidelines.

The objectives of these tests are two-fold: to characterize the performance and sensitivity of the ACM-BCD and the NDI components, and to provide information concerning the suitability of this equipment for use in the BIDS.

All agents of biological origin (ABO) are already on hand at Dugway Proving Ground. Dugway testers use killed ABOs as often as

possible to minimize the use of pathogens; however, it is necessary to establish the functionality of the biosensor with unaltered agents. Sensitivity testing requires the use of live materials.

At the conclusion of testing, all potentially contaminated equipment will be decontaminated using established procedures.

Dugway officials have coordinated this project and the installation's emergency response plan with the Utah Department of Health, the Department of Public Safety, and the Tooele County Emergency Management Director. All emergency response personnel will be fully trained prior to testing.

This test will be conducted in full compliance with the National Environmental Policy Act. Dugway's biological protection testing has been addressed in the Biological Defense Research Program Programmatic Environmental Impact Statement, the Life Sciences Test Facility Final Environmental Impact Statement and the Baker Test Facility Environmental Assessment. Additionally, Dugway has prepared a Record of Environmental Consideration and provided it to the State.

July 30, 1992

DUGWAY PROVING GROUND, Utah -- Dugway Proving Ground will conduct an Antigen/Antibody Development Reagents test program in September 1992 at the Baker Test Facility.

The objective of the Antigen/Antibody Development Reagents test is to create a handbook which can be used by the Department of the Army or its contractors to develop and produce antibody reagents. These reagents will be used in biological agent detection devices that require antibodies to function. The handbook will guide the developer or manufacturer through a checklist of decisions that have to be made at each step of the process from the time a requirement for a specific antibody is determined through production, quality control testing and packaging of the final product.

This handbook will be validated by using it to produce antibodies for tests to detect Bacillus anthracis, Vollum 18, and an attenuated vaccine strain of Venezuelan equine encephalomyelitis virus (VEE).

None of the testing will involve the generation of aerosols. During the testing, both pathogens will be handled as liquid challenges using Biosafety Level 3 containment with appropriate safety practices and the public will not be in any danger.

At the conclusion of testing, all test equipment will be thoroughly decontaminated using established practices.

Dugway officials have coordinated this project and the installation's emergency response plan with the Utah Department of Health, the Department of Public Safety and the Tooele County Emergency Management Director. All emergency response personnel will be fully trained prior to pathogen testing.

This test will be conducted in full compliance with the National Environmental Policy Act. Biological protection testing at Dugway has been addressed in the Programmatic Environmental Impact Statement for the Biological Defense Research Program. Additionally, Dugway has prepared a Record of Environmental Consideration and submitted it to the State.

July 30, 1992

DUGWAY PROVING GROUND, Utah -- Dugway Proving Ground will begin a test of the Concept Model of the Bio-Chemical Detector in September 1992 at the Baker Test Facility.

A critical need exists in the Army for a biological agent detection capability for use by our soldiers in the field. The Bio-Chemical Detector will continuously sample the air and identify any dangerous biological pathogens and toxins. This would alert our soldiers in the field to put on their protective clothing, and to determine when the threat has passed. The testing is necessary to ensure the device can selectively differentiate between potential threat organisms and naturally occurring organisms.

The challenge materials for this test are:

- Bacillus subtilis var. niger, a bacterial simulant;
- MS2 bacteriophage, a viral simulant;
- T-2 toxin, a toxin produced by fungi;
- Staphylococcal enterotoxin B, a toxin that causes food poisoning;
- botulinum toxin A, a toxin that causes food poisoning;
- Yersinia pestis, a vaccine strain of the organism that causes plague;
- Coxiella burnetii, the organism that causes Q-fever.

The testing will involve both liquid and aerosol challenges inside the Biosafety Level 3 containment facility using appropriate safety practices, and outdoor field trials using simulant only. The public will not be in danger.

At the conclusion of testing, all test equipment will be thoroughly decontaminated using established practices.

Dugway officials have coordinated this project and the installation's emergency response plan with the Utah Department of Health, the Department of Public Safety and the Tooele County Emergency Management Director. All emergency response personnel have been fully trained.

This test will be conducted in full compliance with the National Environmental Policy Act. All biological protection testing at Dugway has been addressed in the Programmatic Environmental Impact Statement for the Department of Defense Biological Defense Research Program. Additionally, Dugway has prepared a Record of Environmental Consideration and submitted it to the State, along with the notification letter to the State Air Quality Board.

In November 1969, the United States officially renounced the use of biological warfare, confining programs to defensive testing only. Since that time, Dugway's biological program is limited solely to testing military equipment such as protective masks, clothing, decontamination systems and detection devices against threat agents.

July 30, 1992

DUGWAY PROVING GROUND, Utah -- Dugway Proving Ground will begin a Decontaminating Agent Multipurpose test program in September 1992 at the Baker Test Facility. Two decontaminating formulas will be tested.

The objective of the Decontaminating Agent Multipurpose test is to find a more efficient and more environmentally benign decontaminant for chemical and biological agents. The current decontamination solution, DS2, is very corrosive to metals and is not as effective against bacterial spores as desired. The Army is seeking a single decontaminant for both chemical and biological agents.

The Decontaminating Agent Multipurpose will consist of mixtures of N-Cyclohexyl-2-Pyrrolidone (NCP), High Test Hypochlorite (HTH) and water. In addition to NCP, HTH and water, the DAM1 formula will also contain N-Ethyl-2-Pyrrolidone (NEP) and Variquat.

The biological challenge materials to be used in this test are:

- Asciillus subtilis var. niger (BG), a simulant;
- MS2 coliphage, a viral simulant;
- T2 toxin, a toxin produced by fungi.

The contaminant will be placed on the surface of Chemical Agent Resistant Coating (CARC) painted metal panels. At the conclusion of testing, all test equipment will be thoroughly decontaminated using established practices.

None of the testing will involve aerosols and the public will not be in any danger. During the testing, the toxin will be handled as a liquid challenge using Biosafety Level 3 containment with appropriate safety practices. Although only Biosafety Level-2 is needed for this work, the Army has decided to use a more stringent requirement.

At the conclusion of testing, all test equipment will be thoroughly decontaminated using established practices.

This test will be conducted in full compliance with the National Environmental Policy Act. Biological protection testing at Dugway has been addressed in the Biological Defense Research Program Programmatic Environmental Impact Statement. Additionally, Dugway prepared a Record of Environmental Consideration and submitted it to the State.

UNITED STATES ARMY DUGWAY PROVING GROUND, UTAH

NEWS RELEASE

For more information, contact the Public Affairs Officer, USADPG, ATTN: STEDMFA, Dugway, Utah 84022-8700. From Salt Lake City only, call 822-2118 toll free. Other places dial (801) 831-2118. Autovon users dial 786-2118.

Release No.: _____

DUGWAY PROVING GROUND, Utah -- In April, Dugway Proving Ground notified the public of the beginning of the Chemical Biological Mass Spectrometer detector test program at the Baker Test Facility.

The CBMS detector is designed to collect and identify vapors and particulate aerosols of all known chemical and biological agents.

The program, which began early this summer, includes laboratory tests with aerosol and liquid challenges with biological simulants and agents of biological origin and outdoor aerosol challenges with biological simulants. Testers are using interferants, such as gasoline fumes, diesel smoke, burning vegetation, weapons fire and fog oil, in the laboratory to attempt to confuse the detector. The goal is to have a detector that can recognize the true agent despite the presence of other materials, simulating battlefield conditions.

The previously approved challenge materials for this test program include Bacillus subtilis var. niger (BG); MS2 coliphage; Coxiella burnetii (killed); an attenuated strain of Yersinia pestis; and aldolase, a common enzyme which breaks down sugars. T2 toxin and Staphylococcal enterotoxin B (SEB), both liquid challenges, also will be used.

The Detection Directorate at the U.S. Army Chemical Research, Development and Engineering Center has requested that five agents of biological origin be added to the previously approved list for (CBMS) bioprofiling. (Bioprofiling is the process of analyzing known materials to establish a "library" of information. This library is later used to identify unknown samples.) These are:

- * Botulinum toxin A, liquid challenge,
- * Ricin (RCA₅₀), (a toxin byproduct from the castor bean), liquid challenge,
- * Bacillus anthracis, (killed Vollum strain), liquid challenge,

* Francisella tularensis (live vaccine strain), liquid challenge,

* Venezuelan Equine Encephalomyelitis Virus (vaccine strain TC83), liquid challenge.

The request is only for bioprofiling so there will be no aerosolization of these pathogens and toxins at this time. For bioprofiling, the pathogens and toxins will be placed in distilled water which will be introduced directly into the CBMS and immediately pyrolyzed (producing a chemical change brought about by the action of heat.) All challenges will take place in certified Class I or Class II biosafety cabinets. The additional bioprofiling will require one to two weeks for completion.

All interferences, safety precautions and emergency response planning remain the same as described in the previously approved Public Affairs plan for this test. This change in scope is adequately addressed in existing National Environmental Policy Act documentation.

All toxins will be procured from commercial sources and the spores of *Bacillus anthracis* (Vollum strain) will be grown and killed by gamma radiation at the U.S. Army Medical Research Institute for Infectious Disease, Fort Detrick, Md., and provided to Baker Test Facility.

Decontamination of microorganisms will be accomplished using steam sterilization and disinfectants before removal from the test chamber. Botulinum toxin A and ricin will be inactivated with a 5 percent bleach solution inside of the BL-2 cabinets where liquid challenges will take place.

In addition to previous state and local notification pertaining to this test, Dugway's commander briefed members of the Governor's Technical Review Committee regarding the additional pathogens and toxins.

UNITED STATES ARMY DUGWAY PROVING GROUND, UTAH

NEWS RELEASE

For more information, contact the Public Affairs Officer, USAADPG, ATTN: STEDP-PA, Dugway, Utah 84022-8700
 From Salt Lake City only, call 822-2116 toll free. Others please dial (801) 821-2116. Astrocomp users dial 789-2116.

Release No. 5029/1

FOR IMMEDIATE RELEASE

2 MAY 1991

DUGWAY PROVING GROUND, UTAH -- U.S. Army officials at Dugway Proving Ground have announced resumption of testing, at biosafety level 3 containment, at Dugway's Baker Test Facility beginning June 3, 1991.

Testing will be conducted to evaluate the performance of a biological detection system for the Army.

Testing will be performed with simulant materials -- the bacteria Bacillus subtilis var. niger and the coliphage MS2 virus.

After initial operational procedures for the device are established, the device will be tested with three toxins and two pathogens. The toxins are botulinum toxin, staphylococcus enterotoxin B, and the mycotoxin T-2. The pathogens used in the testing will be Yersinia pestis, and Coxiella burnetii. A relatively harmless strain of Yersinia pestis (strain ZV 76) has been selected to reduce hazards associated with pathogens.

Col. Frank Cox, Dugway's commander, stated that all work will be done under biosafety level 3 containment, with appropriate safety practices.

The Utah Department of Health has been fully briefed on the project and have treatment protocols for all illnesses associated with the challenge materials. An emergency response plan is in place and training is completed. Dry runs are made every time. Coordination of the emergency response plan with the Utah Department of Health and Department of Public Safety as well as the Tooele County Emergency Management Director has occurred. A Record of Environmental Consideration has been prepared for this action in compliance with the National Environmental Policy Act.

At the conclusion of testing, all test equipment will be thoroughly decontaminated by initially being air washed for 24 hours following trials, then fumigated with paraformaldehyde for 4 hours, then washed down with a solution of sodium hypochlorite, and all unused microorganisms destroyed by a chemical disinfectant and steam sterilization.

FOR IMMEDIATE RELEASE

September 24, 1991

DUGWAY PROVING GROUND, Dugway, Utah -- Dugway Proving Ground will conduct the ultra-violet light fluorescence test beginning Oct. 7, 1991, at the Baker Test Facility, according to Army officials.

The UVLIF test will be performed in conjunction with testing to evaluate the performance of a biological detection system for the Army. During the UVLIF portion of the test, a disposable probe will be used to obtain ultra-violet light induced fluorescence patterns of specified test materials. The probe, a fiber optic cable, will take its readings passively, that is, the probe will be placed in the aerosol stream or cloud; it will not pull aerosols to it. No aerosol sample is required to pass outside the chamber. The entrance port, which is one centimeter in diameter, is sealed with RTV silicone, and the containment chamber will be leak-tested using freon prior to using pathogens.

Testing of the UVLIF system will be performed using Bacillus subtilis variety niger and botulinum toxin A as materials of primary interest.

The UVLIF test will not require expanding the scale or scope of the Bio-Chemical Detector test as it currently has been approved. No additional types or volumes of pathogens or toxins will be required. All operational procedures and hazard analyses applicable to the combined BCD/UVLIF test will remain unchanged from those of the BCD test, according to Army officials.

According to Kelynda J. Petrie, chief of public affairs for Dugway, all pathogen work will be done under biosafety level 3 containment, with appropriate safety practices.

The Utah Department of Health has been fully briefed on the project and has treatment protocols for all illnesses associated with the materials. An emergency response plan is in place and training is complete. Additionally, detailed standardization training and protocol refinement will take place using simulants prior to aerosolization of etiologic agents. Coordination of the emergency response plan with the Utah Department of Health and Department of Public Safety as well as the Tooele County Emergency Management Director has occurred. A Record of Environmental

Consideration has been prepared for this action in compliance with the National Environmental Policy Act.

At the conclusion of testing, all test equipment will be thoroughly decontaminated by initially being air washed in the containment chamber for 24 hours, then fumigated with paraformaldehyde for four hours, and/or washed down with a solution of sodium hypochlorite. All unused micro-organisms will be destroyed by steam sterilization; toxins which are not returned to storage will be destroyed using chemical decontaminants. All etiologic agents will be vigorously accounted for from preparation for, to retrograde from testing.

For more information on the test, contact Mrs. Melynda J. Patrie, chief of public affairs, at (801) 831-2116.

-30-

-more-

UNITED STATES ARMY DUGWAY PROVING GROUND, UTAH

April 1992

NEWS RELEASE

For more information, contact the Public Affairs Officer, USADPG, ATTN: STED9-PA, Dugway, Utah 84022-5700
 From Salt Lake City only, call 822-2116 toll free. Other places dial (801) 831-2116. Airforce users dial 789-2116.

Release No. 0401921

U.S. ARMY DUGWAY PROVING GROUND
 PUBLIC AFFAIRS OFFICE
 DUGWAY, UTAH 84022-5000
 (801) 831-2116

Dugway Proving Ground began a Chemical Biological Mass Spectrometer (CBMS) detector test program in November 1991 at the Baker Test Facility. Pathogens will not be used in the program until May 1992.

The CBMS detector is designed to collect and identify vapors and particulate aerosols of all known chemical and biological agents.

The program will include laboratory tests with aerosol and liquid challenges with biological simulants and agents of biological origin and outdoor aerosol challenges with biological simulants. Interferents, such as gasoline fumes, diesel smoke, burning vegetation, weapons fire and fog oil, will be used in the laboratory and outdoors to attempt to confuse the detector. The goal is to have a detector that can recognize the true agent despite the presence of other materials, simulating battlefield conditions.

In addition to the interferents, the biological challenge materials for the CBMS test will include Bacillus subtilis var. niger (BG); MS2 coliphage; Coxiella burnetii (killed); an attenuated strain of Yersinia pestis; and aldolase, a common enzyme which breaks down sugars. T2 toxin and Staphylococcal enterotoxin B (SEB), both liquid challenges, will also be used. Only BG and MS2 will be used in outdoor testing.

All laboratory aerosol challenges with simulants and killed microorganisms will be performed under BL2 containment. Liquid challenges with toxins will be performed under BL3 containment with appropriate safety practices, according to Mrs. Melynda J. Petrie, public affairs officer for Dugway.

The Utah Department of Health has been fully briefed on the project and has treatment protocols for all illnesses associated with the materials. An emergency response plan is in place and training for emergency response personnel is complete.

Additionally, detailed test system standardisation, training and protocol refinement will take place using simulants prior to aerosolisation of etiologic agents. The emergency response plan was coordinated with the Utah Department of Health, Department of Public Safety and the Tooele County Emergency Management Director. A Record of Environmental Consideration has been prepared for this action in compliance with the National Environmental Policy Act.

At the conclusion of testing, all test equipment will be thoroughly decontaminated by initially being air washed for 24 hours, then fumigated with paraformaldehyde for four hours, and/or washed down with a solution of sodium hypochlorite. All air wash will be filtered through four laboratory HEPA filters before entering the facility HEPA filtration compartment and final exhaust through the building stack system. All unused microorganisms will be destroyed by steam sterilization; toxins which are not returned to storage will be destroyed using chemical decontaminants. All etiologic agents will be vigorously accounted for from preparation for, to retrograde from testing.



THE OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE

4000 DEFENSE PENTAGON
WASHINGTON DC 20301-4000



3 FEB 2004

Mr. Quinton Kinderman
Assistant Director for Policy
Compensation & Pension Service
Department of Veterans' Affairs
Washington, DC

Dear Mr. Kinderman:

This is in response to your request for assistance with the case file on Mr. Clyde O. Priddy. We have reviewed our list of Chemical Weapons Service Units that were active during World War II and have confirmed the presence of Mr. Priddy's unit in India at the time that he stated. We are forwarding the specific reference to Mr. Priddy's unit as an enclosure to this letter. We are also returning to you the pictures that accompanied Mr. Priddy's claim, and the personal data you forwarded to us for information.

In addition to locating the information on Mr. Priddy's unit in our historical records on the Chemical Weapons Service, we were able to have a munitions expert at Edgewood Arsenal look at the pictures of the canisters stored at Ondal, India. They confirmed that the type of munitions in the pictures were consistent with those used for mustard agent and phosgene gas transported to and stored in the China, India, Burma Theater of Operations during World War II. The munitions expert also informed us that the canisters were notorious leakers due to the wartime manufacturing quality and the damp climate of the Indian continent.

We will be forwarding to the Department of Veterans' Affairs, under separate cover, the historical information on the dates of training and wartime assignments of Chemical Weapons Service Units. Thank you for sharing this information with us, I hope the information we have provided will be of assistance to Mr. Priddy and the VA.

Sincerely,

Martha E. Hamed
Project Manager

Information Resources Management



THE OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE

4000 DEFENSE PENTAGON
WASHINGTON DC 20301-4000



3 FEB 1994

Mr. Quinton Kinderman
Assistant Director for Policy
Compensation & Pension Service
Department of Veterans' Affairs
Washington, DC

Dear Mr. Kinderman:

This is in response to your request for assistance with the case file on Mr. Clyde O. Priddy. We have reviewed our list of Chemical Weapons Service Units that were active during World War II and have confirmed the presence of Mr. Priddy's unit in India at the time that he stated. We are forwarding the specific reference to Mr. Priddy's unit as an enclosure to this letter. We are also returning to you the pictures that accompanied Mr. Priddy's claim, and the personal data you forwarded to us for information.

In addition to locating the information on Mr. Priddy's unit in our historical records on the Chemical Weapons Service, we were able to have a munitions expert at Edgewood Arsenal look at the pictures of the canisters stored at Ondal, India. They confirmed that the type of munitions in the pictures were consistent with those used for mustard agent and phosgene gas transported to and stored in the China, India, Burma Theater of Operations during World War II. The munitions expert also informed us that the canisters were notorious leakers due to the wartime manufacturing quality and the damp climate of the Indian continent.

We will be forwarding to the Department of Veterans' Affairs, under separate cover, the historical information on the dates of training and wartime assignments of Chemical Weapons Service Units. Thank you for sharing this information with us, I hope the information we have provided will be of assistance to Mr. Priddy and the VA.

Sincerely,

Martha E. Hamed

Project Manager

Information Resources Management

897	15 Mar 43	15 Mar 43	20 Dec 43	Daniel Fld, Ga.				D20 Dec 43	Daniel Fld, Ga.
898	15 Mar 43	15 Mar 43	20 Dec 43	Daniel Fld, Ga.				D20 Dec 43	Daniel Fld, Ga.
899	15 Mar 43	15 Mar 43	20 Dec 43	Daniel Fld, Ga.				D20 Dec 43	Daniel Fld, Ga.
900	10 May 45	10 May 45	3 Nov 45	India	10 May 45	3 Nov 45	I-B	5 Nov 45	Cp. Kilmer, N. J.

2532010 (handwritten)

Department of Veterans Affairs

1A. ADDRESS CODE: 13 REQUEST FOR INFORMATION 1B. TYPE OF CLAIM: Compensation

2. SEPARATION FORMS ON FILE: YES NO 3. DATA REQUESTED: SERVICE MEDICAL DENTAL CLINICAL OTHER

BRANCH OF SERVICE: ARMY NAVY AIR FORCE MARINE CORPS COAST GUARD NATIONAL GUARD (Army) NATIONAL GUARD (Air) OTHER (Specify)

4A. NAME AND ADDRESS OF VA REQUESTING OFFICE: REGIONAL OFFICE, 1400 NORTH VALLEY MILLS DRIVE, WACO, TEXAS 76799 5B. ORIGINATING UNIT: 389/211B 6. FILE NO.: 10 677 337

8. LAST NAME - FIRST NAME - MIDDLE INITIAL: PRIDDY, Clyde, C. 9A. ALL SERVICE NOS.: 3774.300.1 9B. SOCIAL SECURITY NO. [REDACTED]

10. DATE OF BIRTH: [REDACTED] 11. PLACE OF BIRTH: Hayes, Kansas 12. DATE OF DEATH: [REDACTED]

13. DATE ENTERED ACTIVE DUTY: 5-12-44 14. DATE SEPARATED FROM ACTIVE DUTY: 6-5-46 15. CHARACTER OF SEPARATION OR DISCHARGE: Hon 16. LAST GRADE, RATE OR RANK AND ORGANIZATION: DD214 attached

17. ALLEGED DISEASE OR INJURY: [REDACTED] 18. DATES OF TREATMENT: [REDACTED] 19. PLACE OF TREATMENT: [REDACTED] 20. TYPE (Check): HOSPITAL OP

21. ADDITIONAL INFORMATION REQUESTED: DD214 states toxic gas handler. Veteran claiming lung condition due to exposure to mustard Gas at 700th Chemical Co + 900th Chemical Co. in Ordeal, India in 1945. Pls confirm exposure.

22A. SUBSEQUENT RESERVE OR RETIRED STATUS: NONE RESERVE OBLIGATION RETIRED UNKNOWN

22B. OBLIGATION TERMINAL DATE: [REDACTED] 22C. RETIRED STATUS: IN PAY STATUS NONPAY STATUS TEMPORARY DISABILITY RETIRED LIST RETIRED-STATUS UNKNOWN

23. DATE: 5-10-93 24. SIGNATURE AND TITLE OF VA OFFICIAL: [Signature]

ENDORSEMENT-VERIFICATION BY SERVICE DEPARTMENT: AVAILABLE REQUESTED RECORDS FORWARDED ITEMS B, 9, AND 13 THROUGH 15 VERIFIED CORRECT ITEMS B, 9, AND 13 THROUGH 15 VERIFIED CORRECT, EXCEPT:

21. Mustard gas No SHP's or SG's on file Physical exams cannot be reconstructed

ALL RECORDS, IF ANY, IN OUR CUSTODY REGARDING THIS SUBJECT WERE LOST IN THE FIRE IN JULY 1983

No medical records on file at NPRC. NOTE: File related service. Refer to VA Program Guide 21-1, Section B for further guidance. NCPMR Harris 2 Jul 93

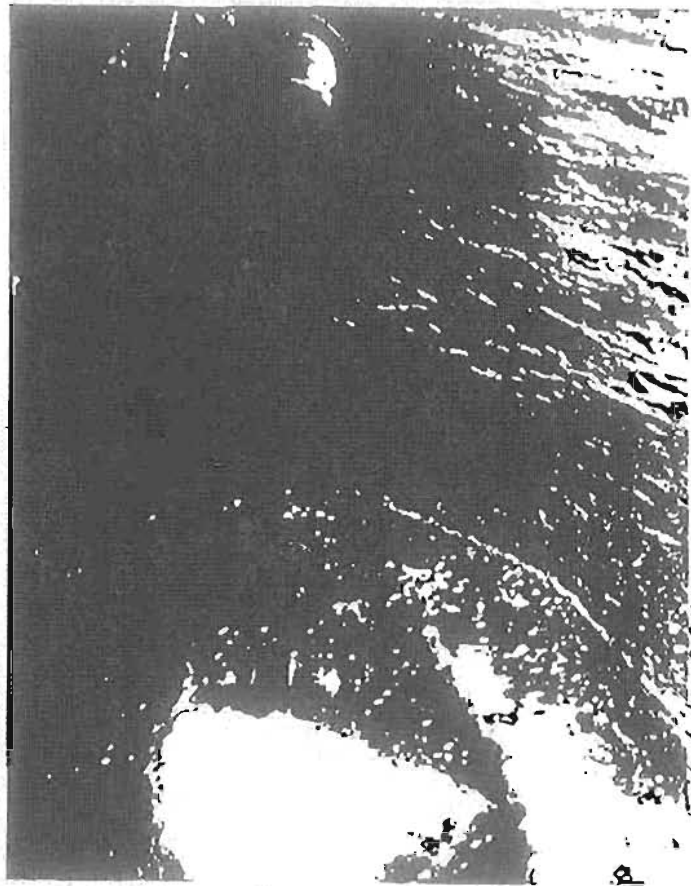
NO. OF ENCLOSURES ORIG. COPY NO. ENCL. (Cont.) ORIG. COPY SERVICE INFORMATION DATE SIGNATURE AND TITLE

HEALTH RECORDS CLINICAL RECORDS X-RAYS DENTAL RECORDS MEDICAL RECORDS OTHER RECORDS

PHYSICAL EXAMINATIONS AT SEPARATION MEDICAL RECORDS DATE SIGNATURE AND TITLE

VA FORM 21-3101 Exception to SP 160 Approved by General Services Administration, March 1969

EXISTING STOCKS OF VA FORM 21-3101, OCT 1987, WILL BE USED.

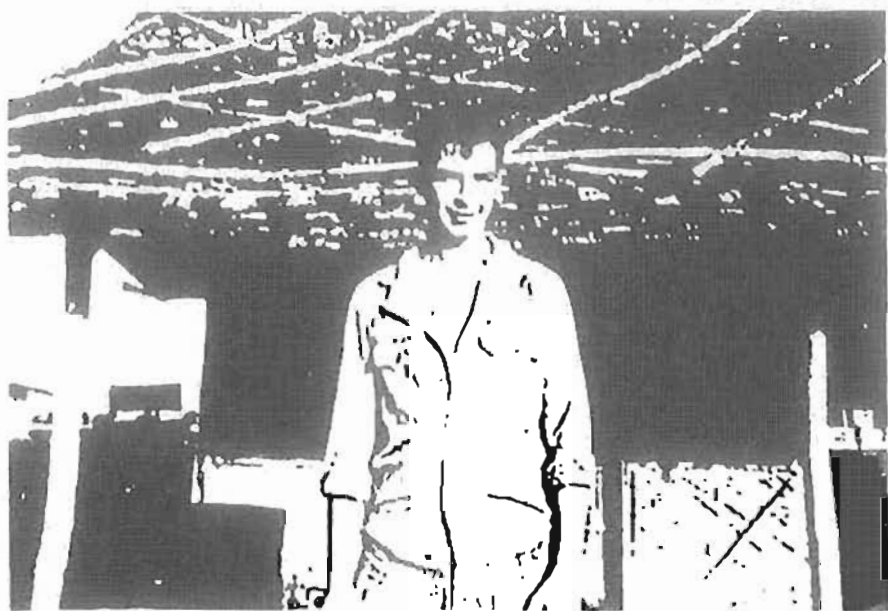


UNION ADAM G. FOSTER IN 5470 - 22ND ST. N.Y.C. NOV 1945



ALBERT K. HILBY, AN U.S. AIR FORCE MEMBER
IN NOV 1945

CYANIDE CHLORIDE & PHOSPHORUS
POISON GAS UNIT - BORDAL IN INDIA, 1945



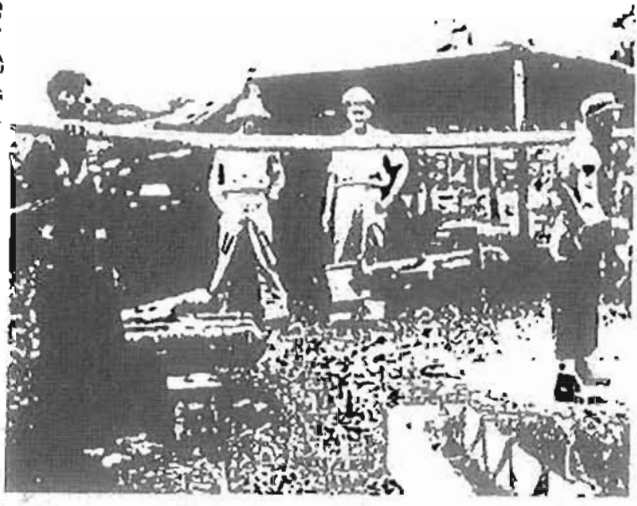
SEAN THERNBERG IN INDIA - AREFAT
JULY 1945

INSIDE BRIDY

HOME OF 400 CHEMICAL CO

~~SECRET~~

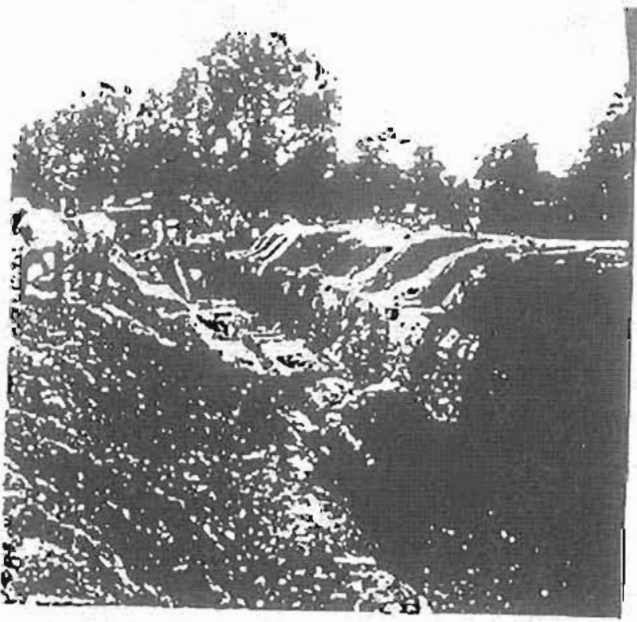
THE METHOD WE USE
A FEW DAYS I NEVER
SAW A PROBLEM WITH IT.



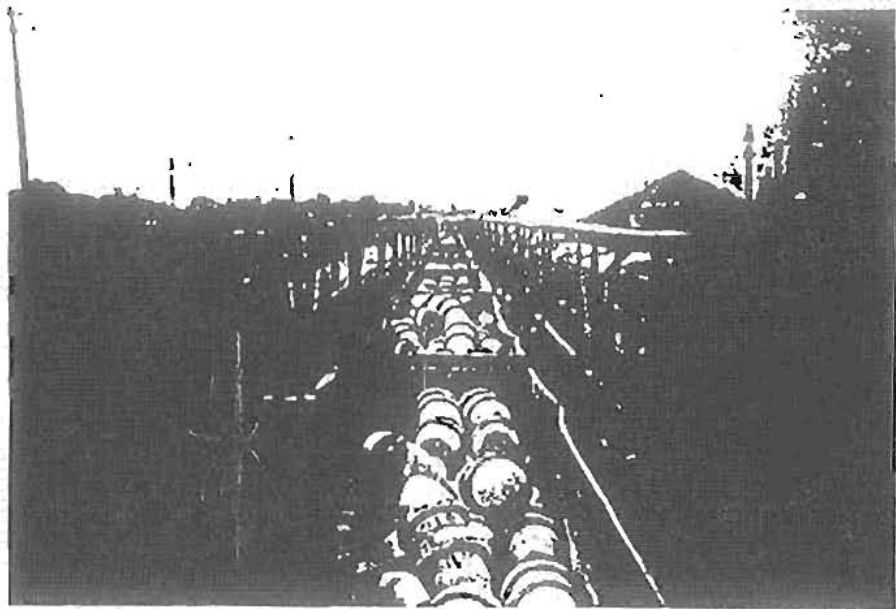
WE NEVER SAW A PROBLEM
WITH IT.

100 LB MUSTARD GAS BOMBS - INDIA 1945
I NEVER SAW OR HEARD THIS METHOD

AIRCRAFT BOMBS WERE
TOO DIFFICULT TO USE
AND WE WERE FORCED TO USE

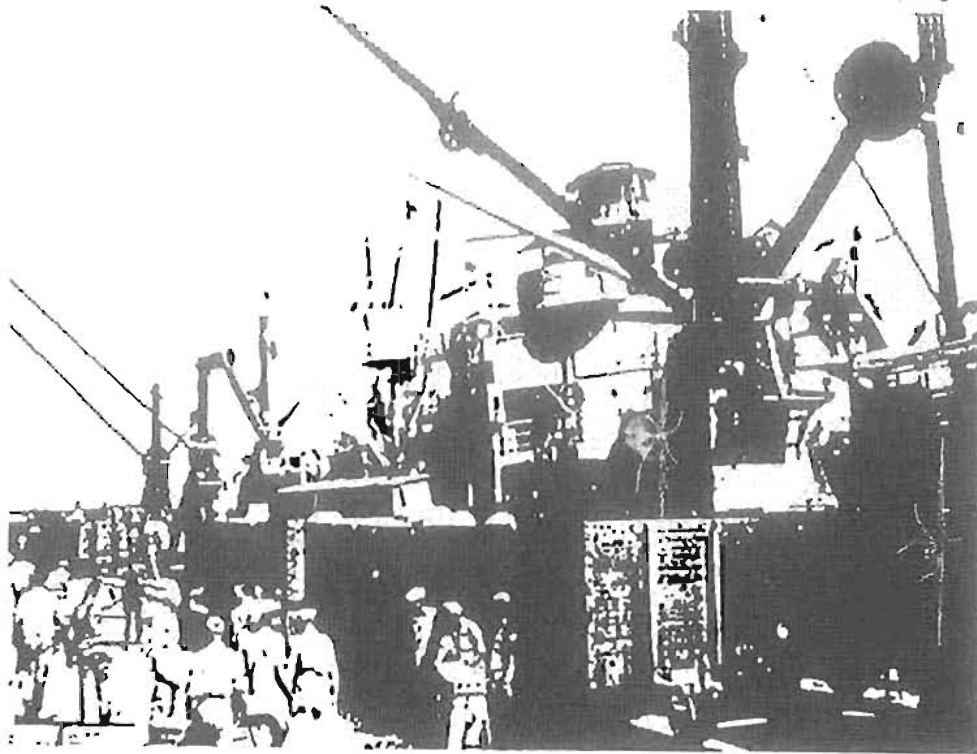


THEY WERE NOT KILLED



POISON GAS BOMBS ON WAY TO PORT
MAY 1945

LOADING GAS BOMBS ON SHIP
MATTHEWSON, CHITTAGONG, BANGLA DESH MAY 1945



ROUTING AND TRANSMITTAL SLIP

Date 9/23

TO: (Name, office symbol, room number, building, Agency/Post)	Initials	Date
1.		
2.		
3.		
4.		
5.		

[Handwritten signatures and initials in routing table]

Action	File	Note and Return
Approval	For Clearance	Per Conversation
As Requested	For Correction	Prepare Reply
Circulate	For Your Information	See Me
Comment	Investigate	Signature
Coordination	Justify	

REMARKS

For MIKE BAKER - 20P - for his meeting with Marty Hamed on 9/24/93.

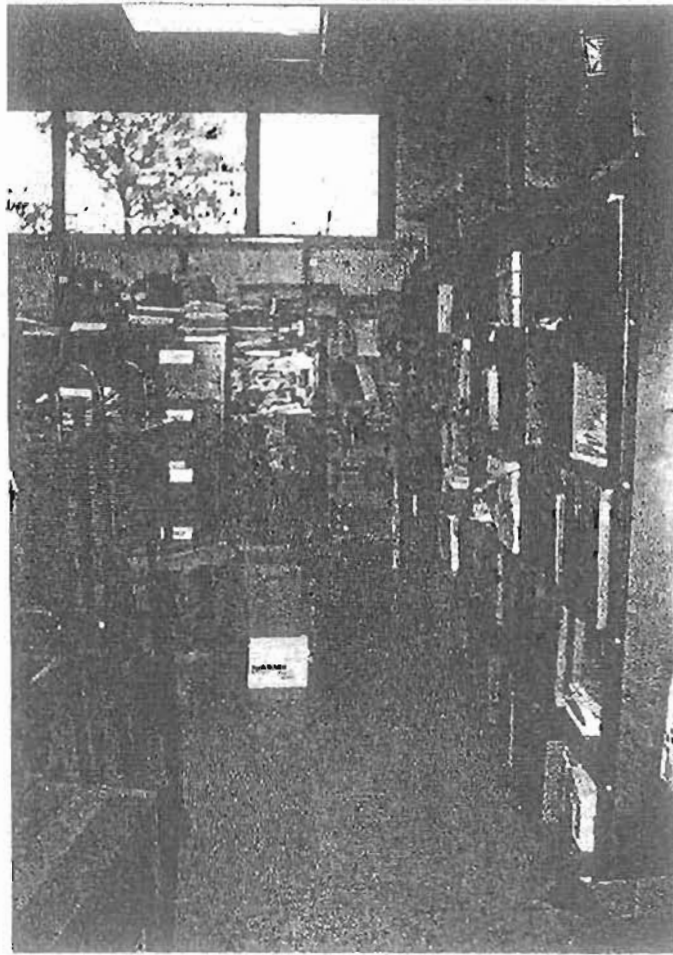
Picture must be returned to c-file

DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions

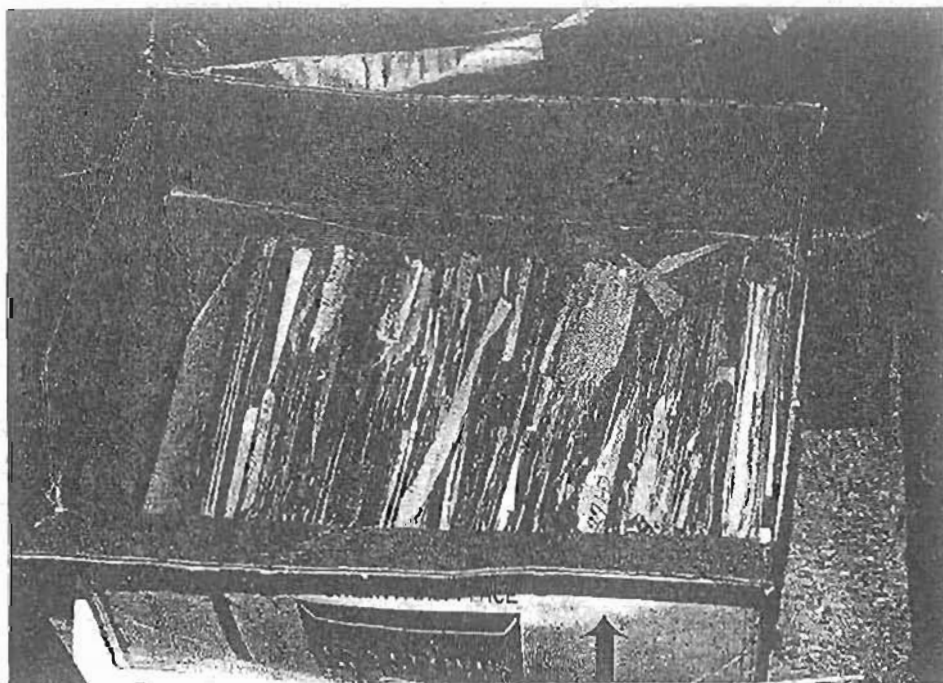
FROM: (Name, org. symbol, Agency/Post)	Room No.—Bldg.
<i>[Handwritten signature]</i>	Phone No.
	<u>233 5446</u>

U.S. ARMY CHEMICAL SCHOOL LIBRARY

Long View of the Right Wall of the Library Back Room

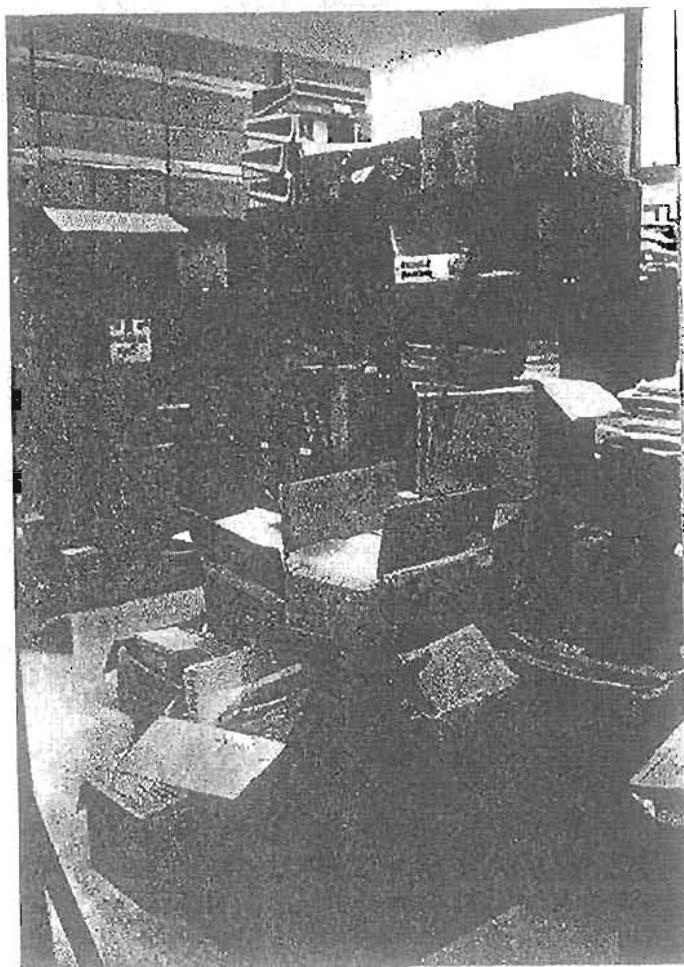


Contents of Box of WW I Develop. Reports - Back of Box Contains Other Historical Material



U.S. ARMY CHEMICAL SCHOOL LIBRARY

View of the Library Back Room Showing Pile of Boxes and partial View of Shelf Space

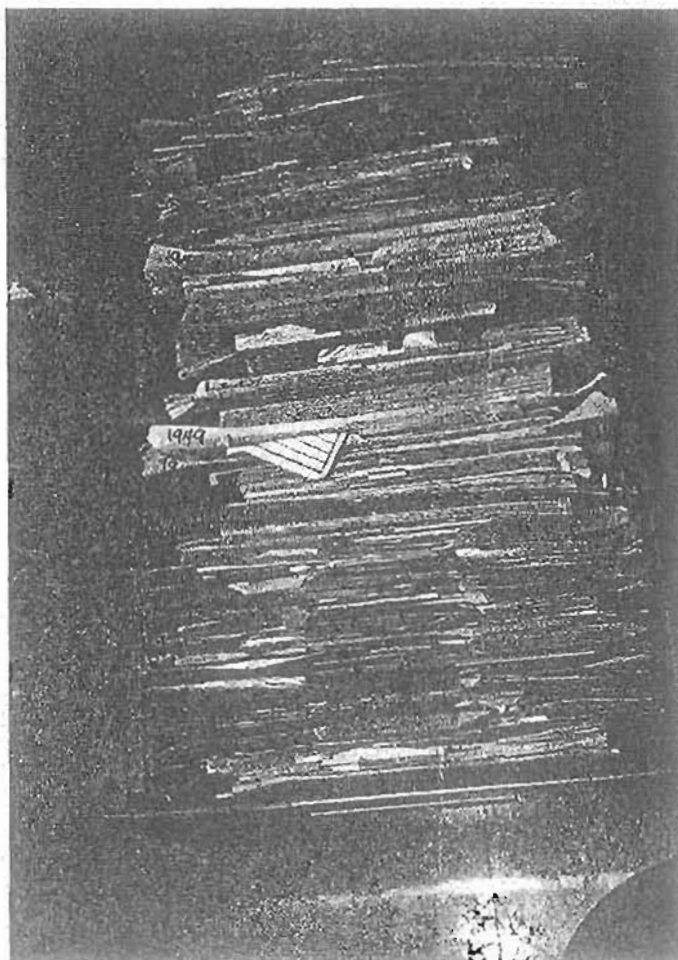


Closer View of the File of Boxes in Back Room - Shows Some Mixed Box Contents



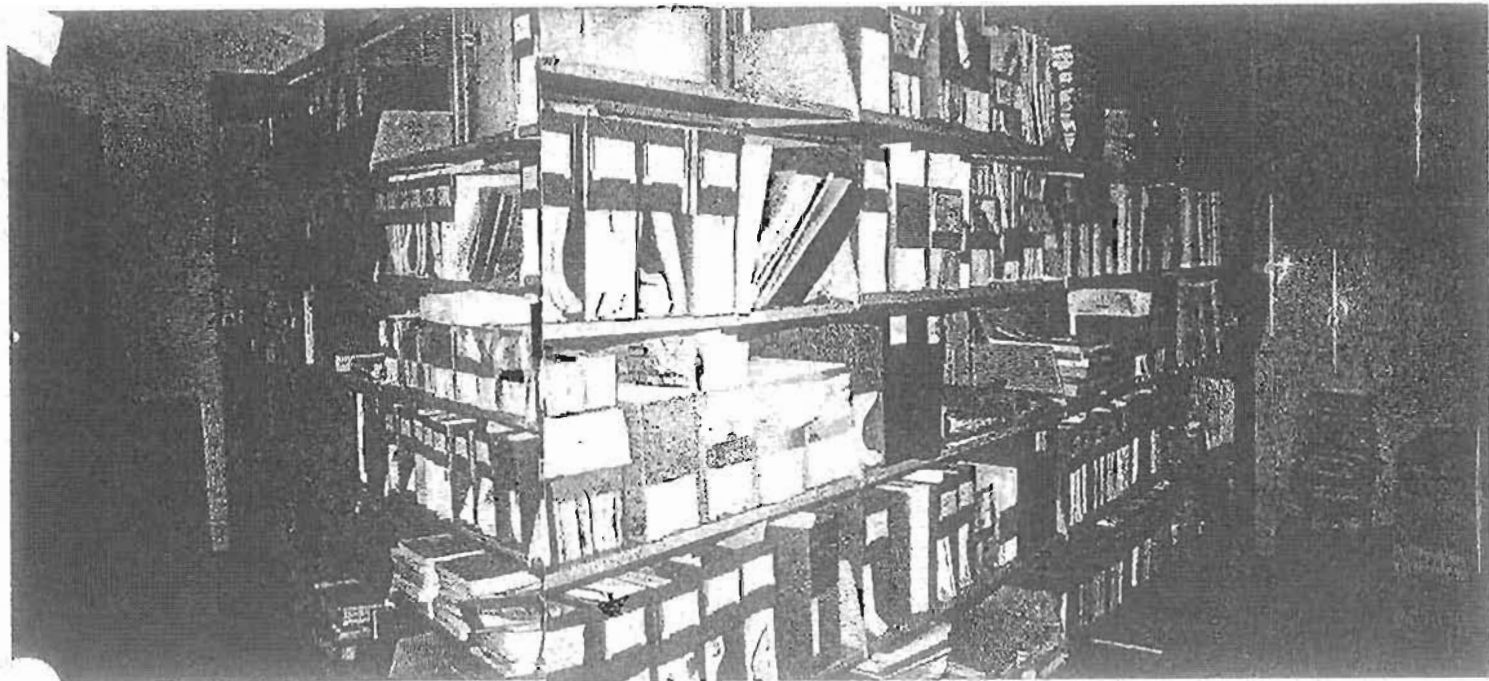
U.S. ARMY CHEMICAL SCHOOL LIBRARY

Contents of a File Drawer with Class Histories/ Programs of Instruction



U.S. ARMY CHEMICAL, SCHOOL LIBRARY

"Panoramic" View of the Back Wall of the Library Back Room



View in the Library's Side Room Showing some of the stacks and Reports Stacked on Floor

