DEPARTMENT OF DEFENSE

OFFICE OF THE UNDER SECRETARY OF DEFENSE PERSONNEL & READINESS

DEPUTY UNDER SECRETARY FOR PROGRAM INTEGRATION

INFORMATION MANAGEMENT OFFICE

CHEMICAL WEAPONS EXPOSURE PROJECT

SUMMARY OF ACTIONS AND PROJECTS

1993 – 2007

SUMMARY FOR 1995 THROUGH 2007
This report was prepared at the request of the Office of the Under Secretary of Defense for Personnel and Readiness, Information Management Office. It summarizes the efforts of the Department of Defense to identify, collect, archive, and forward to the Department of Veterans Affairs the names of DoD personnel exposed to chemical, biological, or nuclear agents during research, testing, and transportation of subject agents.

Information was extracted from current and archived files containing official letters, memoranda, technical and administrative reports, task force and work group reports, Congressional briefings, newspaper articles, and from the corporate memory of the preparer. Major source documents that define the efforts undertaken from 1993 to 2004 are included at tabs to the report. Submitted September 26, 2007. Addendum added May 2008.

Prepared By: Martha E. Hamed
Independent Consultant to
BOOZ ALLEN HAMILTON INC.
G-SOOT-99-ALD0202
ICA#91458DG
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1995 - 2007
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SUMMARY FOR 1995 THROUGH 2007

I Chemical Weapons Exposure Study

In 1995 the Chemical Weapons Exposure Study had moved to the Defense Manpower Data Center (DMDC), another organization staffed to the OUSD Personnel & Readiness. The staff there consisted of the fulltime chemical weapons officer formerly staffed to the IM Office, and a support person at the GS-12 level. The search continued for documentation of tests using human test subjects, particularly those documents that would yield names. Participation in the P&R IM Office shifted from day to day work on the project to support for major OSD action items such as augmenting information for hearings or inquiries, or for oversight of major information exchange projects with the VA. Paragraphs II and III are overviews of DMDC activity during the period of 1995-1996.

II Certificates of Commendation

As stated in Section B for 1994, there had been a Sense of Congress added to the FY1995 Defense Authorization Act S.2182. This required the Secretary of Defense to issue commendation certificates to each surviving individual and to notify them of the exposure, the possible health effects of the exposure, and the options available for medical treatment. During the period 1995 to 1996 DMDC used the Personnel Database to record the names, most recent addresses, and exposures of WWII test subjects. A copy of the language is in the FY1995 legislation is at Tab C1. Tab C2 is a copy of the certificate signed by the Secretary of Defense, and a sample of the cover letter that went with it signed by the Deputy Under Secretary for Program Integration. Tab C3 is a copy of an information paper developed in DMDC probably in 1995 enumerating the possible numbers of test subjects by Service. There were 722 commendations sent to veterans. Copies of those certificates and letters are stored in DMDC Records Box 3 Control Numbers RMI ML 42619, transferred to OASD (HA).

III Personnel Database and Information Exchange 1995 and 1996

As previously mentioned, as soon as names were found, they were extracted and sent to the VA. They were also put in a database developed at DMDC that had the names and last known addresses of test subjects, as well as the kind of agent used and kind of test (chamber, field, protective clothing). This database had also been shared with the VA. In spite of the information being shared with the VA, there was a break down in internal communication and sharing within the VA concerning the information being provided by DoD. This communication problem became very obvious in 1995 when the Under Secretary of the VA sent three separate letters to DoD requesting information that, for the most part, had already been provided to the Compensation and Pension Service.
Tab C4 is a copy of a correspondence staffing package prepared by DMDC answering letters from the VA dated May 8, July 5, and July 28, 1995. The package has attached to it a copy of a memorandum for the record which shows the confusion and frustration in each Department with regard to the information exchange of exposure information. The DoD response addressed each issue in the VA letters and cites the earlier responses provided to the VA, including the large response sent on some identical issues in July, 1994 (Tab B18).

The final database compiled at DMDC contains over 6,000 names. Most of the names are mustard gas exposures (about 4,000). Others were exposures to agents such as chlorine gas, nerve agents, and antidotes such as atropine. The database also had last known addresses, Service or Social Security numbers, and sites where tests were conducted if available. Tab C5 is a sample of some of the data from the Personnel Database. Page one shows name, rank, location of test, agent used, date, and unit of assignment. Page two shows how some tests cited participants as “observers” and did not list a name, although the date and location, and the kind of agent used were recorded.

In September of 1996 the chemical weapons officer staffed to DMDC retired. By this time known sources of documentation had been inventoried and researched for the names of test subjects. An overall estimate of the number of names of WWII test subjects extracted from records collections is about 5,000. Other records located pertained to tests conducted later during the Cold War and were for substances such as LSD and nerve agents. DMDC continued to respond to inquiries for validation of veterans’ claims up until the time the program was transferred in 2005, which is discussed in paragraph VI.

IV Exposure Records Locator Project 1996

The communication and information exchange issues brought to the fore by the 1995 requests from VA for information already in their possession led to the DoD/VA Exposure Records Locator Project in late 1996. The purpose of the project was to look at the inter-agency business processes associated with requests for, and responses to, information supporting veterans’ compensation claims concerning exposure to chemical weapons and other agents. The project addressed mustard gas, ionizing radiation, agent orange, and LSD. Proposed and actual attendees at the meetings, which started in July 1996, were representatives from the Services from the chemical, research, medical, and records management communities. Representatives from various offices and levels from the VA Compensation and Pension Service also were full participants. A copy of the announcement letter is at Tab C6. It includes the original proposed attendee list. The project was overseen by the OUSD P&R Information Management Office.
In January of 1997 the final report of the project was published and widely disseminated in DoD and the VA. The report cited four major problems with human exposure information management:

- Lack of central control in DoD
- Lack of automation support for existing record collections
- Lack of records accountability (retention, storage, archiving)
- Insufficient inquiry information from VA

Various solutions to the problems were proposed and are contained in the report in a matrix that includes cost benefit estimates. One of the solutions was a detailed list of contacts within DoD for specific kinds of information requests on exposures. Appendix C to the report is a detailed list of points of contact within DoD by exposure type, with names and phone numbers, and a short description of the kinds of records held. Tab C7 is a copy of the internal DoD memorandum publishing the final report and an original copy of the Exposure Records Locator Project Final Report, dated January 23, 1997.


Another major report that was published in 1997 was the above named report on human radiation experiment records. This report was published by the ASD for Nuclear and Chemical and Biological Defense Programs. It cited the as the impetus for the record project the search directed by President Clinton. This project was promulgated in DoD by an internal SECDEF memorandum dated January 7, 1994. A copy is in Section B at Tab B8. The report presents an overview of the nuclear test programs and discusses the search for the records and the establishment of the Radiation Experiment Command Center (RECC). A copy of the report is included in this report because the lead at the RECC participated in the Exposure Records Locator Project and the contacts for inquiries on radiation exposures are included in the DoD Points of Contact at Appendix C of the Exposure Records Locator Final Report. A copy of the Report on Search for Human Radiation Experiment Records 1944 – 1994 is at Tab C8.


The next major issue that the P&R Information Management IM Office would participate in was the research for a series of articles published in the Detroit Free Press in 2004 by David Zeman. Mr. Zeman contacted the DoD Public Affairs Office in 2003 and requested access to information on, and to personnel who had worked on, the WWII mustard gas testing on humans. Mr. Zeman wrote a three part expose' that included the stories of veterans who had participated personally in the tests, how they were conducted, and what had happened to them during the tests, and how their health had been affected afterwards. The article also discussed the efforts of DoD to locate records and extract names and went on to discuss the response to veterans by the VA. A copy of the transcript of the October 2003 interview of the Project Lead and Director of the P&R IM
Office with Mr. Zeman is at Tab C9. Copies of all three installments of Mr. Zeman's expose' from November 2004 are at Tab C10. An Information Paper, at Tab C11, on DoD Efforts to Identify World War II Chemical Weapons Test Subjects was prepared by the P&R IM Office in November, 2004, probably in response to questions arising from Mr. Zeman's articles.

VI Closing Out 1995 – 2007

In 2005 all of the chemical weapons exposure study files were transferred to the Office of the Assistant Secretary of Defense for Health Affairs under the responsibility of the Program Director for CBRN Assessments (Chemical, Biological, Radiation, and Nuclear) in the Deployment Health Support Directorate. At the time of this report that is Ms. Dee Dodson Morris, at (703)845-8339. Tab C12 is a copy of the DMDC inventory of the Chemical Weapons Exposure Project Files that were transferred to OASD (HA).

In August 2007 the Personnel & Readiness IM Office was contacted by the General Accounting Office in regard to a study being conducted that included efforts and contracts from the Chemical Weapons Exposure Study. On August 10, 2007 the Director, P&R IM had preliminary meeting with GAO Auditors. On September, 11 2007 the Director, P&R IM, and the former Project Lead from the IM Office were interviewed by GAO. The Project Lead met with GAO another two hours assisting with interpretations of and copies of some of the early documentation and correspondence from the Chemical Weapons Exposure Study. GAO was also given a full copy of the CBIAC Chemical Exposure Database dated April 28, 1994 and two early contract documents on the contract with Battelle Corporation. At Tab C13 is a copy of the P&R Information Management Funding History from FY-92 to FY-95, and a Task Order dated April 1994, transferring funding to Battelle Corporation for the Chemical Weapons Exposure Database. Both documents were given to GAO in 2007. Tab C14 is a copy of electronic communication, e-mail and fax, between the author and GAO during the months of August and September 2007.

This report was prepared in September 2007. It is the most current accounting of the Personnel & Readiness IM Office participation and assistance with the Chemical Weapons Exposure Study initiated in 1993 by the Secretary of Defense.
NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 1995

CONFERENCE REPORT

TO ACCOMPANY

S. 2182

AUGUST 12, 1994—Ordered to be printed

Final Legislation Mustardizes Sense of Congress on Commendation
(Original HR 1055 Mr. Boss)
Section 1051. Sense of Congress Concerning Commendation of Indivi­
duals 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).

Subtitle F—Congressional Findings, Policies, Commendations, and
Commemorations

Section 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 United
States with valor and distinction throughout World War II
in action against enemy forces in the Pacific Theater of Oper­
atations 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 distinct­
ion 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
Awards this
Certificate of Commendation
to
Edmund C. Asher
In recognition of special service, loyalty and contribution to the United States of America during World War II.

November 15, 1996

Date

Secretary of Defense
Awards this
Certificate of Commendation
to

In recognition of special service, loyalty and contribution to
the United States of America during World War II.

Date

Secretary of Defense
May 9, 1996

Dear Mr. Abatemarco:

The Department of Defense is required by recent law to notify members of the Armed Forces or employees of the Department of War who were exposed to mustard agents in connection with testing performed by the Department of War during World War II. The Department also provides such exposure information to the Department of Veterans Affairs (VA). Your name has been identified as a participant in mustard agent testing conducted at the Naval Research Laboratory, Washington, DC, in October, 1944.

In order to assess any association between exposure to mustard agents and the development of specific diseases, the National Academy of Sciences surveyed scientific and medical literature on this subject. The results were published in a 1993 report titled, *Veterans at Risk: The Health Effects of Mustard Gas and Lewisite*. The report indicates a causal relationship between the type of exposure you received and health conditions such as various respiratory conditions, bone marrow depression, skin and eye abnormalities, leukemia, and psychological disorders. A comprehensive listing is included in an extract of this report, which is enclosed.

Although the report lists possible health conditions resulting from such exposure, the VA has developed specific adjudication regulations to process claims for disabilities or deaths resulting from exposure. If you believe you have adverse health conditions as a result of mustard agent exposure, you should contact the Department of Veterans Affairs on its Hot Line Number (800) 827-1000.

Your patriotic service and contribution to our country are recognized and greatly appreciated. To this end, I am pleased to present you with the enclosed Certificate of Commendation in honorary recognition of your special service, loyalty and contribution to the United States during World War II.

Sincerely,

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

Enclosures:
As Stated
Awards this
Certificate of Commendation
to
Michael J. Abatemarco
In recognition of special service, loyalty and contribution to the United States of America during World War II.

May 9, 1996

Date

Secretary of Defense
Dear Mr. Aiken:

The Department of Defense is required by recent law to notify members of the Armed Forces or employees of the Department of War who were exposed to mustard agents in connection with testing performed by the Department of War during World War II. The Department also provides such exposure information to the Department of Veterans Affairs (VA). Your name has been identified as a participant in mustard agent testing conducted at the U.S. Army Edgewood Arsenal, Edgewood, Maryland, in July, 1944.

In order to assess any association between exposure to mustard agents and the development of specific diseases, the National Academy of Sciences surveyed scientific and medical literature on this subject. The results were published in a 1993 report titled, *Veterans at Risk: The Health Effects of Mustard Gas and Lewisite*. The report indicates a causal relationship between the type of exposure you received and health conditions such as various respiratory conditions, bone marrow depression, skin and eye abnormalities, leukemia, and psychological disorders. A comprehensive listing is included in an extract of this report, which is enclosed.

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Your patriotic service and contribution to our country are recognized and greatly appreciated. To this end, I am pleased to present you with the enclosed Certificate of Commendation in honorary recognition of your special service, loyalty and contribution to the United States during World War II.

Sincerely,

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

Enclosures:
As Stated
Awards this 
Certificate of Commendation 
to 
Jack S. Aiken 
In recognition of special service, loyalty and contribution to the United States of America during World War II.

May 17, 1996

Date

William J. Perry
Secretary of Defense
June 11, 1996

Dear Mr. Cancel-Rosado:

The Department of Defense is required by recent law to notify members of the Armed Forces or employees of the Department of War who were exposed to mustard agents in connection with testing performed by the Department of War during World War II. The Department also provides such exposure information to the Department of Veterans Affairs (VA). Your name has been identified as a participant in mustard agent testing conducted at San Jose Island, Republic of Panama, in February 1945.

In order to assess any association between exposure to mustard agents and the development of specific diseases, the National Academy of Sciences surveyed scientific and medical literature on this subject. The results were published in a 1993 report titled, Veterans at Risk: The Health Effects of Mustard Gas and Lewisite. The report indicates a causal relationship between the type of exposure you received and health conditions such as various respiratory conditions, bone marrow depression, skin and eye abnormalities, leukemia, and psychological disorders. A comprehensive listing is included in an extract of this report, which is enclosed.

Although the report lists possible health conditions resulting from such exposure, the VA has developed specific adjudication regulations to process claims for disabilities or deaths resulting from exposure. If you believe you have adverse health conditions as a result of mustard agent exposure, you should contact the Department of Veterans Affairs on its Hot Line Number (800) 827-1000.

Your patriotic service and contribution to our country are recognized and greatly appreciated. To this end, I am pleased to present you with the enclosed Certificate of Commendation in honorary recognition of your special service, loyalty and contribution to the United States during World War II.

Sincerely,

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

Enclosures:
As Stated
Awards this
Certificate of Commendation
to
Jose A. Cancel-Rosado
In recognition of special service, loyalty and contribution to the United States of America during World War II.

June 11, 1996

Date

Secretary of Defense
Dear Mr. Goren:

The Department of Defense is required by recent law to notify members of the Armed Forces or employees of the Department of War who were exposed to mustard agents in connection with testing performed by the Department of War during World War II. The Department also provides such exposure information to the Department of Veterans Affairs (VA). Your name has been identified as a participant in mustard agent testing conducted at the Naval Research Laboratory, Washington, DC, in March, 1944.

In order to assess any association between exposure to mustard agents and the development of specific diseases, the National Academy of Sciences surveyed scientific and medical literature on this subject. The results were published in a 1993 report titled, Veterans at Risk: The Health Effects of Mustard Gas and Lewisite. The report indicates a causal relationship between the type of exposure you received and health conditions such as various respiratory conditions, bone marrow depression, skin and eye abnormalities, leukemia, and psychological disorders. A comprehensive listing is included in an extract of this report, which is enclosed.

Although the report lists possible health conditions resulting from such exposure, the VA has developed specific adjudication regulations to process claims for disabilities or deaths resulting from exposure. If you believe you have adverse health conditions as a result of mustard agent exposure, you should contact the Department of Veterans Affairs on its Hot Line Number (800) 827-1000.

Your patriotic service and contribution to our country are recognized and greatly appreciated. To this end, I am pleased to present you with the enclosed Certificate of Commendation in honorary recognition of your special service, loyalty and contribution to the United States during World War II.

Sincerely,

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

Enclosures:
As Stated
Awards this Certificate of Commendation to

Joseph Goren

In recognition of special service, loyalty and contribution to the United States of America during World War II.

June 21, 1996

Date

William J. Perry
Secretary of Defense
October 17, 1996

Dear Mr. Albright:

The Department of Defense is required by recent law to notify members of the Armed Forces or employees of the Department of War who were exposed to mustard agents in connection with testing performed by the Department of War during World War II. The Department also provides such exposure information to the Department of Veterans Affairs (VA). Your name has been identified as a participant in mustard agent testing conducted at the Naval Research Laboratory, Washington, DC, in October, 1944.

In order to assess any association between exposure to mustard agents and the development of specific diseases, the National Academy of Sciences surveyed scientific and medical literature on this subject. The results were published in a 1993 report titled, *Veterans at Risk: The Health Effects of Mustard Gas and Lewisite*. The report indicates a causal relationship between the type of exposure you received and health conditions such as various respiratory conditions, bone marrow depression, skin and eye abnormalities, leukemia, and psychological disorders.

VA has developed specific adjudication regulations to process claims for disabilities or deaths resulting from exposure. If you believe you have adverse health conditions as a result of mustard agent exposure, you should contact the VA on its Hot Line Number (800) 827-1000.

Your patriotic service and contribution to our country are recognized and greatly appreciated. To this end, I am pleased to present you with the enclosed Certificate of Commendation in honorary recognition of your special service, loyalty and contribution to the United States during World War II.

Sincerely,

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

Enclosure:
As Stated
Awards this

Certificate of Commendation

to

James C. Albright

In recognition of special service, loyalty and contribution to the United States of America during World War II.

October 17, 1996

Date

Secretary of Defense
November 15, 1996

Dear Mr. Amory:

The Department of Defense is required by recent law to notify members of the Armed Forces or employees of the Department of War who were exposed to mustard agents in connection with testing performed by the Department of War during World War II. The Department also provides such exposure information to the Department of Veterans Affairs (VA). Your name has been identified as a participant in mustard agent testing conducted at the Naval Research Laboratory, Washington, DC, in August, 1943.

In order to assess any association between exposure to mustard agents and the development of specific diseases, the National Academy of Sciences surveyed scientific and medical literature on this subject. The results were published in a 1993 report titled, Veterans at Risk: The Health Effects of Mustard Gas and Lewisite. The report indicates a causal relationship between the type of exposure you received and health conditions such as various respiratory conditions, bone marrow depression, skin and eye abnormalities, leukemia, and psychological disorders.

VA has developed specific adjudication regulations to process claims for disabilities or deaths resulting from exposure. If you believe you have adverse health conditions as a result of mustard agent exposure, you should contact the VA on its Hot Line Number (800) 827-1000.

Your patriotic service and contribution to our country are recognized and greatly appreciated. To this end, I am pleased to present you with the enclosed Certificate of Commendation in honorary recognition of your special service, loyalty and contribution to the United States during World War II.

Sincerely,

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

Enclosure:

As Stated
Awards this
Certificate of Commendation
to
Lloyd R. Amory

In recognition of special service, loyalty and contribution to the United States of America during World War II.

November 15, 1996

Date

William J. Perry
Secretary of Defense
Dear Mr. Ellis:

The Department of Defense is required by recent law to notify members of the Armed Forces or employees of the Department of War who were exposed to mustard agents in connection with testing performed by the Department of War during World War II. The Department also provides such exposure information to the Department of Veterans Affairs (VA). Your name has been identified as a participant in mustard agent testing conducted at the Naval Research Laboratory, Washington, DC, in October, 1943.

In order to assess any association between exposure to mustard agents and the development of specific diseases, the National Academy of Sciences surveyed scientific and medical literature on this subject. The results were published in a 1993 report titled, Veterans at Risk: The Health Effects of Mustard Gas and Lewisite. The report indicates a causal relationship between the type of exposure you received and health conditions such as various respiratory conditions, bone marrow depression, skin and eye abnormalities, leukemia, and psychological disorders.

VA has developed specific adjudication regulations to process claims for disabilities or deaths resulting from exposure. If you believe you have adverse health conditions as a result of mustard agent exposure, you should contact the VA on its Hot Line Number (800) 827-1000.

Your patriotic service and contribution to our country are recognized and greatly appreciated. To this end, I am pleased to present you with the enclosed Certificate of Commendation in honorary recognition of your special service, loyalty and contribution to the United States during World War II.

Sincerely,

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

Enclosure:
As Stated
Awards this
Certificate of Commendation
to
Louis C. Ellis

In recognition of special service, loyalty and contribution to the United States of America during World War II.

November 22, 1996

Date

Secretary of Defense
Dear Mr. Andrews:

The Department of Defense is required by recent law to notify members of the Armed Forces or employees of the Department of War who were exposed to mustard agents in connection with testing performed by the Department of War during World War II. The Department also provides such exposure information to the Department of Veterans Affairs (VA). Your name has been identified as a participant in mustard agent testing conducted at the U.S. Army Edgewood Arsenal, Edgewood, Maryland, in May, 1944.

In order to assess any association between exposure to mustard agents and the development of specific diseases, the National Academy of Sciences surveyed scientific and medical literature on this subject. The results were published in a 1993 report titled, *Veterans at Risk: The Health Effects of Mustard Gas and Lewisite*. The report indicates a causal relationship between the type of exposure you received and health conditions such as various respiratory conditions, bone marrow depression, skin and eye abnormalities, leukemia, and psychological disorders.

VA has developed specific adjudication regulations to process claims for disabilities or deaths resulting from exposure. If you believe you have adverse health conditions as a result of mustard agent exposure, you should contact the VA on its Hot Line Number (800) 827-1000.

Your patriotic service and contribution to our country are recognized and greatly appreciated. To this end, I am pleased to present you with the enclosed Certificate of Commendation in honorary recognition of your special service, loyalty and contribution to the United States during World War II.

Sincerely,

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

Enclosure:
As Stated
Awards this Certificate of Commendation to

Lester C. Andrews

In recognition of special service, loyalty and contribution to the United States of America during World War II.

December 18, 1996

Date

William J. Perry
Secretary of Defense
Dear Mr. Adams:

The Department of Defense is required by recent law to notify members of the Armed Forces or employees of the Department of War who were exposed to mustard agents in connection with testing performed by the Department of War during World War II. The Department also provides such exposure information to the Department of Veterans Affairs (VA). Your name has been identified as a participant in mustard agent testing conducted at the Naval Research Laboratory, Washington, DC, in March, 1944.

In order to assess any association between exposure to mustard agents and the development of specific diseases, the National Academy of Sciences surveyed scientific and medical literature on this subject. The results were published in a 1993 report titled, *Veterans at Risk: The Health Effects of Mustard Gas and Lewisite*. The report indicates a causal relationship between the type of exposure you received and health conditions such as various respiratory conditions, bone marrow depression, skin and eye abnormalities, leukemia, and psychological disorders.

VA has developed specific adjudication regulations to process claims for disabilities or deaths resulting from exposure. If you believe you have adverse health conditions as a result of mustard agent exposure, you should contact the VA on its Hot Line Number (800) 827-1000.

Your patriotic service and contribution to our country are recognized and greatly appreciated. To this end, I am pleased to present you with the enclosed Certificate of Commendation in honorary recognition of your special service, loyalty and contribution to the United States during World War II.

Sincerely,

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

Enclosure:
As Stated
Awards this Certificate of Commendation to Charles F. Adams in recognition of special service, loyalty and contribution to the United States of America during World War II.

January 15, 1997

Date

Secretary of Defense
January 22, 1997

Geoffrey F. Dolan

Dear Mr. Adkins:

The Department of Defense is required by recent law to notify members of the Armed Forces or employees of the Department of War who were exposed to mustard agents in connection with testing performed by the Department of War during World War II. The Department also provides such exposure information to the Department of Veterans Affairs (VA). Your name has been identified as a participant in mustard agent testing conducted at the Naval Research Laboratory, Washington, DC, in March, 1945.

In order to assess any association between exposure to mustard agents and the development of specific diseases, the National Academy of Sciences surveyed scientific and medical literature on this subject. The results were published in a 1993 report titled, Veterans at Risk: The Health Effects of Mustard Gas and Lewisite. The report indicates a causal relationship between the type of exposure you received and health conditions such as various respiratory conditions, bone marrow depression, skin and eye abnormalities, leukemia, and psychological disorders.

VA has developed specific adjudication regulations to process claims for disabilities or deaths resulting from exposure. If you believe you have adverse health conditions as a result of mustard agent exposure, you should contact the VA on its Hot Line Number (800) 827-1000.

Your patriotic service and contribution to our country are recognized and greatly appreciated. To this end, I am pleased to present you with the enclosed Certificate of Commendation in honorary recognition of your special service, loyalty and contribution to the United States during World War II.

Sincerely,

Jeanne B. Fites
Deputy Under Secretary of Defense
Program Integration

Enclosure:
As Stated
Awards this
Certificate of Commendation

to

Willard C. Adkins

In recognition of special service, loyalty and contribution to
the United States of America during World War II.

January 22, 1997

Date

Secretary of Defense
1. DoD is required to commend veterans who participated in WWII mustard agent testing programs. This direction is contained in PL103-337, Subtitle F, Section 1051, Sense of Congress dated October 5, 1994 which is a part of the National Defense Authorization Act for FY 1995. Congressman Goss proposed HR 1055 to commend WWII veterans who participated in mustard agent testing programs, however, the bill was not passed as a separate item.

2. At the time the discussion of commendations began with Congressman Goss’ office, the history on commendations was quite unclear. Since that time, however, we have become aware of ‘commendations’ which were done at various locations and by different Services for their members who participated in chemical tests.

   a. ARMY: The only Service which had a clear-cut policy for commendations was the Army. At the beginning of WWII, individual letters of commendation were prepared by the Chief, Chemical Warfare Service for each person who visited the War, the Office of the Chief, Chemical Warfare participant an Army Commendation Ribbon. W awards and it is likely they were destroyed since material for retention purposes. In most cases, the Army Commendation Ribbon awards that we themselves. We have no idea of the number of Co testing.

   b. NAVY: One of the singularly large gro conducted either by the U.S. Navy or using Navy p participants is unclear as we have found evidence t the rest were not.

      (1) Naval Research Laboratory (NRL) were run by the Naval Research Laboratory, Washin Bainbridge Naval Training Center, Maryland. Appa and in fact it was the hue and cry of these men which chemical tests actually took place in the Naval Rese run by NRL were actually done at Bainbridge NTC.

      (2) University of Chicago/Great Lakes Training Center: Large numbers of personnel participated in tests in the Chicago area at either the University of Chicago or at the
Great Lakes Naval Training Center. As many as 70,000 participants were in these trials and were from either the Navy or the Army. From our research of this testing, we have learned that the first mention of human volunteers appears in the monthly contract reports beginning April 1942. Later in the year, the actual place from which volunteers were solicited is identified in the reports. Lists of names of personnel who participated in the tests have not been located and there is no evidence that suggests that many of the 70,000 participants were commended. The final report of the gas chamber tests run at Great Lakes in 1945 does say that a record was added to the medical file and a commendation was placed in the personnel file of the volunteers after they were in the chamber test. We have found these for the few participants whom we have been able to identify. Each was identified only after applying for benefits from the VA or contacting us.

(3) Rockefeller Institute/Cornell University Medical College: Some unknown number of personnel were used as participants under contracts at these two institutions in the New York area. Work originally was done with Navy students and midshipmen. Since the possibility of injury resulting in lost class time was unacceptable, arrangements were made to solicit volunteers from the population of prisoners at the Harts Island Naval Brig. It appears that Cornell might have routinely issued commendations to incarcerated Navy personnel who participated in tests. Others who have alleged they were part of tests at Harts Island do not seem to have a commendation in their files.

3. Numbers of Participants: There is no exact count for the number of individuals who took part in tests in WWII, however, the number is believed to be under 75,000. Based on an actuarial evaluation, a maximum of 35,000 surviving veterans would be eligible to receive commendations.

The 75,000 estimate breaks down as follows:

- 70,000 from tests under the auspices of the University of Chicago Toxicity Laboratory. Sources: Great Lakes Naval Training Center, Chicago Navy Pier, Chicago-area Signal Schools, transient Army personnel. (693 sailors were part of gas chamber exposures at Great Lakes Naval Training Center, Illinois, in 1945.)

- 3,354 sailors volunteered for tests run by the Naval Research Laboratory. Most took part in gas chamber tests, some were only in “patch” tests; and a few were not used even though they volunteered. NRL is the only laboratory from which the laboratory records were found intact. Still, the records were incomplete as they omitted the full names and service numbers of the volunteers. Even today, we have incomplete records from NRL with the biggest problem being the lack of service numbers for corroboration.

- 990 soldiers’ names are contained in the copies of the commendatory orders which we have assembled. These personnel took part in tests at Edgewood Arsenal, Maryland; Bushnell Field, Florida; Dugway Proving Ground, Utah; and San Jose Island, Panamá. Some troops may have also come from the trainee population at Camp Sibert, Alabama.
- 690 names were located in the National Archives in a box labeled "Bushnell Field."
Among these names are participants from Edgewood, Bushnell, and Dugway. Some of their
names also appear in the lists of the 990 names from commenratory orders.

Prepared by: Chemical Weapons Exposure Project Office, OUSD(P&R)(R&R)DMDC
703 696-5851
Fax: 703 696-5822
World War II Mustard Gas Testing

Secretary of Defense Perry sent a memo dated March 9, 1993 to the Services which released test participants from non-disclosure restrictions, initiated procedures to declassify documents and directed ASD(FM&P) to establish a task force and monitor actions. Secretaries of the Military Departments were directed to provide: (a) the location of test programs, type of chemical tested, and dates of testing; (b) identification of each military unit and individual participant, (c) location of facilities and individual participants in the production, transportation or storage of chemical agents.

The responses received from the Army, Navy and Air Force to the memo provided the location and estimated holdings of human chemical exposure records. Research was conducted by OASD(FM&P)(IM) and formed the basis of the database maintained by DMDC reflecting possible and/or confirmed World War II mustard gas exposures.

The Department of Veterans Affairs compensates for full body exposure (not patch tests) if the exposure is verified by DoD and the veteran has specific medical conditions outlined by VA. Civilian exposures are processed through the Department of Labor, Worker's Compensation Program. The following World War II mustard gas test locations were identified:

- Naval Research Laboratory, Washington, DC (Gas chamber and patch tests)
- Bainbridge Naval Training Center, Maryland (Patch tests)
- Great Lakes Naval Training Center, Illinois (Gas chamber and patch tests)
- Hart's Island, New York (Patch tests)
- University of Chicago, Illinois (Patch tests)
- Edgewood Arsenal, Maryland (Gas chamber, patch and field tests)
- Camp Sibert, Alabama (field tests)
- Brooksville Army Airfield (Bushnell), Florida (Field tests)
- Dugway Proving Ground, Utah (Field tests)
- San Jose Island, Republic of Panama (Field tests)

* Gas chamber was operational from February – August 1945 only
MEMORANDUM FOR USD(P&R)

FROM: DUSD(R&R)
Prepared by: Colonel F.A. Kolbrener (DMDC), X696-8741

SUBJECT: Reply to Veterans Affairs (VA) letters - ACTION MEMORANDUM

PURPOSE: Sign the attached correspondence to Veterans Affairs

DISCUSSION: The attached proposed correspondence is a combined response to the concerns raised by Veterans Affairs in their letters of 8 May 1995 (TAB B), 5 July 1995 (TAB C) and 28 July 1995 (TAB D) concerning requests for DoD records pertaining to several areas listed on the enclosure to the letter at TAB C. For information purposes, the VA letters and the DoD response to each issue is enclosed at TAB 1 through TAB 7. See especially, TAB 3 where we responded point by point and the VA never asked for further clarification or acknowledged receipt.

Most VA requests have been answered by the Department of Defense. Of the seven issues presented, the VA alleges all but one of ten separate requests for information have gone unanswered. In fact, all of the requests have already been answered, and there appears to be some confusion as to how our records are searched. Continuing coordination with the VA is ongoing by the various project offices. The reply to the request on the Japanese POW issue, dated 8 May 1995, prepared by the Army Center of Military History was signed by the SECDEF on August 7, 1995.

COORDINATION(S):
(R&R) IM ____________ RECC ____________
OASD(HA) ______________ OUSD(Policy) ____________

RECOMMENDATION: Sign the letter at TAB A.

_________________ Approved
_________________ Disapproved
_________________ Other: _______________________

CONTROL NUMBER: 950712031, 950803016, 9506208Z (U34099/95)
MEMORANDUM FOR RECORD

SUBJECT: Conversation with the Kathy Collier, Pension and Benefits Service, Department of Veterans Affairs.

I called Ms. Collier on July 18, 1995, after we received the VA letter from Mr. Vogel dated July 5, 1995, which alleges that DoD has not provided records to the VA. The main subject of this letter deals with obtaining records pertaining to the possible Japanese biological experimentation on American POW’s in WWII. However, the side issue raised is that Mr. Vogel was seeking the status of alleged requests for records made to DoD in the past. Attached to his letter was a list of issues VA needed records for and the alleged date of letters requesting records.

I pointed out to Ms. Collier that my orientation was only from the standpoint of the mustard gas exposures and that we would have to see who was going to answer all the issues raised. I told her that we were surprised that the letter alleged that we had not given any mustard gas records to the VA. I asked her if she knew that we sent a copy of the Bari harbor list to Lance Peterson (on their staff) last? She replied “No”. I asked her if she knew we had provided evidence (to include interim and final reports) that Mr. Dietmeyer and Mr. Drew were exposed to mustard gas in a chamber at Great Lakes, Illinois, and that Mr. Hickman had written back to us about one of the cases. Her answer was also “no”. I also told her that we were in continual contact with Ersie Farber who had succeeded Lance Peterson. She said that she did not realize that either. She also did not know that we gave completely updated lists of all our data to Ersie Farber in Early May 1995.

I also pointed out to her that from my limited viewpoint, the letter embarrassed us in front of Mr. Dorm and made us look as if we were not doing our jobs when in fact, we have been coordinating with VA people in her own office regularly. She stated that she was happy to find this out and would talk to the other group in their office. Later, I FAXed copies of some correspondence we discussed and letters we have sent to various VA Regional Offices in response to their requests for information.

Ms. Collier works for Quentin Kinderman who used to be responsible for the mustard gas project. The mustard gas project in the VA is now under Tom Pamperin, a parallel level manager to Mr. Kinderman. Since our conversation on 18 July, Cheryl Deegan (Ersie Farber’s supervisor) has been in contact with either Ms. Collier or her supervisor.

F.A. Kolbrener

Encl.
VA Letter dated July 5, 1995
Honorable R. J. Vogel
Under Secretary of Veterans Affairs for Benefits
Washington, DC 20420

Dear Mr. Vogel:

I appreciate your bringing to my attention your concern over prior requests by the Department of Veterans Affairs for Department of Defense (DoD) military records covering mustard gas exposure, human radiation experimentation, exposure to environmental hazards in the Persian Gulf, and most recently, alleged Japanese biological experiments during World War II on American prisoners of war. Although we have responded to each of your requests, there is obviously some confusion concerning our review of records. There is no single place where we can extract records of people who were exposed to hazardous substances. We are continuing a diligent search of files at sites where experiments were conducted to locate names of participants. This is an arduous, time-consuming, manual task. When we have the name and service number of a potential participant, we can sometimes verify exposure by locating the individual’s personnel record. We cannot access information contained in individual records without names and service numbers.

The attached enclosure is a combined response to your letters of May 8, 1995, July 5, 1995 and July 28, 1995. Copies of your requests and DoD responses to previously answered correspondence outlined in your July 5, 1995 are also enclosed. We are expending considerable resources to conduct intensive research on these projects. Additionally, we continue to provide the applicable VA agency with records as information is located.

I trust that the enclosed information is helpful and will clear up the confusion about these issues. We will continue to work closely with members of your staff to ensure that they have copies of all applicable information. My point of contact to assist your staff in these requests is Colonel F. A. Kolbrenner, 703 696-8741.

Perhaps it is time to have another meeting of our joint task force. We do not have a current VA point of contact for the task force. My point of contact for a meeting is Ms. Norma St. Claire, 703-696-8710.

Sincerely,

Edwin Dom

Enclosures:
As Stated
RESPONSE TO VETERANS AFFAIRS (VA) REQUESTS FOR
DEPARTMENT OF DEFENSE (DoD) RECORDS DATED JULY 5, 1995

1. Mukden POWs - The Secretary of Veterans Affairs letter to the Secretary of Defense dated 05/08/95 requested resolution on the question of whether U.S. Prisoners of War at Mukden POW camp in Manchuria were used for biological experiments by Japanese Army Unit 731 during WWII. The letter also states that a previous appeal for DoD records and cooperation has not been addressed (VA letter dated 02/10/94, reference para 2b below).

DoD Response: A response to the POW question was prepared by the Army Center of Military History and was signed on August 7, 1995. The portion of the 5/8/95 letter pertaining to VA request for records is addressed in this enclosure and the cover letter.

2. Mustard Gas - This issue involves identification of personnel who took part in WWII testing of clothing and equipment with mustard gas and lewisite.

   a. The Secretary of Veterans Affairs letter to the Secretary of Defense dated January 5, 1993, refers to the report written by the National Academy of Sciences (NAS) entitled “Veterans at Risk: The Health Effects of Mustard Gas and Lewisite.” It specifically requested the names of service personnel exposed to agents during WWII testing, agents used, locations, and other data. The letter also requested that a list of names of the personnel injured at Bari, Italy in December 1943 also be furnished.

   DoD Response: The Deputy Director of Defense Research and Engineering answered this letter on March 17, 1993. A copy of the response is at TAB 1. VA’s statement that information about mustard gas and lewisite exposures has not been provided is incorrect. DoD has been compiling the names of personnel exposed to mustard and lewisite since shortly after the release of the NAS report. As the VA staff have been informed, this effort is extremely labor intensive, requiring countless hours of page-by-page searches of records which are not indexed or stored in a predictable manner. Many of the records which have been searched are not in possession of the Department of Defense, but belong to the National Archives. When names have been located, they often lack full identifying information, referring to the participants as only “Subject Jones or Subject Smith.” Additionally, many test reports make reference to test volunteers as “Observer 1 or Observer 2.” We have not been able to locate records which make full identification possible in many cases. However, we continuously provide VA with full information as we find it.

   In February 1991, full copies of the laboratory notebooks which listed the last names of personnel involved in the Naval Research Laboratory tests were provided to the VA. In early 1994, when full names of the test participants were found, they were provided to the VA Environmental Epidemiology Service. Close liaison has also been maintained, often on a weekly basis, with personnel in the VA Benefits and Pension Service. In September 1994, a list of personnel on board ships at Bari, Italy was mailed to Mr. Lance Peterson of the Benefits and Pension Service. The information for this list was assembled from
files in possession of the National Archives and the U.S. Coast Guard. DoD furnished its current lists of personnel exposed to chemical agents informally to the VA Pension and Benefits Service in early May 1995.

DoD provided information to the VA on December 21, 1994, and March 15, 1995, documenting exposure of two veterans (Dietmeyer and Drew) in gas chamber testing in 1945 at Great Lakes Naval Training Center. Copies of the reports which detail the exposures were also provided at that time.

b. The Secretary of Veterans Affairs letter to the Secretary of Defense dated February 10, 1994 proposed the formation of an interdepartmental working group to design and undertake a review of projects, other than appropriately approved medical research, involving the exposure of military personnel to toxic substances or environmental hazards. This letter is also listed as a VA request under Drugs/LSD (para 4b), Human Radiation Experimentation (para 6), and PGW Environmental Hazards (para 7a).

**DoD Response:** The Deputy Secretary of Defense answered this letter on April 30, 1994. A copy of the response is at TAB 2. The response pointed out that the existing joint DoD/VA Task Force was the appropriate body to carry out future projects and that joint efforts in support of several initiatives were already underway.

c. The Secretary of Veterans Affairs letter to the Secretary of Defense dated April 7, 1994, stated VA was having difficulty obtaining information with which to adjudicate cases involving mustard gas and lewisite exposures. A Fact Sheet outlining these difficulties was enclosed.

**DoD Response:** This letter was answered by the Under Secretary of Defense for Personnel and Readiness letter dated June 16, 1994. A copy of the response is at TAB 3. Each issue listed on the Fact Sheet was addressed. A point of contact for questions was also provided. We received no requests for clarification from the VA.

3. CARC Paint - This issue involves the possible exposure of military personnel to the Chemical Agent Resistant Coating (CARC) in conjunction with the Persian Gulf War.

a. Veterans Affairs Deputy Under Secretary for Benefits letter dated October 1, 1993, addressed to the Commanding General of the Walter Reed Army Medical Center, requested identification of personnel involved with the use of CARC, units of assignment, locations of units, whether protective clothing was used during application of CARC, and what paints were in CARC.

**DoD Response:** This letter was answered by Walter Reed Army Medical Center Commanding General letter dated October 20, 1993. A copy of the response is at TAB 4. The response pointed out that the requested information was not available to Walter
Reed Army Medical Center and coordination had been effected with the proper personnel from OUSD (Personnel and Readiness) and DUSD (Health Affairs).

b. Veterans Affairs Deputy Under Secretary for Benefits letter dated October 5, 1993, addressed to the Assistant Secretary of Defense for Personnel and Readiness requested the same information contained in the October 1, 1993 letter to the Walter Reed Army Medical Center.

**DoD Response:** This letter was addressed during the DoD/VA Non-Medical Benefits Task Force Meeting held on October 27, 1993. A copy of the minutes of this meeting is at TAB 5. This issue is now subsumed as a part of Persian Gulf exposures.

4. **Drugs/LSD** - This issue involves the testing of psychoactive compounds by the Armed Forces and other government agencies.

a. Veterans Affairs Director of Benefits letter dated October 17, 1991 addressed to the Secretary of the Army, requested testing dates and names of personnel tested. Further, it requested a name and address to which future requests for records related to drug testing could be forwarded.

**DoD Response:** The Office of The Judge Advocate General, Department of the Army answered this letter on December 19, 1991. A copy of the response is at TAB 6. The reply, addressed to the VA Chief Benefits Director, provided the dates of testing, mentioned that complete medical records could be requested from the Office of the Surgeon General, and noted there was a 1976 report with complete details available from the Army Inspector General (DAIG). Appropriate addresses and phone numbers were also provided.


**DoD Response:** The Office of the Army Inspector General answered the letter on January 28, 1992. A copy of the response is at TAB 7. A copy of the DAIG report was provided of Mr. Gary Hickman of the VA staff.

c. The Secretary of Veterans Affairs letter to the Secretary of Defense dated February 10, 1994 proposed the formation of an interdepartmental working group to design and undertake a review of projects, other than appropriately approved medical research, involving the exposure of military personnel to toxic substances or environmental hazards.

**DoD Response:** The Deputy Secretary of Defense answered this letter on April 30, 1994. The response pointed out that the existing joint DoD/VA Task Force was the appropriate body to carry out future projects and that joint efforts in support of a few initiatives were already underway. OSD correspondence records indicate that the response to the April
30, 1994 was also in response to the February 10, 1994. The reply stated that the Non-Medical Benefits Task Force would be expanded to encompass this issue. Since this time, the VA point of contact, Mr. Rich Pell, has been reassigned and we do not have a point of contact to work on setting up a meeting.

5. **Crested Ice** - This program is not an issue - the VA indicated it received the requested records.

6. **Human Radiation Experimentation** - The Secretary of Veterans Affairs letter to the Secretary of Defense dated February 10, 1994 proposed the formation of an interdepartmental working group to design and undertake a review of projects, other than appropriately approved medical research, involving the exposure of military personnel to toxic substances or environmental hazards.

   **DoD Response:** We have checked with the Department of Defense Radiation Experiments Command Center (RECC) which was established in February 1994 as DoD’s central repository for matters concerning human use ionizing radiation experiments. To date, their records indicate the RECC has not received any requests for records from the VA. We have passed your request to them. The point of contact at the RECC is Colonel Claud Bailey. His telephone number is (703) 442-5675.

7. **PGW Environmental Hazards** -

   a. The Secretary of Veterans Affairs letter to the Secretary of Defense dated February 10, 1994 proposed the formation of an interdepartmental working group to design and undertake a review of projects, other than appropriately approved medical research, involving the exposure of military personnel to toxic substances or environmental hazards.

   **DoD Response:** The Deputy Secretary of Defense answered this letter on April 30, 1994. The response indicated that the existing joint DoD/VA Task Force was the appropriate body to carry out future projects and that joint efforts in support of a few initiatives were already underway.

   b. The Deputy Secretary of Veterans Affairs letter to the Deputy Secretary of Defense dated April 12, 1994 proposed the establishment of a VA/DoD Reinvention Partnership between VA and DoD.

   **DoD Response:** The Deputy Secretary of Defense answered this letter on April 30, 1994. The response indicated that the existing joint DoD/VA Task Force was the appropriate body to carry out future projects and that joint efforts in support of a few initiatives were already underway. OSD correspondence records indicate that this response to the April 12, 1994 VA letter (TAB 2) was also in response to the February 10, 1994 (see paragraph 2b above).
The Honorable William J. Perry
Secretary of Defense
The Pentagon, 3E880
Washington, DC 20301-1135

Dear Mr. Secretary:

Based on recent revelations by former World War II Japanese service personnel and related private research efforts, I believe there is sufficient reason for our two departments to jointly resolve the issue of alleged human experimentation upon U.S. prisoners of war in violation of the Geneva Convention.

Specifically in question is the treatment of prisoners held at Mukden POW camp by members of Unit 731 in Japanese-occupied Manchuria, China. Allegations and apparent first-person accounts point to possible biological experiments involving prisoners. If true, we must not only express our indignation regarding this immoral behavior, but take immediate and thorough steps to properly reach out to the survivors.

I hope you will agree with me that it would be equally outrageous for the government to modify or temper its actions to spare former officials and current interests the shame associated with the perpetration of these acts and efforts that may have been taken to conceal them. The Administration’s actions to declassify pertinent documents and make them available to the public fulfills a moral obligation only if we aggressively pursue a search for the survivors and offer them benefits to which they may be entitled.

Regrettably, Mr. Secretary, a previous similar appeal for Defense Department records and cooperation has largely gone unanswered. The enclosed letter sought to establish a framework within which we could work to identify veterans who might have been exposed to any form of chemical, biological or radiation tests or experiments.

In the spirit of the concern we both share for the welfare of our service personnel and our veterans, I request that you provide assistance that will allow us to exert every possible humanitarian effort to address these lingering issues.

Sincerely yours,

[Signature]

Jesse Brown

Enclosure (2/16/94 lett)

IB/drc

Putting Veterans First
The Honorable Edwin Dorn  
Under Secretary of Defense  
for Personnel and Readiness  
3E764, The Pentagon  
Washington, DC 20301-4000  

Dear Mr. Dorn:

The Department of Veterans Affairs is investigating the allegations that the Japanese conducted biological experimentation on American Prisoners of War (POW) at Camp Mukden in Manchuria during World War II. As I analyze the details of the Mukden issue, I realize that I must ask your assistance in searching for military records responding to these allegations.

The Mukden POW issue, however, is just one of several events that we must refer to you for records. During the past few years we have asked for military records for other similar instances, such as mustard gas experiments, human radiation experimentation, and exposure to environmental hazards in the Persian Gulf theater of operations. Although I realize that we co-chair a joint task force whose purpose is to address our department's mutual needs and concerns, I feel obliged to ask for the status of our prior requests for records.

I am enclosing an outline of our prior requests for records. I would appreciate your looking into this and advising me of the status of your records searches. These records are extremely important to us and the veterans we serve as they will help us determine courses of action to respond to their needs. Further, knowing that no records are available is equally important because then, too, we can make decisions concerning what we can do for veterans.

Additionally, I am designating Ms. Kathy Collier from the Compensation and Pension Service as my point of contact in this matter. She may be reached at (202) 273-7226.
The Honorable Edwin Dorn

In the spirit of cooperation and concern for our veterans, I look forward to working with you in resolving any unanswered requests for records.

Sincerely yours,

R. J. Vogel

Enclosure
Requests for Department of Defense Records

<table>
<thead>
<tr>
<th>Issue</th>
<th>Date of VA Request</th>
<th>Records Received?</th>
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<tbody>
<tr>
<td>Mukden POWs</td>
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<td>Mustard Gas</td>
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<td></td>
<td>02-10-94</td>
<td>No</td>
</tr>
<tr>
<td>Crested Ice</td>
<td>05-17-94</td>
<td>Yes(^1)</td>
</tr>
<tr>
<td>Human Radiation Experimentation</td>
<td>02-10-94</td>
<td>No</td>
</tr>
<tr>
<td>PGW Environmental Hazards</td>
<td>02-10-94</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>04-12-94</td>
<td>No</td>
</tr>
</tbody>
</table>

\(^1\)Recently, VA received a list of approximately 500 names of individuals who participated in the clean-up of Operation Crested Ice. This list contains the Social Security number for each individual as well as the service number for military personnel. It also contains the names and other identifying data for civilian personnel.
The Honorable Edwin Dorn  
Under Secretary of Defense  
for Personnel and Readiness  
3E764, The Pentagon  
Washington, DC 20301-4000  

JUL 28 1995  

Dear Mr. Dorn:  

It was good to see you last week at the reception honoring Sonny Montgomery. It is truly an indescribable emotion to celebrate his contribution to veterans as well as the 10th anniversary of the Montgomery GI Bill. In speaking with you, I sensed that you share some of the same emotion.

Likewise, I believe we share similar feelings relating to the welfare of veterans who may have been subjected to various hazards while in the military that have affected their lives, health and well being. I was glad we had an opportunity to talk about these and my recent communication outlining several outstanding requests for military records. I appreciate the tremendous undertaking you and your staff accepted to locate records associated with the military operations I described in my outline, such as biological experimentation on Mukden Prisoners of War, mustard gas experiments, and exposure to environmental hazards in the Persian Gulf.

I also appreciate every effort expended on this quest for records. However, it is time to come to closure on this issue. Therefore, I would appreciate your letting me know whether your searches have located any records. It is important for us to know if any records are available because if not, we can then explore the possibility of alternative sources.

I look forward to hearing from you. Again, I enjoyed speaking with you at Sonny’s reception.

Sincerely yours,

R. J. Vogel
THE SECRETARY OF VETERANS AFFAIRS
WASHINGTON

FEB 10 1994

The Honorable William J. Perry
Secretary of Defense
The Pentagon
Washington, DC 20301-1155

Dear Mr. Secretary:

Recent disclosures concerning inappropriate radiation-related human experimentation in the late 1940's and 1950's caught us all by surprise and caused the Administration to react immediately. The Department of Veterans Affairs is now carefully searching our own records to determine whether experimental abuses occurred under our auspices and I have expressed my personal distress at recently learning that VA at one time apparently had a secret Atomic Medicine Division.

In the past, VA also has been surprised by allegations and disclosures of various types of chemical testing or exposure conducted by the military, for example, mustard gas testing and LSD experiments.

VA's responses to these situations were as quick and comprehensive as circumstances and current knowledge permitted. However, concern exists that additional, previously undisclosed, questionable programs may have been conducted. Thus, I believe that our departments need to work together to avoid similar future surprises and to help ensure that veterans are not needlessly disadvantaged by military service. In my view, we should adopt the goal of identifying all veterans who may have been harmed by their participation in improper experimentation while serving on active duty and assist them in applying for any benefits for which they may be entitled. To this end, I propose the formation of an Interdepartmental working group to design and undertake a review of projects, other than appropriately approved medical research, involving the exposure of military personnel to toxic substances or environmental hazards. In order to provide for the development of this proposal, I have designated Deputy Undersecretary for Benefits R.J. Vogel as the VA contact in this matter, and I request that you name an appropriate DoD official to contact Mr. Vogel in order to initiate discussions.

I know you share my concern for the welfare of our veterans and I would appreciate your immediate attention to this request. I look forward to your response.

Sincerely yours,

Jesse Brown
Honorable Hershel W. Gober  
Deputy Secretary of Veterans Affairs  
Washington, DC 20420  

Dear Mr. Gober:

Thank you for your letter of April 12. We fully support the proposed DoD/VA Reinvention Partnership agreement that your staff prepared. Secretary Perry is also pleased with our collaboration on the Persian Gulf illnesses. Dr. Edwin Dom, Under Secretary of Defense for Personnel and Readiness, has oversight for all DoD activities related to veterans.

As you pointed out, DoD and VA staff have been working together on a number of joint issues, including: improving the processes for transfer of medical records from DoD to VA; studying the dual compensation issue; and facilitating searches for the records of veterans used as test subjects in experimental tests during and after World War II. These projects were initiated under the auspices of a joint DoD/VA task force, co-chaired by Dr. Dom and Mr. Vogel. The DoD membership of that task force is the appropriate representation for our Reinvention Partnership Executive Committee. The membership list is enclosed.

I believe that we should move forward and formalize our agreement. Dr. Dom's staff will work with your staff to: prepare the agreement for signature of the Secretaries; expand the existing DoD/VA task force to include the additional membership from VA; incorporate the existing working groups into the new structure; and schedule a kick-off meeting within the next couple of weeks.

We look forward to opportunities to expand our partnership.

Sincerely,

[Signature]

Enclosure:
As Stated
DOD/VA NON-MEDICAL BENEFITS TASK FORCE

DoD Members

Mr. Edwin Dorn, Under Secretary of Defense
Personnel and Readiness

Ms. Deborah Lee, Assistant Secretary of Defense
Reserve Affairs

Dr. Stephen C. Joseph, Assistant Secretary of Defense
Health Affairs

Mr. William Clark, Assistant Secretary of the Army
Manpower and Reserve Affairs (Acting)
(Confirmation vote on Mrs. Sara Lister, 4/20/94)

Mr. Fred Pang, Assistant Secretary of the Navy
Manpower and Reserve Affairs

Mr. Rodney A. Coleman, Assistant Secretary of the Air Force
Manpower, Reserve Affairs, Installation and Environment

VA Members

Mr. John Vogel, Under Secretary for Benefits
Department of Veterans Affairs

Mr. J. Gary Hickman, Director
Compensation and Pension Service

Mr. Thomas R. Wagner, Director
Administrative Staff

Executive Secretaries

Ms. Norma St.Claire, Department of Defense
Director, Information Resources Management

Mr. William Stinger, Department of Veterans Affairs
Director of Programs and Planning
The Honorable William J. Perry  
Secretary of Defense  
Washington, DC  20301  

Dear Mr. Secretary:

The Department of Veterans Affairs (VA) is committed to providing the best possible service to veterans who claim to have been exposed to vesicant gasses during their active service either through experimental testing, field training or accidentally while working with the gasses. To fulfill our commitment, we find we must call upon you for assistance.

VA decisions concerning entitlement to disability benefits are based on evaluations of documentary evidence provided by the Department of Defense. After the World War II mustard gas testing became public knowledge in 1990, VA has learned that the evidence of possible exposure of an individual is usually not available in his service records. Without access to this information it is impossible for VA to render a fair and just decision on such a claim.

The enclosed fact sheet outlines some of the difficulties VA has experienced in obtaining relevant information.

I am certain you share my concern for providing the best possible service to our nation's veterans. I would appreciate your immediate attention to resolving the issues raised in this letter.

Sincerely yours,

Jesse Brown

Enclosures

JB/1p
Fact Sheet

ISSUE: Department of Defense (DoD) cooperation in developing information which would document servicemen's participation in events during which they were exposed to vesicant gases.

DISCUSSION: The Department of Veterans Affairs (VA) has received over 1,100 claims for conditions allegedly arising from exposure to mustard gas. We have been able to verify exposure for fewer than 200 veterans, most of whom were in testing at the Naval Research Laboratory (NRL).

In March 1993, DoD’s Deputy Director, Defense Research and Engineering, assured the Secretary of Veterans Affairs, in writing, that DoD would 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 (VA) in expediting the collection of available information."

This information was to have been compiled and available to VA before the end of fiscal year 1993. None of these actions have yet taken place.

We have worked closely with NRL for claims by Navy personnel who participated in testing there. VA was initially informed that no other testing occurred. However, we have since learned of other testing by the Navy at sites such as USN Disciplinary Barracks, Hart’s Island, New York and Great Lakes Naval Training Center, Illinois. VA has been aware of extensive arm testing at Great Lakes which involved putting drops of a vesicant on a participant’s arm. Documents received here recently mention a chamber constructed in 1944 which was used extensively. Development for exposure at Navy sites other than NRL have produced essentially negative results.

Currently, our development procedures for claims for Army personnel are to solicit information from the National Personnel Records Center (NPRC), if the alleged exposure occurred prior to 1955, and from the Office of the Surgeon General (OTSG), Falls Church, Virginia, for other periods. The results of this development have been, with few exceptions, negative. In addition to the five bases where the Army has acknowledged mustard gas testing occurred (Edgewood Arsenal, Maryland; Bushnell Field, Florida; Camp Sibert, Alabama; Dugway Proving Grounds, Utah; and San Jose Island, Panama), we have learned of several other sites where mustard gas training or testing was undertaken.
For example, VA received a claim from an Army veteran claiming exposure at Ft. Riley, Kansas. Up to this time, we had no knowledge of mustard gas activity at Ft. Riley. In response to a referral from OTSG, the Federal Archives in Suitland, Maryland, stated that they had over 1,000 pages of material which includes information about training exercises at Ft. Riley, including the use of mustard gas, during World War II. They are not staffed to do research on individuals involved in the training. A copy of this letter is attached.

In another case, VA received a claim from a veteran who served with a chemical company in India. The contention was that the canisters leaked badly and one of his jobs was to sniff the canisters daily to identify the leaking ones. He supported his contention with photographs of the canisters containing mustard gas on a flatbed railroad car, being buried and being tossed over the side of a ship into the Indian Ocean. Officials from DoD confirmed they were indeed mustard gas canisters and that in the heat and humidity of India they all leaked.

Additionally, we have received material from a veteran who was a member of the Army Chemical Service which identifies other locations such as the Black Hills Ordnance Depot, South Dakota, where he was temporarily assigned for the purpose of destroying mustard gas.

The DoD Mustard Gas Project has recently provided VA with some assistance in the form of site listings where mustard gas was used for testing, training or was stored during and after World War II. One volume entitled, "Potential Chemical/Biological Exposure Sites," contains over 200 pages with several sites listed on each page. This information is very interesting and a good beginning, but it is not adequate to support VA claims adjudication which requires more specific information on individuals.

It is clear that if DoD is aware of mustard gas related records at the Federal Archives and elsewhere, it should be able to consolidate them into a single location and have them sorted or indexed by individual, service number or even by unit designation, and begin fulfilling its pledge to VA.
Honorable John Vogel  
Under Secretary for Benefits  
Department of Veterans Affairs  
810 Vermont Avenue, N. W.  
Washington, D. C. 20420

Dear Mr. Vogel:

This is in response to Secretary Brown's April 7 letter to Secretary Perry requesting information on veterans exposed to mustard and vesicant gasses. I apologize for the delay in responding. Unfortunately, there is no single repository of information on personnel exposures, so developing a response required quite an extensive effort.

The enclosure provides answers to the major concerns addressed in Secretary Brown's letter. Should your staff have any questions please have them contact my action officer, Ms. Norma St. Claire; 696-8710.

I am committed to providing the best possible service to our veterans and appreciate your interest and support in our joint efforts. Please call me if I can be of further assistance.

Sincerely,

Enclosure:
As stated
RESPONSE TO VA FACT SHEET FORWARDED APRIL 7, 1994

VA Fact Sheet Statement:

ISSUE: Department of Defense (DoD) cooperation in developing information which would document servicemen's participation in events during which they were exposed to vesicant gases.

DISCUSSION: The Department of Veterans Affairs (VA) has received over 1,100 claims for conditions allegedly arising from exposure to mustard gas. We have been able to verify exposure of fewer than 200 veterans, most of whom were in testing at the Naval Research Laboratory (NRL).

In March 1993, DoD's Deputy Director, Defense Research and Engineering, assuring the Secretary of Veterans Affairs, in writing, that DoD would 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 names and exposure data for military chemical agent workers exposed to mustard 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 (VA) in expediting the collection of available information.

This information was to have been compiled and available to the VA before the end of fiscal year 1993. None of these actions have yet taken place.

DoD Response: It is important to note that neither the referenced letter, nor the letter forwarded to Congressman Sonny Montgomery from the Deputy Secretary of Defense, committed DoD to completing actions by the end of FY 1993. At the hearing held on March 10, 1993, LtGen Alexander stated that this effort will require years of research, collection, and analysis in order for the information to be put into an organized and easily accessible format for use by DoD, VA and the Department of Labor. We did commit to providing as much information as soon as possible, and we have provided VA with some of the information we extracted. However, much of the information is not conclusive concerning exposure, and personnel information is incomplete in many instances. Many records refer to personnel by last name only, with no rank or title that would indicate military or civilian; test subject numbers may be used instead of
names, code names are sometimes used instead of surnames, and often there are no service or social security numbers. Chemical agents being tested are often referred to by numbers or letters relevant only to the test site which makes it necessary to have an index or guide to determine the name and type of agent. Extraction of pertinent information on human exposures, or potential exposure is an extremely complex and labor intensive task. Information on personnel injured in the Bari, Italy, harbor disaster has not been located. The DoD points of contact are the members of the Chemical Weapons Exposure Task Force, which has held joint meetings with representatives from VA. The Task Force includes representatives from the Services and several OSD offices.

VA Fact Sheet Statement:

We have worked closely with NRL for claims of Navy personnel who participated in testing there. VA was initially informed that no other testing occurred. However, we have since learned of other testing by the Navy at sites such as USN Disciplinary Barracks, Hart's Island, New York, and Great Lakes Naval Training Center, Illinois. VA has been aware of extensive arm testing at Great Lakes which involved putting drops of a vesicant on a participant's arm. Documents received here recently mention a chamber constructed in 1944 which was used extensively. Development for exposure at Navy sites other than NRL have produced essentially negative results.

DoD Response: Hart's Island was identified as a test site by staff in the Office of the Under Secretary of Defense for Personnel & Readiness, OUSD (P&R), after over a year of research into records collections. The actual documentation was forwarded to us by the Head of the Military Records Section at the National Personnel Records Center (NPRC) in St. Louis. DoD did not previously know about these documents. Because DoD staff had made a visit to NPRC to discuss what records collections were there, the archivist contacted us when the documents were found. We were pleased to be able to assist in the verification of a veteran's claim based on the information from NPRC. The information on testing at Great Lakes was in the National Academy of Science Report published in January, 1993. Great Lakes was on the list issued in March of 1993. Chamber test information was sent to VA by OUSD (P&R) staff after finding technical reports at one of the DoD record repositories. P&R staff also visited the University of Chicago (Test Contractor) and researched records in an attempt to locate names. To date no names have been found. The Naval Training Center Great Lakes does not have any records of the testing or the test subjects. We are continuing our search for the names of the Great Lakes test subjects.

VA Fact Sheet Statement:

Currently, our development procedures for claims for Army personnel are to solicit information from the National Personnel Records Center (NPRC), if the alleged exposure occurred prior to 1955, and from the Office of the Surgeon General (OTSG), Falls Church, Virginia, for other periods. The results of this development have been, with few exceptions, negative. In addition to the five bases where the Army acknowledges mustard gas testing occurred (Edgewood Arsenal, Maryland; Bushnell Field, Florida; Camp Sibert, Alabama;
Dugway Proving Ground, Utah; and San Jose Island, Panama), we have learned of several other sites where mustard gas training or testing was undertaken.

**DoD Response:** The other sites where mustard gas training or testing was conducted were identified through the exhaustive review of automated records indexing and storage systems maintained by Dugway Proving Ground and the Chemical/Biological Information Analysis Center in Edgewood, Maryland. Initial information on two of the additional sites was forwarded by veterans who had personal knowledge and documentation on the chemical warfare activities carried out at the locations. When we get information from veterans, we try to verify it. We have found in researching some veterans' claims that individuals have mistaken standard tear gas training for mustard because it burned their eyes or made them cough. More than ten cases a day are received at Edgewood Arsenal from VA Regional Offices. Each case is researched and answered. P&R has several cases we are currently researching. The list of sites where testing and training were done with chemical weapons is updated as information is located.

**VA Fact Sheet Statement:**

For example, VA received a claim from an Army veteran claiming exposure at Fort Riley, Kansas. In response to a referral from OTSG, the Federal Archives in Suitland, Maryland, stated that they had over 1,000 pages of material which includes information about training exercises at Ft. Riley, including the use of mustard gas, during World War II. They are not staffed to do research on individuals involved in the training. A copy of this letter is attached.

**DoD Response:** VA shared this information with P&R staff. The records on Fort Riley stored at the National Archives turned out to be lesson plans. There were no names of personnel in the records. P&R staff continue to review records when we expect to find information on human test subjects; for example, we have reviewed a collection of Surgeon General records and records from the Army Chemical Corps. DoD does not have the resources to immediately review all archived material relating to military installations and activities. We are targeting collections that we know to have information on chemical warfare and research test activities in the hope of providing information to assist the VA in making compensation determinations.

**VA Fact Sheet Statement:**

In another case, VA received a claim from a veteran who served with a chemical company in India. The contention was that the canisters leaked badly and one of his jobs was to sniff the canisters daily to identify the leaking ones. He supported his contention with photographs of the canisters containing mustard gas on a flatbed railroad car, being buried and being tossed over the side of a ship into the Indian Ocean. Officials from DoD confirmed they were indeed mustard gas canisters and that in the heat and humidity of India they all leaked.

**DoD Response:** P&R staff received this inquiry from VA. A P&R staff member took the file to Edgewood Arsenal and had the veteran's unit researched. We were pleased to be able to provide
VA with historical information on chemical warfare units that was used to confirm the veteran's deployment to India. The P&R staff member also took the veteran's photographs to a munitions expert to have cylinders identified. We were not aware of storage and transport at Ondal, India prior to this. As stated above, initial DoD efforts have been to identify persons used as human test subjects. Storage or transport sites are included in our database as we find them. The Black Hills Ordnance Depot was identified in the February 1994 Site Location Database as a storage site. We have found no information on confirmed human exposures at Black Hills as of this date.

VA Fact Sheet Statement:

The DoD Mustard Gas Project has recently provided VA with some assistance in the form of site listings where mustard gas was used for testing, training or was stored during and after World War II. One volume entitled, "potential Chemical/Biological Exposure sites," contains over 200 pages with several sites listed on each page. This information is very interesting and a good beginning, but it is not adequate to support VA claims adjudication which requires more specific information on individuals.

*DoD Response:* The Chemical/Biological Exposure Sites is the interim product of an exhaustive search of automated records. We have been pleased to be able to provide information on individuals when we can. Unfortunately we have not found any large collections of personnel or medical records verifying exposures. In most cases we find information on testing, transportation and storage that is interspersed with administrative correspondence, technical manuals, laboratory notebooks, test plans, etc. Names are scattered throughout, and conclusive verification of exposure is not always evident. More importantly, names for World War II test subjects have been particularly elusive. It is because of this we have tried to construct a database of test sites and dates to verify events. Very little information has been found on training, specifically, information that verifies the use of vesicants or live agent as part of training.

VA Fact Sheet Statement:

It is clear that if DoD is aware of mustard gas related records at the Federal Archives and elsewhere, it should be able to consolidate them into a single location and have them sorted and indexed by individual, service number or even by unit designation, and begin fulfilling its pledge to VA.

*DoD Response:* DoD is working to provide data on personnel who participated in tests in which mustard gas was used; however, there are no organized records of participants for any of the tests. Research work to date has revealed that most test reports simply refer to the participant as "Subject" using the surname, or as "Observer" with a numerical designator. While small numbers of names have been located there is no central listing of test subjects during and after World War II. Information at the National Archives and installations are not in any order to support easy retrieval. At the National Archives, the records are sorted by the activity that retired the records. To do what is recommended would require searching millions of documents.
page by page to identify names. Many names may be imbedded in documents that are technical in nature. The average time to review this information is in excess of 1 hour per linear foot. Staff from OUSD (P&R), the Defense Manpower Data Center (DMDC), and the Chemical/Biological Defense Command are working to convert 13 magnetic tapes from the 1970's to a format usable by DMDC and VA. These tapes were found in April, 1994, and we believe they contain information on over 7,000 test subjects who participated in tests at Edgewood Arsenal between 1955 and the late 70's. As soon as this conversion is accomplished the information will be shared with the VA. This will be the largest single collection of test subjects we have found to date.
Dear General Blanck:

We have received several claims for disability benefits from Army reservists and National Guard members called to active duty during Desert Storm, stating that they suffer from disabilities resulting from exposure to Chemical Agent Resistant Compound (CARC). These individuals have given consistent accounts of the circumstances surrounding their exposure to CARC, including allegations of inappropriate training in the use of CARC and failure to receive protective equipment, clothing or breathing apparatus.

The combined weight of the individual descriptions of events has seemed persuasive to some. However, since VA decisions concerning entitlement to disability benefits are based on evaluations of documentary evidence, we need your assistance in furnishing information concerning the Department of the Army's use of CARC. Specifically, we would like you to identify the individuals involved in the use of CARC; the units to which they were assigned; where these units were located; when these individuals were exposed to CARC; whether protective clothing, equipment or breathing apparatus was issued; and which paints containing CARC were used.

As I am sure you share my concern for the well-being of the claimants, I would appreciate your immediate attention to this request.

Sincerely yours,

R. J. Vogel
Deputy Under Secretary for Benefits
The Honorable R. J. Vogel  
Deputy Under Secretary for Benefits  
Department of Veterans Affairs (211B)  
Veterans Benefits Administration  
Washington, DC 20420

Dear Secretary Vogel:

Thank you for your letter of 1 October 1993 concerning possible disability claims and Chemical Agent Resistant Compounds (CARC) exposure.

Although I am not in the position to answer your request because it is outside of our medical purview, members of my staff have coordinated with the Office of the Assistant Secretary of Defense for Health Affairs and Personnel and Readiness. Those two offices have a copy of your letter and a response will be forthcoming.

Sincerely,

Ronald R. Blanck  
Major General, U.S. Army  
Commanding Officer
OCT 05 1993

The Honorable Calvin D. Cox
Assistant Secretary of Defense
For Personnel and Readiness
JE 764, The Pentagon
Washington, DC 20301-4000

Dear Mr. Dorn:

The Department of Veterans Affairs (VA) is committed to searching for answers surrounding the medical problems plaguing veterans of the Persian Gulf War and to providing benefits to these deserving individuals. To fulfill our commitments, we find we must call upon you for assistance and information.

Recently, we have received several claims for disability benefits from Army reservists and National Guard members called to active duty during Desert Storm, stating that they suffer Reactive Resistant Compound (CARC). These individuals have given consistent accounts of the circumstances surrounding their exposure to CARC, including allegations of inappropriate training in the use of CARC and failure to receive protective equipment, clothing or breathing apparatus.

The combined weight of the individual descriptions of events has seemed persuasive to some. However, since VA disability determinations are based on evaluations of documentary evidence, we need information concerning the Department of the Army’s use of CARC. Specifically, we would like the names of the individuals involved in the use of CARC; the units to which they were assigned; where these units were located; when these individuals were exposed to CARC; whether protective clothing, equipment or breathing apparatus was issued—and which points containing CARC were used.

As I am sure you share my concern for the well-being of the claimants, I would appreciate your immediate attention to this request. I look forward to meeting you in the near future to discuss this and other issues concerning veterans.

Sincerely yours,

[Signature]

R. E. Yotzel
Assistant Secretary
DOD/VA NON-MEDICAL BENEFITS TASK FORCE
MEETING
OCTOBER 27, 1993
SUMMARY MINUTES
DOD/VA NON-MEDICAL BENEFITS TASK FORCE MEETING  
OCTOBER 27, 1993  
SUMMARY MINUTES

Mr. R. J. Vogel, Deputy Under Secretary for Benefits, VA, began the meeting by welcoming the participants and pointing out Secretary Brown's interest in the work of the Task Force. He spoke of the joint projects which are successfully underway and expressed his desire to continue to build upon these successes.

Mr. Ed Dorn, Assistant Secretary of Defense for Personnel and Readiness, DoD, remarked how pleased he was to see the two Departments working together to build consensus on issues of mutual concern.

A discussion of the agenda followed:

Service Medical Records Transfer—Background information about the origins of the project was presented. Historically, VA had difficulty acquiring service medical records (SMR's) timely in an attempt to serve veterans filing claims for service-connected compensation benefits. In order to expedite the process, DoD/VA entered into a demonstration project. The project would be used to evaluate the utility of transferring SMR's directly to VA upon a service member's separation from service.

Army agreed to test the feasibility of transferring SMR's to VA automatically upon a service member's separation. Procedures were established for the routine transfer of SMR's from Army transition points to VA's Service Medical Record Center (SMRC), St. Louis, MO. Also, procedures were established to test the VA's ability to retrieve and transmit SMR's back to the Army in the event of mobilization. The first SMR's were transferred to VA on October 16, 1992.

A test of VA's ability to retrieve and transmit SMR's back to the Army was conducted during September 8, 9, and 10, 1993. There were three parts to the test: Part I-Reconciliation; Part II-Mobilization; and Part III-Routine Peacetime Request. All three parts of the test were concluded successfully. See Attachment A.

The Task Force agreed to the following recommendations:

1. Make the Army transfer of SMR's to VA a permanent practice. Establish policy directives to that end.

2. Task the working group to develop procedures for the transfer of the Navy's SMR's.

4. Task the working group to develop procedures for the transfer of the Air Force's SMR's.

5. VA would like to begin receipt of the Air Force's SMR's no later than January 30, 1994.

DoD chooses to adhere to the original agreement which called for a phased-in approach to the transfer of SMR's. In the instant case, the agreement calls for the Air Force to transfer SMR's to VA six months after the Navy begins SMR's transfer. This means the Air Force SMR's transfer would occur in June 1994.

VA believes the procedures currently in-place for the Army SMR's and successfully tested demonstrate VA's ability to manage SMR's. VA's SMRC, St. Louis, MO. moved to expanded quarters in October 1993 and will easily accommodate the Air Force's SMR's.

Further, VA views the transfer of the Air Force's SMR's as part of their focus on customer satisfaction. VA wants all service members to have equal access to their services.

VA requests DoD to reconsider the original agreement to afford the Air Force the opportunity to accelerate the SMR's transfer process.

Separation Physical Examinations—DoD proposes a uniform policy for all military services calling for each separating service member to undergo a medical interview prior to separation to identify any complaints, illnesses, or injuries. If the interview identifies condition(s) requiring further medical evaluation, or upon a separatee's request, a physical examination will be given.

VA wants all separating service members to undergo a separation physical examination. VA needs these physical examinations as evidence in the event the separating service member files a claim for service connected compensation benefits.

The Task Force agreed to the following recommendations:

1. Task the working group to develop a comprehensive set of data for the purpose of determining whether a military population exists which would benefit from a uniform policy requiring mandatory separation physical examinations.

2. Task the working group to further analyze the data regarding the sufficiency of separation physical examination. Specifically, whether a benefit could be realized from the introduction of VA's physical examination protocol into the culture of DoD health organizations.
DoD believes their uniform policy proposal will satisfy VA's needs. VA does not share that opinion. Further, DoD will work with VA to accommodate VA's examination protocol where appropriate.

- Environmental Health Issues/Persian Gulf Veterans contained two issues for discussion: 1) Persian Gulf Syndrome; and, 2) Chemical Agent Resistant Coating.

Discussion focused on attempts to insure that the Departments were cooperating in the research and investigation into the complaints and illnesses which are being labeled as Persian Gulf Syndrome.

Congressmen Kennedy and Evans were requesting a joint DoD/VA hearing into the issues associated with the health concerns of Persian Gulf War veterans. A hearing set for Tuesday, November 2, 1993 was canceled.

The members were interested in the VA's receipt of approximately 1260 claims for service connected compensation benefits from veterans claiming exposure to environmental agents. VA granted service connected benefits in 65 instances. These veterans served during the Persian Gulf War period, but not necessarily in the Persian Gulf. The granting of service connected benefits in the 65 instances is not necessarily associated with an environmental agent. For example, if a veteran claims a skin condition, and the service medical records indicate the condition did not exist at the time of entry on active duty but did at separation, service connected benefits are granted as the skin condition occurred during service.

VA is seeking information from DoD about the use of Chemical Agent Resistant Coating (CARC). A number of veterans claim their medical problems resulted from the use of CARC. VA is interested in the units involved along with all the information DoD can provide surrounding this issue.

The Task Force agreed to the following recommendation:
That DoD/VA maintain communication channels to continue to participate in working groups pursuing the health issues associated with the Persian Gulf War.

- Loan Guaranty. VA is concerned that military base closings and downsizing will put at risk those members having guaranteed VA home loans. In a cooperative joint venture, DoD/VA are working together to identify active duty service members having VA guaranteed home loans. VA will contact these individuals to offer counseling and alternative solutions to prevent service members from becoming delinquent in their
loans and/or resulting foreclosure.

Members were very pleased with this approach. However, members believe that civilian employees of the DoD having guaranteed home loans would be at greater risk for delinquency and/or foreclosure. They encourage DoD/VA to work together to identify the civilian employees at risk.

The Task Force agreed to the following recommendation:
That DoD/VA continue to work together to identify the active duty service members at risk for delinquency and/or foreclosure and to expand the mission to include civilian employees also at risk.

Mustard Gas and Lewisite—This issue affects WWII veterans and is primarily centered on the access to records. Discussion concerned VA's ability to access DoD records to process pending claims for service connected compensation benefits as a result of exposure to Mustard Gas and Lewisite.

The Task Force agreed to the following recommendation:
Task the Chemical Weapons Exposure Task Force to work with VA representatives to develop administrative procedures to institutionalize a process for searching for and identifying records associated with the testing of Mustard Gas and Lewisite.

Electronic Transfer of Data—VA is receiving data from Defense Manpower Data Center (DMDC) for all active duty military. VA plans to update and/or establish records contained in its automated Beneficiary Index Records Locator System (BIRLS). BIRLS is used by VA to establish eligibility to certain entitlements. VA anticipates these data exchanges will eventually lead to the elimination of paper exchanges between the two Departments.

The Task Force agreed to the following recommendation:
The data exchanges continue and opportunities for expansion be explored and acted upon.
The Honorable Michael P. Stone
Secretary of the Army
Department of the Army
The Pentagon
Washington, DC 20310

Dear Mr. Secretary,

The Department of Veterans Affairs (VA) has received an inquiry from Congressman Douglas Applegate containing a

recommendation concerning the U.S. Army which included the administration of typhoid vaccine to participants. Congressman Applegate is interested in how VA intends to deal with claims for disability compensation from participants in such testing.

Along with his letter, the Congressman provided a copy of a

private bill he introduced to Congress which details the life and problems of a serviceman who claims to have been a participant of such testing at the Edgewood Arsenal in the late 1950s and early 1960s. A copy of this material is enclosed.

VA has no knowledge of these test programs and needs some information from the Department of the Army to establish a procedure for processing this and other claims we may receive on this issue.

To establish the validity of a claim, it is important to be able to place the veteran (claimant) at the proper location(s) during the testing period. It also is important to know the type and extent of exposure each participant received. The better we are able to verify this information the better VA can determine the results of the testing on each person.

Please provide the inclusive dates the testing occurred and a list of servicemen who participated in the tests. In addition, please provide a name and address which our regional offices can contact to secure information concerning any individual who files a claim for disability benefits based upon his participation in the testing.
Page 2

The Honorable Michael P. W. Stone

If members of your staff have any questions, suggestions or comments, please contact J. Gary Hickman, Director, Compensation and Pension Service. He can be reached at (202) 233-2244.

I appreciate your cooperation in this matter.

Sincerely yours,

M. Wayne Gray

Enclosure
Dear Mr. Gray:

This responds to your request for information about research conducted by the Army during the period from 1955 through 1967 that included the administration of lysergic acid diethylamide (LSD) to members of the armed forces.

The LSD experimentation program is described in detail in a report prepared by the Army Inspector General in 1976. The Office of the Inspector General, the custodian of the document, has indicated that upon request to the Inspector General, the report will be provided to you. The report is entitled "Use of Volunteers in Chemical Agent Research" and numbered "DAIG-IN 21-75." Your request should be sent to:

Department of the Army
Office of the Inspector General
ATTN: SAIG-ZXR
Washington, D.C. 20310-1714

Reference the title and number of the report in your request.

There is currently a system to retrieve personal information relating to the experimentation participants. Copies of physical examinations and test records are available upon request from the Office of the Surgeon General, Department of the Army. You may obtain information concerning a specific claimant by submitting a request for information to:

Department of the Army
Office of the Surgeon General
ATTN: DASG-RDE
5109 Leesburg Pike
Falls Church, Virginia 22041-3258

Provide the name and social security number of the individual involved, as well as an Army serial number if available.
Information concerning a claimant's participation in chemical agent research may also be present in the participant's official military personnel file. These records may include orders assigning a participant to a military installation where research was being conducted and the participant's medical records. For retired Army personnel, requests for records should be sent to:

Commander, US Army Reserve Personnel Center
9700 Page Boulevard
St. Louis, Missouri 63132

For former Army personnel who have been completely separated, requests for records should be sent to:

Chief, National Personnel Records Center
General Services Administration
9700 Page Boulevard
St. Louis, Missouri 63132

If you have additional questions concerning the maintenance of records prepared for individuals during their participation in the LSD experimentation program, please contact the Chief, Office of Records Management, Office of the Surgeon General, (703) 756-0223.

Sincerely,

Joseph R. Barnes
Colonel, JA
Chief, Administrative Law Division
In Reply Refer To:

Department of the Army
Office of the Inspector General
ATTN: SAIG-ZXR
Washington, DC 20310-1714

Dear Sir:

The Department of Veterans Affairs (VA) recently requested information from the Secretary of the Army about research conducted by the Army that included the administration of lysergic acid diethylamide (LSD) to members of the armed forces. The Chief, Administrative Law Division, Office of the Judge Advocate General wrote the response to our request.

We are informed that the LSD experimentation program is described in detail in a report prepared by the Army Inspector General in 1976. The report is entitled "Use of Volunteers in Chemical Test Agent Research" and is numbered "DAIG-IN 21-75." We are formally requesting a copy of this report.

VA appreciates your cooperation in this matter.

Sincerely yours,

J. Gary Hickman, Director
Compensation and Pension Service
Records Release Office

Mr. J. Gary Hickman  
Department of Veterans Affairs  
Director  
Compensation and Pension Services  
Washington, DC 20420

Dear Mr. Hickman:

This is in response to your request for Inspector General records.

The records you requested are enclosed.

Sincerely,

Ronald H. Griffith  
Lieutenant General, U.S. Army  
The Inspector General  

Enclosure
The Honorable Jesse Brown  
Secretary of Veterans Affairs  
810 Vermont Avenue, NW  
Washington, D.C. 20420

Dear Mr. Secretary:

Thank you for your May 8 letter regarding alleged human experimentation by Japanese Unit 731 on American prisoners held at the Mukden POW camp in Japanese-occupied Manchuria, as well as other matters. The other matters will be addressed separately, but allow me to respond to the allegations about the American prisoners in this reply.

There is no question Unit 731 conducted experiments on Chinese, Korean, and Soviet victims. Extensive efforts by Army historians conducted originally in 1985-1986 and again in April and May of this year, however, failed to uncover any documentary evidence to support allegations that U.S. POWs were subjected to biological experimentation by Unit 731 during World War II. To the best of our knowledge, no discrete file of classified materials about Unit 731 exists that might shed further light on the issue. Furthermore, archivists, academicians, serious researchers, and investigative reporters have thoroughly searched the holdings of the National Archives and Records Administration, Washington, DC, for material related to Unit 731. None has found any evidence to support the American POWs' allegations.

Allow me to close by reemphasizing the moral obligation that the government has to its veterans and its citizens. Our aggressive search for records related to Unit 731 was conducted in good faith with an understanding of our responsibility to the nation.

Sincerely,

William J. Perry
MEMORANDUM FOR USD(P&R)

FROM: DUSD(R&R)
Prepared by: Colonel F.A. Kolbrener (DMDC), 696-8741

SUBJECT: Veterans Affairs (VA) Requests for Military Records - ACTION

PURPOSE: Sign correspondence to Veterans Affairs

DISCUSSION: Correspondence at TAB A is a combined response to the Under Secretary of Veterans Affairs for Benefits' letters dated 5 July 1995 (TAB B) and 28 July 1995 (TAB C). VA has requested (1) information on biological experimentation on American Prisoners of War (POWs) at Mukden POW Camp, Manchuria, during WWII and (2) an update on previous VA requests for military records. These requests are detailed in an enclosure to the letter at TAB B. Also, the Secretary of Veterans Affairs recently requested information on Mukden POW Camp. For your information, his 8 May 1995 letter and the SECDEF response are at TAB D.

With regard to Mukden POW Camp, our proposed response mirrors the SECDEF's that extensive record checks have been completed by the Army and no evidence of experimentation on U.S. POWs was discovered. Providing an update on previous VA information requests proved challenging, as those requests were assigned to multiple offices both within P&R and across various OSD components. Defense Manpower Data Center (DMDC) is not responsible for these previous requests but has summarized available information. In short, most VA requests for information have been answered and we have contacted multiple VA offices in an effort to help them internally locate our responses.

It is also clear, however, that VA believes we are working on issues via a joint task force. This task force has not met since October 27, 1993, although repeated requests to reconvene have been made by my staff to no avail. We are requesting reactivation of this task force. For your information, previous VA letters and DoD responses are assembled at TABS 1-7.

COORDINATION(S):
(R&R) IM OASD/ISP/CP/N&I ATSD(AE)

(R&R) LLP OASD(HA)

RECOMMENDATION: Sign the letter at TAB A.

Approved
Disapproved
Other:

CONTROL NUMBERS: 950712031, 950803016
Honorable R. J. Vogel  
Under Secretary of Veterans Affairs for Benefits  
Washington, DC 20420

Dear Mr. Vogel:

This is in response to your July 5 and July 28, 1995 requests for information on biological experimentation on American prisoners of war (POWs) at the Mukden POW camp in Manchuria and an update on previous requests for military information.

With regard to the Mukden POW Camp, the Army has conducted extensive record searches and has not uncovered any evidence of biological experimentation on American POWs. A recent response from Secretary Perry to Secretary Brown on this subject is at Enclosure 1.

I appreciate your concern regarding previous VA requests for military records covering mustard gas exposure, human radiation experimentation, and exposure to environmental hazards in the Persian Gulf. An update and summary of actions completed on each one are at Enclosure 2. Within both our departments, we have multiple offices working on these issues and this may have caused some confusion. Additionally, at the Department of Defense there is no single data repository where we can extract records of people who were exposed to hazardous substances. However, I believe we are making good progress and we have an ongoing effort to identify files at sites where experiments were conducted to locate names of participants. As this information becomes available, we will provide it to appropriate offices in your department.

I hope the enclosed information is helpful. We will continue to work closely with members of your staff to ensure they obtain information. My point of contact for military records is Colonel F.A. Kolbrener, 703-696-8741.

You pointed out that we co-chair a joint task force to address issues related to hazards veterans may have experienced while in the military. Since the task force has not met since October 27, 1993, perhaps it is time to do so. My point of contact for a meeting is Ms. Norma St. Claire, 703-696-8710.

Sincerely,

Edwin Dorn

Enclosures:
As Stated
The Honorable Jesse Brown  
Secretary of Veterans Affairs  
810 Vermont Avenue, NW  
Washington, D.C. 20420

Dear Mr. Secretary:

Thank you for your May 8 letter regarding alleged human experimentation by Japanese Unit 731 on American prisoners held at the Mukden POW camp in Japanese-occupied Manchuria, as well as other matters. The other matters will be addressed separately, but allow me to respond to the allegations about the American prisoners in this reply.

There is no question Unit 731 conducted experiments on Chinese, Korean, and Soviet victims. Extensive efforts by Army historians conducted originally in 1985-1986 and again in April and May of this year, however, failed to uncover any documentary evidence to support allegations that U.S. POWs were subjected to biological experimentation by Unit 731 during World War II. To the best of our knowledge, no discrete file of classified materials about Unit 731 exists that might shed further light on the issue. Furthermore, archivists, academicians, serious researchers, and investigative reporters have thoroughly searched the holdings of the National Archives and Records Administration, Washington, DC, for material related to Unit 731. None has found any evidence to support the American POWs' allegations.

Allow me to close by reemphasizing the moral obligation that the government has to its veterans and its citizens. Our aggressive search for records related to Unit 731 was conducted in good faith with an understanding of our responsibility to the nation.

Sincerely,

[Signature]

U37877 /95
ENCLOSURE 1
RESPONSE TO VETERANS AFFAIRS (VA) REQUESTS FOR DEPARTMENT OF DEFENSE (DoD) RECORDS DATED JULY 5, 1995

1. Mukden POWs - The Secretary of Veterans Affairs letter to the Secretary of Defense dated May 8, 1995 requested resolution on the question of whether U.S. Prisoners of War at Mukden POW camp in Manchuria were used for biological experiments by Japanese Army Unit 731 during WWII.

DoD Response: A response to the POW question dated August 7, 1995, prepared by the Army Center of Military History, is at enclosure 1 to the current letter.

2. Mustard Gas - This issue involves identification of personnel who took part in WWII testing of clothing and equipment with mustard gas and lewisite.

a. The Secretary of Veterans Affairs letter to the Secretary of Defense dated January 5, 1993, refers to the report written by the National Academy of Sciences (NAS) entitled “Veterans at Risk: The Health Effects of Mustard Gas and Lewisite.” It specifically requested the names of Service personnel exposed to agents during WWII testing, agents used, locations, and other data. The letter also requested that a list of names of the personnel injured at Bari, Italy in December 1943 be furnished.

DoD Response: The Deputy Director of Defense Research and Engineering answered this letter on March 17, 1993. A copy of the response is at TAB 1. VA’s statement that information about mustard gas and lewisite exposures has not been provided is incorrect. DoD has been compiling the names of personnel exposed to mustard and lewisite since shortly after the release of the NAS report. As the VA staff have been informed, this effort is extremely labor intensive, requiring countless hours of page-by-page searches of records which are not indexed or stored in a predictable manner. Many of the records which have been searched are not in possession of the Department of Defense, but belong to the National Archives. When names have been located, they often lack full identifying information, referring to the participants as only “Subject Jones or Subject Smith.” Additionally, many test reports make reference to test volunteers as “Observer 1 or Observer 2.” We have not been able to locate records which make full identification possible in many cases. However, we continuously provide VA with full information as we find it.

In February 1991, full copies of the laboratory notebooks which listed the last names of personnel involved in the Naval Research Laboratory tests were provided to the VA. In early 1994, when full names of the test participants were found, they were provided to the VA Environmental Epidemiology Service. Close liaison has also been maintained, often on a weekly basis, with personnel in the VA Benefits and Pension Service. In September 1994, a list of personnel on board ships at Bari, Italy was mailed to Mr. Lance Peterson of the Benefits and Pension Service. The information for this list was assembled from files in possession of the National Archives and the U.S. Coast Guard. DoD furnished its
current lists of personnel exposed to chemical agents informally to the VA Pension and Benefits Service in early May 1995.

DoD provided information to the VA on December 21, 1994, and March 15, 1995, documenting exposure of two veterans (Dietmeyer and Drew) in gas chamber testing in 1945 at Great Lakes Naval Training Center. Copies of the reports which detail the exposures were also provided at that time.

b. The Secretary of Veterans Affairs letter to the Secretary of Defense dated February 10, 1994 proposed the formation of an interdepartmental working group to design and undertake a review of projects, other than appropriately approved medical research, involving the exposure of military personnel to toxic substances or environmental hazards. This letter is also listed as a VA request under Drugs/LSD (para 4c), Human Radiation Experimentation (para 6), and PGW Environmental Hazards (para 7a).

**DoD Response:** The Deputy Secretary of Defense answered this letter on April 30, 1994. A copy of the response is at TAB 2. The response expressed support for the proposed DoD/VA Reinvention Partnership Agreement but pointed out that several issues were already being worked under the joint DoD/VA Task Force and the membership of the task force was the appropriate representation for the Reinvention Partnership Executive Committee. It suggested VA/DoD prepare an agreement to expand the existing working group into the new structure and schedule a kickoff meeting.

c. The Secretary of Veterans Affairs letter to the Secretary of Defense dated April 7, 1994, stated VA was having difficulty obtaining information with which to adjudicate cases involving mustard gas and lewisite exposures. A Fact Sheet outlining these difficulties was enclosed.

**DoD Response:** This letter was answered by the Under Secretary of Defense for Personnel and Readiness letter dated June 16, 1994. A copy of the response is at TAB 3. Each issue listed on the Fact Sheet was addressed. A point of contact for questions was also provided. We received no requests for clarification from the VA.

3. CARC Paint - This issue involves the possible exposure of military personnel to the Chemical Agent Resistant Coating (CARC) in conjunction with the Persian Gulf War.

a. Veterans Affairs Deputy Under Secretary for Benefits letter dated October 1, 1993, addressed to the Commanding General of the Walter Reed Army Medical Center, requested identification of personnel involved with the use of CARC, units of assignment, locations of units, whether protective clothing was used during application of CARC, and what paints were in CARC.

**DoD Response:** This letter was answered by Walter Reed Army Medical Center Commanding General letter dated October 20, 1993. A copy of the response is at TAB
4. The response pointed out that the requested information was not available to the Walter Reed Army Medical Center and coordination with the proper personnel from OUSD (Personnel and Readiness) and OASD (Health Affairs) had been accomplished.

b. Veterans Affairs Deputy Under Secretary for Benefits letter dated October 5, 1993, addressed to the Assistant Secretary of Defense for Personnel and Readiness requested the same information contained in the October 1, 1993 letter to the Walter Reed Army Medical Center.

**DoD Response:** CARC paint was addressed during the DoD/VA Non-Medical Benefits Task Force Meeting held on October 27, 1993. A copy of the minutes of this meeting is at TAB 5. This issue is now subsumed as a part of Persian Gulf exposures.

4. **Drugs/LSD** - This issue involves the testing of psychoactive compounds by the Armed Forces and other government agencies.

a. Veterans Affairs Director of Benefits letter dated October 17, 1991 addressed to the Secretary of the Army, requested testing dates and names of personnel tested. Further, it requested a name and address to which future requests for records related to drug testing could be forwarded.

**DoD Response:** The Office of The Judge Advocate General, Department of the Army answered this letter on December 19, 1991. A copy of the response is at TAB 6. The reply, addressed to the VA Chief Benefits Director, provided the dates of testing, mentioned that complete medical records could be requested from the Office of the Surgeon General, and noted there was a 1976 report with complete details available from the Army Inspector General (DAIG). Appropriate addresses and phone numbers were also provided.


**DoD Response:** The Office of the Army Inspector General answered the letter on January 28, 1992. A copy of the response is at TAB 7. A copy of the DAIG report was provided to Mr. Gary Hickman of the VA staff.

c. The Secretary of Veterans Affairs letter to the Secretary of Defense dated February 10, 1994 proposed the formation of an interdepartmental working group to design and undertake a review of projects, other than appropriately approved medical research, involving the exposure of military personnel to toxic substances or environmental hazards.

**DoD Response:** The Deputy Secretary of Defense answered this letter on April 30, 1994. The response pointed out that the existing joint DoD/VA Task Force was the appropriate body to carry out future projects and that joint efforts in support of a few initiatives were
already underway. OSD correspondence records indicate that the response to the April 30, 1994 was also in response to the February 10, 1994. The reply stated that the Non-Medical Benefits Task Force would be expanded to encompass this issue. Since this time, the VA point of contact, Mr. Rich Pell, has been reassigned, and we have not been given a point of contact to work on setting up a meeting, even after repeated requests.

5. Crested Ice - This program is not an issue, the VA indicated it received the requested records.

6. Human Radiation Experimentation - The Secretary of Veterans Affairs letter to the Secretary of Defense dated February 10, 1994 proposed the formation of an interdepartmental working group to design and undertake a review of projects, other than appropriately approved medical research, involving the exposure of military personnel to toxic substances or environmental hazards.

**DoD Response:** We have checked with the Department of Defense Radiation Experiments Command Center (RECC) which was established in February 1994 as DoD’s central repository for matters concerning human use ionizing radiation experiments. To date, their records indicate the RECC has not received any requests for records from the VA. We have passed your request to them. The point of contact at the RECC is Colonel Claud Bailey. His telephone number is (703) 442-5675.

7. PGW Environmental Hazards -

a. The Secretary of Veterans Affairs letter to the Secretary of Defense dated February 10, 1994 proposed the formation of an interdepartmental working group to design and undertake a review of projects, other than appropriately approved medical research, involving the exposure of military personnel to toxic substances or environmental hazards.

**DoD Response:** The Deputy Secretary of Defense answered this letter on April 30, 1994. The response indicated that the existing joint DoD/VA Task Force was the appropriate body to carry out future projects and that joint efforts in support of a few initiatives were already underway.

b. The Deputy Secretary of Veterans Affairs letter to the Deputy Secretary of Defense dated April 12, 1994 proposed the establishment of a VA/DoD Reinvention Partnership between VA and DoD.

**DoD Response:** The Deputy Secretary of Defense answered this letter on April 30, 1994. The response indicated that the existing joint DoD/VA Task Force was the appropriate body to carry out future projects and that joint efforts in support of a few initiatives were already underway. OSD correspondence records indicate that this response to the April 12, 1994 VA letter (TAB 2) was also in response to the February 10, 1994 (see paragraph 2b above).
The Honorable Dick Cheney  
Secretary of Defense  
The Pentagon  
Arlington, Virginia 20301-1155

Dear Mr. Secretary:

I am writing in regard to the report entitled "Veterans at Risk: The Health Effects of Mustard Gas and Lewisite" to be released on January 6, 1993. I received an advance briefing on this National Academy of Sciences (NAS)-Institute of Medicine report on December 16, 1992, at which time I urged the Academy to brief your Department on the study since many of the recommendations involve the Department of Defense (DoD). I am pleased the Academy briefed Assistant Secretary of Defense for Health Affairs Enrique Mendez, Jr., M.D., his immediate staff, and certain VA staff on its findings and recommendations on December 29. At that time the NAS provided Dr. Mendez an embargoed copy of the full report, an executive summary of which is enclosed.

It is my understanding that at the meeting Assistant Secretary Mendez advised the Academy that DoD would need time to study the entire report and would do so with an eye toward making every effort to carry out the Academy's recommendations.

In the meantime, VA is planning to begin carrying out many of the recommendations directed to this Department. Concerning our responsibilities, I am seeking DoD's assistance in the following areas:

a. **Personnel Tested.** Regarding the recommendation on page 6 of the NAS report, VA requests the names, service numbers and military units, by test site, of military personnel in World War II testing programs (chamber and field tests and, to the degree possible, patch tests). Please identify the type of test for each person listed and the agent used, including whether it was nitrogen mustard or sulfur mustard. VA will then make every effort to obtain through various official channels the subjects' current addresses and notify them of the possible health risks associated with their exposures, evaluate them medically, and, as appropriate, include them in morbidity and mortality studies.

Further, beyond the NAS report, we request the names, service numbers, type of tests and whether nitrogen mustard or sulfur mustard for 147 service members who were exposed to mustard agents at Edgewood Arsenal between 1955 and 1965. (Please see attached excerpt from "Possible Long-Term Effects of Short-Term Exposure to Chemical Agents," published by the National Academy of Sciences Press, Washington, D.C., 1985.)
b. **Other Type Exposures.** Regarding the recommendation on page 7 of the NAS report, VA requests the names, serial numbers, and duty stations of former active duty military chemical warfare production workers exposed to mustard agents or Lewisite through gas handling or training or through the Bari, Italy, harbor disaster or other circumstances. Please describe the circumstances of exposure and the specific agent, including whether nitrogen mustard or sulfur mustard, for each person identified.

c. **Relief from Oath of Secrecy.** Page 8 of the NAS report recommends that VA and DoD publicly announce that personnel exposed to mustard agents or Lewisite during their service are released from any oath of secrecy taken at that time. We request that DoD release the personnel involved in this testing from their oath of secrecy. VA will work together with DoD to communicate this release to our veterans.

VA looks forward to working with DoD on this very important matter.

With kind personal regards, I remain,

Sincerely,

Anthony J. Principi
Acting Secretary

Enclosures

cc: Assistant Secretary of Defense for Health Affairs
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 complied.

(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
The Honorable John M. Deutch
Deputy Secretary of Defense
The Pentagon
Washington, DC 20301-1000

Dear Mr. Deutch:

It is a pleasure working with you on the President's Management Council and I share your interest in reinventing the way we do business. Because VA and DoD both have such strong interests in health care reform, I met with then Deputy Secretary Perry on January 27 to discuss ways in which we could increase our cooperation in health care. Mr. Perry suggested that we take a much broader view, look for improvements in any area of mutual benefit, and form a high-level Executive Committee to guide our efforts. We agree completely, especially since all military members will become veterans and are already eligible for some veterans benefits while on active duty.

To that end, we proposed creating a VA/DoD Reinvention Partnership and sent a draft agreement for DoD's review. VA's proposal is intended to be a starting point and we are pleased that some of the suggested topics may not be of interest to DoD. These should be eliminated so that we can focus immediately on a few issues that can be acted upon quickly and begin our Partnership with successes.

VA's Deputy Chief of Staff, Rich Pell, spoke to Assistant Secretary Ed Dorn last week while I was away and we are glad to hear that DoD is generally in agreement with establishing the partnership and setting up the Executive Committee. I believe that we need Committee members who are able to view things from the broadest departmental perspectives. Otherwise, interest will be too fragmented and the Partnership will not be effective.

We would like to proceed with establishment of the Reinvention Partnership by formally signing an agreement, forming the Executive Committee, and selecting the first few issues to address. Already underway is the Study of VA Disability Compensation and Military Retired Pay. This is an NPR recommendation, although the study was suggested by VA in early 1993, prior to NPR. The initial meeting between VA and DoD was held on March 29, 1994, and our staffs are now preparing a study plan. This is a somewhat complicated issue but one in which there appears to be opportunity to achieve efficiencies while improving service to our overlapping clients. Approximately 500,000 individuals receive two monthly payments, one from DoD and one from VA.
I am looking forward to working with you on this Partnership and am confident that there are many opportunities for improvement that will be beneficial to both of our Departments.

Sincerely,

Hershel W. Gober
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Captain T. N. Jones, USN
Commanding Officer
Naval Medical Research & Development Command
Bethesda, Maryland 20889

Dear Captain Jones:

On June 30, 1994, the Secretary of Defense and Secretary of Veterans Affairs signed the DoD/VA Reinvention Partnership. The objectives are to enhance cooperation, integrate programs, and streamline procedures and processes between the two departments in order to better serve Service members and veterans. A copy of the agreement is enclosed. Several cooperative initiatives have already been undertaken by DoD and VA to streamline procedures in order to provide Service members and veterans seamless delivery of Federal benefits and entitlements. In April both agencies were presented the Vice President's National Performance Review Hammer Award for a joint business process reengineering initiative. These projects are accomplished through the Information Management program of the Under Secretary of Defense for Personnel and Readiness.

We are about to initiate a new project. The project will examine current business processes associated with requests for, and responses to, information supporting veterans compensation claims associated with exposures to weapons or other agents such as mustard gas, ionizing radiation, agent orange, and LSD. The major objectives of the project are to: for the short term, ensure that the VA directs requests to the right source, using a standard procedure that will facilitate a timely and useful DoD response; and, for the long term, reduce or eliminate duplication of effort within DoD and VA agencies and offices.

Two workshops are currently planned, both in Arlington, Virginia: a two day scoping meeting on July 23 and 24; and an analysis and recommendations meeting during the week of August 12. Because of your records holdings or operational relation to the types of exposure information at issue, you are requested to provide a representative to participate in this business process improvement effort. So we can finalize plans for the scoping workshop on July 23 and 24, please respond not later than July 13. Attendees will be provided a read ahead package for each session.
For your information we have also enclosed a list of other DoD organizations participating in this initiative. My project manager for this effort is Ms. Marty Hamed. She can be reached at (703)696-8710 or by fax at (703)696-8703. Her DSN number is 426-8710.

Sincerely,

Norma J. St. Claire
Director, Information Management

Enclosures:
As stated
The Department of Defense and the Department of Veterans Affairs hereby establish a DoD/VA Reinvention Partnership to enhance cooperation, integrate programs, improve operations between and within both Departments, and provide better service to our customers.

We will take advantage of natural opportunities to work together to our mutual benefit and those we serve. All military service members will become veterans at some point and are already eligible for some veterans benefits such as home loans while on active duty. Streamlined processes and procedures in both Departments will permit us to treat active duty members and veterans in a seamless manner so there is one continuous interaction with the federal government.

We also have areas of our operations that should be mutually supportive so that both operations are as effective and efficient as possible. We will overcome the traditional organizational obstacles to cooperation and concentrate on finding a better way to accomplish our missions. Our intent is to accelerate reinvention efforts in both Departments through a Reinvention Partnership that will seek mutually beneficial opportunities for improving service to our customers, increasing efficiency in operations, cutting red tape, and generally finding better ways to do business. Our Partnership will strive to reinvent and re-engineer processes and operations to make our Departments work better and cost less.

Our DoD/VA Reinvention Partnership will be initiated by forming a permanent Partnership Executive Committee made up of senior DoD and VA executives to spearhead this effort. The Executive Committee will form short-term task forces and work groups as required consisting of subject matter experts from both departments to formulate options and solutions to specific issues, problems, or overlapping functional areas suitable for consolidation in whole or in part.

William J. Perry
Secretary of Defense

Jesse Brown
Secretary of Veterans Affairs

June 30, 1994
The members of the Reinvention Partnership Executive Committee will be:

Department of Defense
- Under Secretary of Defense for Personnel and Readiness
- Assistant Secretary of Defense for Health Affairs
- Assistant Secretary for Reserve Affairs
- Assistant Secretary of the Army (Manpower and Reserve Affairs)
- Assistant Secretary of the Navy (Manpower and Reserve Affairs)
- Assistant Secretary of the Air Force (Manpower, Reserve Affairs, Installations & Environment)

Department of Veterans Affairs
- Under Secretary for Benefits
- Under Secretary for Health
- Assistant Secretary for Policy and Planning
- Deputy Chief of Staff
DOD/VA EXPOSURE RECORDS LOCATOR PROJECT

PROPOSED ATTENDEES LIST

COL Claude Bailey, Jr. USA
RECC
(703) 442-5675

COL Fred Kolbrener, USA
DMDC
(703) 696-7402

COL Joseph Huber, USA
DCSOPS DAMO-FDB
(703) 697-5690 (LtC Lopez)

Mr. Joe Mok, AMC
Asst. DCOS for CHEM/BIO
(703) 617-8786

Ms. Sandy Riley, Director
Safety, Security & Support Services-Washington
(703) 806-7835 (Mr. Don Hakenson/ESG)

LTC Dan Brown, USAF
Surgeon General AFMOA/SGOT
(202) 767-5078

Captain Bruce Buckley, USN
Comminging Officer, Naval Research Lab
(202) 767-2541 (Ms. Maria Lloyd)

Army Medical Research & Materiel Command
Fort Detrick, MD

Navy Medical Research & Development Command

Mr. Richard Boylen, Archivist
National Archives & Records Administration
College Park, Maryland

Mr. Rick Hirst
Mr. Dave Spivey
Ms. Ersie Farber
VA Compensation & Pension Service
MEMORANDUM FOR MILITARY PERSONNEL POLICY REVIEW COMMITTEE

SUBJECT: Final Report on Exposure Records Locator Project

The Exposure Records Locator Project was started in July, 1996, as an initiative under the DoD/VA Reinvention Partnership Agreement signed in June of 1994. The project brought together major DoD, VA, and National Archives personnel that have worked on service member and veterans' issues concerning exposure to chemical, biological, and nuclear warfare agents as the result of human subject testing, operational weapons testing, or occupational activities. The objective of the project was to clarify lines of responsibility within DoD for responding to VA on specific exposures and to provide agency points of contact. The work group was also tasked with analyzing current procedures to respond to requests for exposure information and compensation used both in DoD and VA, and to make recommendations on improving service by reengineering those procedures.

The final report recommends a consolidated DoD office to research, extract, automate, maintain, control and account for all DoD information on human exposures. This would conserve and concentrate DoD resources currently being expended on this effort, provide oversight and direction on information accountability and disclosure, provide a single source for requesting information from DoD; and, dramatically improve our responses to veterans, the public, and Congress. A functional economic analysis was also recommended to compare feasibility, effectiveness, and costs of the alternatives.

The final report and recommendations are attached for your review and comment. The project manager is Martha Hamed. She is in the Information Management Office and can be reached on (703)696-8710, DSN 426-8701, or by E-mail at hamedm@pr.osd.mil. Please forward any comments to her by April 10, 1997.

Jeanne B. Fites
Deputy Under Secretary
Program Integration

Attachment
As stated
EXPOSURE RECORDS
LOCATOR PROJECT

Exposure Records
Locator Project
Final Report

January 23, 1997

Office of the Under Secretary of Defense
for Personnel and Readiness
4015 Wilson Boulevard
Suite 1212
Arlington, VA 22203
January 23, 1997

This document was prepared by Systems Research and Applications (SRA) International Corporation under contract number MDA903-91-D-0061.

This report satisfies, in part, requirements to support the Office of the Under Secretary of Defense for Personnel and Readiness (OUSD (P&R)) with the development of the data and procedures to support the Exposure Records Locator (ERL) project. This information will assist the Department of Defense (DoD) and Veterans Affairs (VA) in the future development of business processes to improve the accuracy and timeliness of processing exposure claims for veterans.
# DoD/VA Exposure Records Locator Project

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EXECUTIVE SUMMARY

The Exposure Records Locator (ERL) Project was initiated by the Office of the Under Secretary of Defense for Personnel and Readiness (OUSD (P&R)) at the request of the Department of Veterans Affairs (VA), under the DoD/VA Reinvention Partnership Agreement signed June 30, 1994. This partnership is intended to enhance cooperation, improve the timeliness of responses, and streamline information exchange processes and procedures in the DoD, National Archives and Records Administration (NARA), and VA.

The ERL project working group consisted of representatives from DoD agencies and NARA involved with the maintenance and accountability of records of human experiments and exposures to Nuclear, Biological, and Chemical (NBC) agents. The ERL Work Group also included representatives from VA. Two multi-day work sessions were held in July and August 1996. The work groups examined the processes and procedures that govern VA requests for evidence in support of veteran NBC exposure-related claims, and how DoD and NARA research the requests and respond to VA.

The VA relies on the agencies and Services within the DoD and NARA to provide information on exposure to NBC agents in order to adjudicate veterans’ claims for service related disability compensation. Historically, this has been a loosely structured process involving the mailing of requests for evidence and responses thereto between the 58 Veterans Affairs Regional Offices (VAROs) and the different agencies within DoD and NARA.

The VAROs are obligated to adjudicate veteran compensation claims for exposure-related medical problems that the veteran alleges occurred while serving in the Armed Forces. In many of these cases, the VAROs need to request evidence to support these claims from DoD and NARA agencies. These agencies do not always have complete knowledge or central indices of their existing holdings. Additionally, agency responsibility for responding to VA claims is not always clearly delineated. In some cases, in particular where degree of exposure is needed, research is time consuming and labor intensive. Almost all of the responding offices or agencies are minimally staffed and have backlogs of requests for evidence.

In an attempt to speed up the adjudication of claims, the VAROs often send a given request to multiple agencies simultaneously. In many cases, no single agency holds all of the required evidence and several agencies need to be contacted. The VAROs don’t always know who to contact, so they contact several potential sources of evidence. Because the multiple DoD agencies contacted by the VAROs do not know who else has received the same request, the agencies may forward the request to another agency that the VARO has already contacted. This further increases the backlog among the responding agencies. The VAROs also send duplicate requests to a single agency when they have not received a response to their first request. The VAROs are not always given complete or accurate information by the veteran claimant. The VAROs also do not always know exactly what information to include in a request for evidence. Responding agencies usually have record holdings that cover a specified time frame, experiment, or exposure event. The VAROs don’t have accurate information regarding the limits of existing record holdings or areas of responsibility. This leads VAROs to send requests for evidence to organizations that neither have the records nor have
responsibility for the requested evidence. These actions cause delays in processing, responses which contain insufficient information, and frustration on the part of the Services and agencies within DoD, VA, as well as the veteran.

The ERL Work Group summarized the above into the following four problem statements:

- Lack of DoD central control or oversight for human exposure information has lead to disjointed efforts:
  - in disclosing location and status of records collections
  - in collecting and indexing records or information contained therein
  - in duplicating efforts in researching records and responding to inquiries
  - in establishing programs for disclosing record information
  - in setting an adequate and efficient allocation and use of human and fiscal resources.

- Lack of automation to support a coordinated collection and retrieval of exposure records and information has a negative impact on DoD's ability to respond to inquiries and to account for the size, location, and custodial responsibility for such records. Current automation efforts do not use standard formats or data, and are not able to effectively interface or exchange information.

- Lack of records accountability\(^1\) and clear definitions of responsibility for research, collection, maintenance, and disclosure of the information hinders timely and comprehensive searches, as well as timely responses to public and agency inquiries.

- Inquiries from VA do not always provide sufficient information or data quality for DoD to conduct a timely search. Some VA policies or procedures cause the duplication of efforts within DoD and hinder expeditious responses (i.e., duplicate, misdirected, and multiple requests for information). Internal VA distribution and use of information provided by DoD needs improvement.

Based on the ERL Work Group problem identification, and their subsequent work in prioritizing and recommending solutions, the overall consensus of the Work Group is to recommend that DoD establish a central office that has responsibility for managing all NBC human exposure information requests. The highest degree of centralization was a recurring solution to three of the four problems cited, and is the recommended solution. That solution is to consolidate all relevant records, records managers, and researchers in a single, fully automated facility staffed at the DoD agency level. This solution would have the following advantages:

- Provide VA with a single location for requesting information, thereby eliminating multiple and duplicate requests

---

\(^1\) Records accountability includes: 1) accessibility and maintenance of records, and; 2) the research, collection, and disclosure of information contained therein.
- Reduce the number of DoD agencies now engaged in this kind of effort

- Conserve and concentrate fiscal and human resources expended on the current disjointed efforts

- Provide for a coordinated collection and retrieval of human exposure information contained in DoD records collections

- Ensure databases with standard formats and data, and the ability to interface and exchange information within DoD and with VA

- Provide oversight and direction to the issue of records accountability, maintenance, and disclosure

- Dramatically improve efforts to respond to veterans and former Service members, the general public, and inquiries from Congress and other Executive agencies.

Organizations currently exist within DoD that are set up to manage agency-wide efforts on specific types of human exposure. These agencies would serve very well as models for a centralized DoD office, or even be suitable for expansion to cover all facets of human exposure issues handled by many other organizations. These organizations are the U.S. Army Environmental Support Group, the Nuclear Test Personnel Review under the Defense Special Weapons Agency, and the Radiation Exposure Command Center under the Assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense Programs.

Table ES-1 highlights the alternative solutions to the current problems and shows a ‘best guess’ estimate of the potential costs and benefits associated with the solutions that the ERL Work Group derived. In order to make an informed and effective decision concerning centralized oversight and management of DoD human exposure records, the Work Group recommends that a formal functional economic analysis be conducted to compare the feasibility and cost effectiveness of the recommended solutions and placement of the organization.
Table ES-1. Cost/Benefit Projections for Proposed Solutions

<table>
<thead>
<tr>
<th>Problems &amp; Alternatives</th>
<th>Resource Requirements</th>
<th>Projected Benefits</th>
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<tbody>
<tr>
<td>PROBLEM #1 Lack of DoD central control</td>
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<tr>
<td>Alternative #1 Establish DoD/VA information exchange group</td>
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<tr>
<td>Alternative #2 Establish a central DoD processing and research group</td>
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<td>H</td>
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<tr>
<td>Alternative #3 Establish a central DoD processing/research/records group</td>
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<td>H</td>
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<tr>
<td>Alternative #4 Establish a central DoD processing actions office</td>
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<td>M</td>
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<tr>
<td>PROBLEM #2 Lack of automation support</td>
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<tr>
<td>Alternative #1 Establish E-mail capability within DoD/VA</td>
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<td>L</td>
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<td>Alternative #2 Grant VA read-only access to DoD pending actions files</td>
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<tr>
<td>Alternative #3 Grant VA read-only access to DoD exposure data bases</td>
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<tr>
<td>Alternative #4 Digitize all DoD exposure records</td>
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<td>H</td>
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<td>PROBLEM #3 Lack of records accountability</td>
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<tr>
<td>Alternative #1 Establish one accountable DoD exposure records office</td>
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<tr>
<td>Alternative #2 Identify and index all DoD exposure records</td>
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<td>H</td>
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<td>PROBLEM #4 Insufficient inquiry information</td>
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<tr>
<td>Alternative #1 All VA requests will contain a standard data set</td>
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<td>M</td>
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<tr>
<td>Alternative #2 DoD will periodically review VA written procedures</td>
<td>L</td>
<td>M</td>
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<tr>
<td>Alternative #3 VARO will perform initial inquiry to NPRC</td>
<td>L</td>
<td>H</td>
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<tr>
<td>Alternative #4 VARO will provide all NPRC information with request</td>
<td>L</td>
<td>H</td>
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<tr>
<td>Alternative #5 DoD will provide point of contact listing by exposure type</td>
<td>L</td>
<td>M</td>
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<tr>
<td>Alternative #6 VA will place requester’s name/phone number on all requests</td>
<td>L</td>
<td>L</td>
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<tr>
<td>Alternative #7 DoD will participate in VA teleconference training</td>
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</tbody>
</table>

**LEGEND:**

Resource requirements - Time and financing necessary to accomplish the recommendation:

- **High (H)** Likely to require more than three fiscal years and cost more than $3,000,000.
- **Medium (M)** Likely to require one to three fiscal years and cost between $500,000 and $3,000,000.
- **Low (L)** Likely to be accomplished within one fiscal year and cost less than $500,000.

Projected Benefits - The degree to which this alternative addresses the problem set:

- **High (H)** This solution will virtually eliminate the current overall problem.
- **Medium (M)** This solution will provide significant relief to the current overall problem.
- **Low (L)** This solution will provide some relief to the overall problem set.
SECTION 1. INTRODUCTION

1.1 Purpose

The purpose of this report is to present an accurate record of the findings and recommendations of the Exposure Records Locator (ERL) Project. The ERL Project was initiated in July of 1996 to identify the problems, determine alternatives, and recommend solutions for improving the accuracy and timeliness in the processing of requests for information on human exposure to nuclear, biological, and chemical (NBC) agents by the Department of Defense (DoD), the National Archives and Records Administration (NARA), and the Department of Veterans Affairs (VA).

1.2 Background

The VA relies on the agencies and Services within the DoD and NARA to provide information on exposure to NBC agents in order to adjudicate veterans' claims for service related disability compensation. Historically, this has been a loosely structured process involving the mailing of requests for evidence and the responses between the 58 Veterans Affairs Regional Offices (VAROs) and the different agencies within DoD and NARA.

The VAROs are obligated to adjudicate veteran compensation claims for exposure-related medical problems that allegedly occurred while serving in the Armed Forces. In many of these cases, the VAROs need to request evidence to support these claims from DoD and NARA agencies. These agencies do not always have complete knowledge or central indices of their existing holdings. Additionally, agency responsibility for responding to VA claims is not always clearly delineated. In some cases, in particular where degree of exposure is needed, research is time consuming and labor intensive. Almost all of the responding offices or agencies are minimally staffed and have backlogs of requests for evidence.
In an attempt to speed up the adjudication of claims, the VAROs often send a request to multiple agencies simultaneously. In many cases, no single agency holds all of the required evidence and several agencies need to be contacted. The VAROs do not always know who to contact, so they contact several potential sources of evidence. Because the multiple DoD agencies contacted by the VAROs do not know who else has received the same request, the agencies may forward the request to another agency that the VARO has already contacted. This further increases the backlog among the responding agencies. The VAROs also will send duplicate requests to an agency. The VAROs are not always given complete or accurate information by the veteran claimant. The VAROs also do not always know exactly what information to include in a request for evidence. Responding agencies usually have record holdings that cover a specified time frame, experiment, or exposure event. The VAROs do not have accurate information regarding the limits of existing record holdings or areas of responsibility. This leads VAROs to send requests for evidence to organizations that neither have the records nor have responsibility for the requested evidence. These actions lead to delays in processing, responses which contain insufficient information, and frustration on the part of the Services and agencies within DoD, VA, as well as the veteran.

The ERL Project was initiated by the Office of the Under Secretary of Defense for Personnel and Readiness (OUSD (P&R)) at the request of VA, under the DoD/VA Reinvention Partnership Agreement signed June 30, 1994. This partnership is intended to enhance cooperation, integrate programs, improve operations between DoD and VA and within both departments, and provide better service to customers. Copies of the partnership letter and the initial OUSD(P&R) introductory letter that outlines the purpose and objectives of this project are at Appendix D.

The ERL project working group consisted of representatives from DoD agencies and NARA involved with the maintenance and accountability of records of human experiments and exposures to NBC agents. The ERL Work Group also included representatives from VA. A list of attendees is at Appendix A. The project examined the current processes and procedures for VA requesting evidence in support of veteran exposure claims, and how DoD/NARA research the requests and respond to VA. These procedures included those internal to VA as well as those processes and
procedures internal to DoD and NARA. NBC Agents to which veterans may have been exposed include: mustard gas; Lewisite; ionizing radiation; Agent Orange; LSD; and other biological/chemical agents.

1.3 Project Methodology

This project used facilitated workshops to derive a uniform set of processes and procedures to be used by VA, NPRC, and DoD to improve the exchange of information needed to adjudicate veteran service-related NBC exposure claims. As part of this approach, two multiple day Business Process Reengineering (BPR) workshops were conducted. One goal of the first workshop was to have each represented agency inform the members of the working group of the specific procedures and processes that govern their daily operation and to clearly define their areas of responsibility and record holdings. Another goal of the first workshop was to define and prioritize the problems agencies experience with regard to exposure-related claims. The second workshop conducted a more detailed examination of the processes and procedures used by agencies, addressed the problems defined by the first workshop, and determined alternative remedial approaches.

1.4 Objectives

1.4.1 Session I. The first session of the ERL group was a two day workshop conducted July 23 and 24, 1996. Representatives from the following agencies participated: OUSD (P&R); VA, Army Materiel Command (AMC); U.S. Army Deputy Chief of Staff for Operations (DCSOPS); U.S. Army Medical Research Institute of Chemical Defense; Office of Assistant Secretary of Defense (Health Affairs) (OASD(HA)); U.S. Air Force, Office of the Surgeon General (AFSG); Defense Manpower Data Center (DMDC); Environmental Support Group (ESG); Radiation Experiments Command Center (RECC); Naval Research Laboratory (NRL); and NARA. Session I had the following objectives:

- obtain DoD, NARA, and VA agency information overview presentations
• conduct a problem census of DoD and VA exposure claims processing
• identify key participants for Session II
• develop an agenda for Session II
• develop objectives for Session II.

1.4.2 Session II. The second session of the ERL group was a four day workshop conducted August 27-30, 1996. Representatives from the following agencies participated: OUSD (P&R); VA, AMC; Defense Special Weapons Agency (DSWA); U.S. Army Test and Evaluation Command (TECOM); U.S. Army Chemical and Biological Defense Command (CBDCOM); AFSG; ESG; RECC; NRL; and NARA. Session II had the following objectives:

• have agency representatives give an overview of their processes and procedures for requesting or providing human exposure information
• develop a matrix that documents areas of responsibility and POCs for specific exposure types
• refine the problem statements developed in Session I
• define and develop standard data elements
• identify and prioritize recommended solutions to the problems identified.

The ERL Work Group developed the following four problem statements (a detailed discussion of each of these problem statements is contained in Section 3):

• Lack of DoD central control or oversight for human exposure information has lead to disjointed efforts:
  - in disclosing location and status of records collections
  - in collecting and indexing records or information contained therein
  - in duplicating efforts in researching records and responding to inquiries
  - in establishing programs for disclosing record information
  - in setting an adequate and efficient allocation and use of human and fiscal resources.
Lack of automation to support a coordinated collection and retrieval of exposure records and information has a negative impact on DoD’s ability to respond to inquiries and to account for the size, location, and custodial responsibility for such records. Current automation efforts do not use standard formats or data, and are not able to effectively interface or exchange information.

- Lack of records accountability\(^2\) and clear definitions of responsibility for research, collection, maintenance, and disclosure of the information hinders timely and comprehensive searches, as well as timely responses to public and agency inquiries.

- Inquiries from VA do not always provide sufficient information or data quality for DoD to conduct a timely search. Some VA policies or procedures cause the duplication of efforts within DoD and hinder expeditious responses (i.e., duplicate, misdirected, and multiple requests for information). Internal VA distribution and use of information provided by DoD needs improvement.

\(^2\) Records accountability includes: 1) accessibility and maintenance of records, and; 2) the research, collection, and disclosure of information contained therein.
SECTION 2. AGENCY OVERVIEWS

2.1 Observations

Each of the participants in the ERL Working Group was focused on the challenge of improving the exposure records handling process to better support the veteran. It was to this end that all participants provided the capabilities and limitations of their organizations and offered many suggestions and recommendations to improve this process. The following paragraphs provide an overview of the participants' capabilities and in some cases the limitations on the information contained within their files and historical records. It is through this disclosure that a more accurate point of contact listing, complete with records information limitations, is provided to VA as Appendix C to this report.

2.2 Agency Overviews

2.2.1 DoD Radiation Experiments Command Center (RECC). The RECC is tasked to process claims associated with Human Radiation Experimentation (HRE) using ionizing radiation. HRE as defined by Executive Order 12891 and the January 19, 1994 White House Memorandum, Subject: Retrieval and Inventory of Records of Human Radiation Experiments, is: "1) experiments on individuals involving intentional exposure to ionizing radiation. This category does not include common and routine clinical practices, such as established diagnosis and treatment methods, involving incidental exposures to ionizing radiation; 2) experiments involving intentional environmental releases of radiation that (a) were designed to test human effects of ionizing radiation; or (b) were designed to test the extent of human exposure to ionizing radiation." The RECC does the following:

- locates, examines, retrieves, catalogs, develops abstracts; and co-locates HRE records and information
- performs on-site and external research pertinent to human radiation experiments
• maintains public contacts, conducts research, and correlates inquiries against known HRE experiments
• makes appropriate referrals; establishes and maintains a database consisting of individual case files, HRE events, and supporting documentation
• responds to HRE questions and issues from the Office of the Secretary of Defense (OSD)
• provides a facility to operate the RECC
• prepares publications of DoD HRE's.

The RECC is managed by an Army O-6 and one full-time civilian overseeing the work of 22 contractor personnel. The RECC has recovered and digitized over 300,000 pages of records dealing with ionizing radiation. In addition, the RECC responds to Freedom of Information Act (FOIA) requests, as well as VA and individual requests for information. All of this is accomplished with a funding profile of $3.2 million in FY 94; $2 million in FY 95; $2 million in FY 96; and $2 million in FY 97. To date, total RECC expenditures have been approximately $7.2 million through September 1996.

2.2.2 Defense Special Weapons Agency (DSWA) (Nuclear Test Personnel Review (NTPR) Program). The DSWA established the NTPR Program in 1978. As NTPR was originally organized, an NTPR team in each military service and a separate team at the DSWA Field Command worked with DNA in meeting its tasks. By late 1986, DSWA eliminated the Service teams and consolidated NTPR under DSWA’s direct control as the best approach in a time of declining budgets. NTPR currently has a staff of four, headed by a GM-15/O-6. NTPR has the following primary tasks:

• compile a roster of DoD participants in the post-World War II occupation of Hiroshima and Nagasaki and U.S. atmospheric tests
• develop a history of each U.S. atmospheric test
• make data available for scientific review
• assemble/declassify relevant source documents
identify individuals who received high doses
• establish personal contact with participants
• provide assistance to veterans, VA, and others.

The NTPR data base of participants more than doubled since 1988, when the participants of the post-World War II occupation of Hiroshima and Nagasaki were added to the NTPR program. New participants continue to be discovered. As of 30 September 1993, the NTPR data base of participants had about 410,000 records. NTPR personnel conduct research involving individual participation and radiation exposure data in response to inquiries from veterans and their families, VA, Congress, and other interested parties. This is an on-going effort. NTPR program costs from 1978 through 1996 were $112.8 million.

2.2.3 U.S. Air Force, Office of the Surgeon General (AFSG). The AFSG is responsible for chemical and biomedical research within the Air Force. The AFSG is staffed by two military officers; one that responds on occupational exposure issues, and one that responds on human experimentation issues. The AFSG acts as a focal point for the processing of requests for information on service-related disability claims from VA. Most of these requests involve human experimentation and assignment-related exposure to ionizing radiation. The AFSG has documented some 50 to 100 thousand pages of information on Air Force experiments and has developed a data base with information on chemical warfare data. Any requests for information dealing with human experimentation or assignment-related ionizing radiation exposure for Air Force Veterans should be directed to the AFSG.

2.2.4 U.S. Army Material Command (AMC). AMC is the Army’s principal developer, charged with developing and acquiring the material needed by the Army to fight and win decisively on the battlefield. AMC makes its primary contribution to the Army in three areas: Acquisition Excellence, Logistics Power Projection, and Technology Generation and Application. AMC operates through major subordinate commands and directs the activities of depots, arsenals, and proving grounds, test ranges, and procurement offices. Two of these commands, CBDCOM and TECOM, are directly
involved in responding to requests for information related to human exposure to chemical and biological agents through experimentation or mission related activities. An initiative is under way through recommendations from the Chemical/Biological Repository Process Action Team (PAT) to consolidate all AMC chemical and biological exposure records under the control of CBDCOM. Currently, CBDCOM is studying the possibility of becoming the central focal point and repository for all Army chemical and biological records on human exposure testing. Estimated costs are $5 million to establish and operate the office for the first year and $3 million per year to sustain the database and respond to inquiries. If approved, all requests for Army chemical and biological exposure information will be processed by CBDCOM. Current requests at CBDCOM are researched and responded to by one full-time GS-7 in the Historian's Office at Aberdeen Proving Ground.

2.2.5 Defense Manpower Data Center (DMDC). In April of 1995, DMDC established a database of individuals exposed to World War II Mustard Gas and Lewisite. The purpose of this action is to provide those veterans of World War II, who participated in a voluntary program of human exposure to these agents, a Certificate of Commendation from the DoD. This database contains approximately 6,350 records. DMDC researchers have found this effort is difficult because, in many instances, there is insufficient evidence in the existing records or, in some cases, records do not exist. Many validations are based on indirect evidence such as awards or commendations and other papers and records that may be found in the process of searching for direct evidence. In addition to processing of the Certificates of Commendation, DMDC processes requests for information from VA, individuals, Congress, and researchers. All of this activity is being supported by one full-time GS-11.

2.2.6 Environmental Support Group (ESG). ESG is an organization under the Office of the Administrative Assistant to the Secretary of the Army. It was organized in May 1980 to obtain data from military records for use in investigations of health effects of Agent Orange and herbicide contamination. The longer-term demands of ESG involve records review support for longitudinal follow-up for health research, assistance to VA in validating veterans' compensation claims, compliance with court orders in product liability litigation, and correspondence and liaison with
veterans, veteran's service organizations, and other federal agencies concerned with the health effects of Agent Orange exposure and Post Traumatic Stress Disorder (PTSD) inquiries. ESG is an Army activity that serves as the executive agent for processing of all Agent Orange and PTSD issues. All Services are supported on Agent Orange (and other defoliants used in Vietnam that have related effects on humans) and PTSD issues, except the Marine Corps, which conducts its own PTSD processing. The organization currently has a staff of nine personnel. The ESG is also responsible for updating and maintaining the DoD Persian Gulf War Registry. This registry contains the names of over 750,000 service members who served in the Gulf and the unit movement data for approximately 4,000 units that were assigned in the Gulf for operation Desert Storm.

The total incoming case load for ESG is 350 to 450 per month. Currently there is a backlog of requests that basically involve PTSD cases. The validation of PTSD cases is very time consuming and the average case requires approximately 9 to 11 months to complete. Most of these are claims from the VA regarding Vietnam veterans. The biggest problem in processing requests is the lack of records or incomplete records. In the search effort, ESG relies on unit daily operations logs. Generally the logs from World War II and Vietnam are more detailed than those from the Gulf War. In some cases, this shortage of information making the researching of Desert Shield/Storm claims more difficult to process. ESG’s total operating budget has been programmed at $710,400 each year since FY 94.

2.2.7 Naval Research Lab (NRL). NRL maintains an extensive data base of World War II chemical warfare documents (October 1942 through October 1945) relating only to the NRL’s testing program (NRL has documentation only on Navy servicemen who participated in chemical warfare tests conducted at NRL, in Washington, D.C.). The collection contains information on approximately 3,400 individuals who were considered volunteers and took part in the testing program. All of these veterans were stationed at the Naval Training Station, Bainbridge, Maryland. Requests for information on any other Navy related exposures (i.e., other testing sites, different dates, other branches of service) cannot be answered by the NRL. The NRL data base is managed by a full-time GS-12 in the public affairs office who has other primary duties. The total NRL data
base will be given to VA by January 31, 1997. This should eliminate the need for a VARO to query the NRL for this information.

2.2.8 US Army Medical Research Institute of Chemical Defense (USAMRICD). Within USAMRICD, records of volunteers in US Army chemical studies from 1955 to 1975 are maintained on microfiche. USAMRICD responds to FOIA requests, requests from individuals, Veteran's organizations, and VA for information on human chemical and biological agent exposure during the period 1955 to 1975. The USAMRICD repository only has records for this period. Records are maintained by one full-time physical scientist (GS-13), who also has other primary duties. Requests for information involving human chemical and biological activities since 1975 are processed within the Office of the Surgeon General of the Army.

2.2.9 National Archives and Records Administration (NARA). NARA is an independent agency responsible for ensuring ready access to essential evidence that documents the rights of American citizens, the actions of federal officials, and the national experience. NARA: 1) provides guidance and assistance to Federal agencies on the management of their records; 2) approves agency records disposition schedules which govern when temporary records may be destroyed and permanently valuable records should be transferred to the National Archives of the United States; 3) operates Federal records centers throughout the country for the storage of other agencies' non-current records, including the National Personnel Records Center (NPRC) which stores non-current military and Federal civilian personnel records; 4) and preserves and makes available to the public, in the Washington, DC area and at regional archives, the permanently valuable records of the three branches of the Federal Government after their transfer to the National Archives of the United States. NARA holds records needed for the ERL project in Federal records centers, particularly the NPRC and the National Archives of the United States. Records stored in Federal records centers and NPRC remain the responsibility of the retiring agency, and may be recalled by the agency. Records designated as permanent are transferred to the National Archives, usually after 30 years, and become the legal property of NARA. NARA controls access to archival records under the provisions of the FOIA.
2.2.10 Department of Veterans Affairs (VA), Compensation and Pension Service. The primary mission of VA, Compensation and Pension Service is to manage the compensation of eligible veterans. Determination of eligibility often requires the gathering of evidence from NARA and the DoD to support veteran claims. Based on the findings, the process can result in the granting of appropriate compensation or pension payments on the part of the government. Most evidence requests are accomplished through the 58 VAROs. VA claims are based on either presumptive service connection or exposure and dosage determinations. Neither the veteran nor the veteran’s survivors may be required to produce evidence substantiating exposure if the information in the veteran’s service records or other records is consistent with the veteran’s claim. If military records do not establish presence at or absence from a site at which exposure is claimed to have occurred, the veteran’s presence at the site will be conceded.

All submissions for verification of information on the part of the veteran to DoD are accomplished using current VA operating instructions. These operating instructions contain the addresses of the points of contact and the listing of the items of information required to investigate the claim. Claims often require more than six months to adjudicate.
SECTION 3. RESULTS OF PROBLEM CENSUS

3.1 Approach

The Session I problem census resulted in a total of nineteen basic problems with the exchange of human NBC exposure-related information between DoD, NARA, and VA. The nineteen problems have been summarized into four major problem statements. During Session II, each of the problem statements was refined and validated by the ERL Work Group. The group then identified recommended solutions for each problem statement. The pros and cons of each alternative were also discussed with the aim of prioritizing the recommendations. Each recommendation was also evaluated to determine its potential impact, in terms of costs and benefits, on the overall NBC exposure program. Based on the discussions and an in-depth analysis of the problem statements, the recommended solutions are outlined in Section 4. The following paragraphs record the four problem statements and associated alternative solutions. For each problem, the solutions are listed in the priority order desired by the group (i.e., solution #1 to problem #1 is the highest priority and solution #4 to problem #1 is lowest priority). A Functional Economic Analysis (FEA) is recommended to provide a more precise estimate of benefits and costs for each alternative.

3.2 Problem Statement #1

Lack of DoD central control and oversight for human exposure information has led to disjointed efforts:

- in disclosing location or status of records collections
- in collecting and indexing records or information contained therein
- in duplicating efforts in researching records and responding to inquiries
- in establishing programs for disclosing record information
- in setting an adequate and efficient allocation and use of human and fiscal resources.
3.2.1 Alternative Solution #1 to Problem #1. As part of the DoD and VA Information Exchange group, establish a group consisting of relevant DoD, VA, NARA, and NPRC personnel to conduct periodic meetings concerning human NBC exposure information issues. The meetings will be held on at least a semi-annual basis and may meet on an ad hoc basis, as well. Each member of the group will assume responsibility for keeping all other members of the group informed when the member’s organization’s exposure responsibilities change, and when the Points of Contact (POCs) contact information changes.

3.2.2 Discussion of Alternative #1 to Problem #1. The formation of a DoD/VA/NARA Information Exchange Group can be accomplished with negligible impact on existing resources. This group will provide a forum to formulate ideas to improve the process of handling NBC exposure requests. The group can provide recommendations to higher authority for funding consideration, if necessary. This forum can review and improve the NBC information exchange processes among VA, NARA, and DoD as well as recommend improvements to the internal workings of each organization. A first action that the group can accomplish would be to maintain and distribute updates to a DoD POC listing giving the specific command/agency, office, individuals, phone, fax numbers, and Internet/E-Mail addresses by type of human NBC exposures. One of the recommendations from Session II was that VA consider including the name and phone number of the action person within the requesting VARO on each request for exposure information. The group may help to follow-up on this suggestion. Direct contact among the group members will foster a better working relationship, improve understanding of ongoing issues, and eliminate extended periods necessary to transfer written correspondence.

This alternative is an early win for the efforts of the ERL Working Group, with some of the above recommendations already accomplished, for example:

- Development of a POC matrix
- DoD representatives agreed to provide a periodic review of VA procedures documentation

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3 Session II produced the POC listing that is at Appendix C; the group will need to maintain the listing.
• DoD representatives reviewed VA M21-1, Part III Change 49, Subchapter II, Compensation Claims for Special Disabilities to ensure that the correct organizations, addresses, and individuals are identified for the VAROs. Work group comments and recommended revisions were forwarded to VA and all ERL Work Group members on 15 October 1996.

3.2.3 Alternative Solution #2 to Problem #1. Establish a central DoD focal point for human NBC exposure information. The focal point would establish electronic interfaces to all existing human NBC exposure information data bases. The ERL Work Group recommends that the office be at the OSD level and be staffed with researchers and records managers that can deploy to exposure information storage sites to research (and index, digitize, collect, or reproduce, if necessary) exposure-related records. The office would be the single point of contact for DoD human NBC exposure claims and would have release authority for human NBC exposure information. The organization would merge all human NBC exposure offices and agencies.

3.2.4 Discussion of Alternative #2 to Problem #1. Establishing a central organization to process all requests for human NBC exposure information would provide one point of contact and standardized responses to VA and other requesters. The office would be established at the OSD level and have sufficient authority to release requested information on human NBC exposures. The assigned staff would contain researchers and records administrators who could be dispatched to locations containing exposure records with the capability to index, inventory, and digitize the records. This process would allow the original records to remain under the control and administration of the responsible agency or Service while the historical information would be available to the central organization to process future requests. This alternative would eliminate the cost of processing duplicate and multiple requests for information in DoD agencies. The ability to access existing data bases electronically, combined with the cross-reference capability achieved through centralization, should enable faster response times. It is possible, however, that response times will be increased in cases where the central office simply is another layer in the request-response cycle. The cost for this central approach would be high initially, but would be reduced as standard practices were established over a period of time. In addition, off-setting costs could be
determined based on the reductions and elimination of numerous agencies accomplishing the same work. An FEA would provide a formal economic evaluation of the costs and benefits of this and other alternatives. The central office could assume the human exposure information missions of ESG, RECC, DMDC, and others. The assigned staff would need to be dedicated full time participants in the process and not performing this service as a collateral duty.

3.2.5 Alternative Solution #3 to Problem #1. Establish a central DoD agency to be accountable for all DoD human NBC exposure records and information. The organization would merge all existing organizations that handle human NBC exposure data into a single organization. Current DoD experts in human NBC exposure information would be incorporated into this agency. All existing DoD human NBC exposure records and information would be collected, managed, and maintained by this office.

3.2.6 Discussion of Alternative #3 to Problem #1. A central office responsible for processing all requests for human NBC exposure information would provide a one-stop information and standard response service for all requesters. It is recommended that the office be established at the OSD level and be given authority to release information on all human NBC exposures. The personnel assigned to the office would be full time researchers and records administrators and consume the assets from existing agencies such as the RECC and ESG. There would be no need to attempt to contact other Services or agencies because all records and information, as well as expert researchers, would be resident at the central processing office. This would save the cost of travel and per diem for people who currently research these requests. It would also eliminate multiple request processing and would ensure that responses are in a standard format. A significant reduction in response time would be achieved, since all records would be indexed and centralized. Storage costs could also decrease due to the efficiencies attainable with centralization. The co-location of all records would also enable better cross-referencing and statistical analysis of existing information, as well as making it easier and less costly for DoD to affirm that no records exist to support a claim, when appropriate. This alternative is expected to meet resistance from current record holders that may need existing records for purposes other than supporting responses to human exposure claims.
The initial costs to establish such an office to include records movement and storage, records indexing and digitizing would be high but, in the long term, benefits in processing efficiency should lower overall costs. The exact cost for the development and implementation of this concept would require justification through an FEA. During consolidation of the records, every effort would be made to maintain the integrity of existing record collections in order to prevent the loss of context. However, records would be indexed and digitized to enhance research and retrieval capabilities through the development of automated data bases.

3.2.7 Alternative Solution #4 to Problem #1. Establish a central human NBC exposure claims handling office to serve as a single point of contact for all human NBC exposure claims directed to the DoD. The organization would be responsible for tracking actions that it directs to other DoD human NBC exposure information organizations. All requests for information on DoD human NBC exposures would be directed to this office. This organization would be the single DoD organization responsible for producing the official DoD response to incoming queries on human NBC exposure.

3.2.8 Discussion of Alternative #4 to Problem #1. This central office would:

- receive requests from VA or other sources
- track the status of requests
- provide up-to-date status information to requesters, including interim responses to VA
- forward requests with suspense dates to appropriate agencies for action
- monitor responses for quality and content
- transmit responses to the requester.

The office would be accountable for each of the above steps and would maintain an electronic data base to document all actions. All participating DoD Services and agencies and VA could be given read-only access to the data base. This information could be accessed at will and provide instant feedback on the status of a request, eliminating the requirement for follow-up requests. The maintenance of an up-to-date status data base would reduce the number of duplicate requests that

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4 The context of a record (i.e., the nature and content of co-located records) is often valuable for research purposes.
the DoD currently handles. In addition, the data base would provide statistics on types of requests, requesters, response times, valid/invalid requests, and other relevant information. The introduction of a broker in the information exchange process may act to slow down the existing response cycle, since a broker would represent one more agency that is involved in the process. A moderate to high level of resources would be required to support this option, since a full-time staff would be required to support this functionality. Benefits would mainly accrue from the elimination of processing multiple and duplicate requests for evidence. This office could also recognize and coordinate identical requests sent by different requesters (e.g., individuals, VAROs, and Congress).

3.3 Problem Statement #2

Lack of automation to support a coordinated collection and retrieval of exposure records and information has a negative impact on DoD’s ability to respond to inquiries and to account for the size, location, and custodial responsibility for such records. Current disjointed automation efforts do not use standard formats or data, and are not able to effectively interface or exchange information, both within DoD and between DoD and VA.

3.3.1 Alternative Solution #1 to Problem #2. Establish E-Mail connectivity among DoD/VA/NARA offices that handle human NBC exposure requests. E-Mail connectivity should help to expedite the coordination of responses to requests in cases where a given request requires multiple agencies to respond. It should also speed coordination between requesters and VAROs in cases where the request is unclear or where the status of the request is communicated, thus preventing multiple requests in the form of follow-ups.

3.3.2 Discussion of Alternative #1 to Problem #2. In some cases, processing time could be reduced by several days due to reduced use of regular mail and to the faster coordination and direct communication that E-Mail provides. Privacy Act concerns would need to be addressed before E-Mail can be properly used. Additionally, there is a risk that the volume of E-Mail between the 60-70 organizations proposed will increase the current workload. E-Mail implementation should not require a high level of resources and should yield immediate benefits.
3.3.3 **Alternative Solution #2 to Problem #2.** Develop electronic interfaces to enable VA to access DoD pending action files (e.g., ESG’s correspondence files). Currently many DoD organizations involved in the processing of requests for human exposure information (e.g., ESG and RECC) maintain pending action files. The introduction of an automated means for VA to have read-only access to these data bases could reduce the number of follow-up requests sent by VA to responding agencies—reducing workloads at both the VAROs and the responding organizations.

3.3.4 **Discussion of Alternative #2 to Problem #2.** Electronic interfaces between the VAROs and automated case tracking systems at DoD responding organizations would require a moderate level of resources, including: developing automated case tracking systems at organizations that do not currently possess them; developing electronic interfaces between the 58 VAROs and each of these organizations; changing policies, procedures, and documentation to support the above interfaces. Benefits would mainly accrue from reductions in workloads that result from reductions in duplicate requests for evidence.

3.3.5 **Alternative Solution #3 to Problem #2.** Provide VA with read-only electronic access to selected automated DoD human NBC exposure data bases. This access would be carefully controlled to ensure only appropriate information is provided to VA. In presumptive cases, where only the individual’s presence at a location or verification of a recorded dose rate is needed, VAROs could electronically query selected automated data bases at responding agencies and obtain evidence needed to adjudicate veteran claims. If the requisite information were obtained, there would be a significant savings in time and effort on the part of responding agencies and VAROs. It would be understood that when a person is not found on an agency’s data base, it does not necessarily indicate that the agency cannot verify the veteran’s claim⁵. Additionally, it would be understood that environmental or level-of-exposure evidence requests would always be handled by responding agencies, unless they can compile a data base of specific exposure levels for specific people.

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⁵ Not all records are indexed, and agencies must occasionally manually search their holdings to process a claim. Agencies will, hopefully, add new findings to their automated indexes when searches are conducted.
3.3.6 Discussion of Alternative #3 to Problem #2. This alternative will require a moderate- to high-level of resources to implement. In cases where data is already in a suitable automated form (e.g., a relational data base), the impact will be the moderate cost of establishing an interface between the VAROs and the responding agency. In other cases, especially where a data base must be automated or converted into a relational form, the resource impact may be high. Depending on the frequency of claims against a particular data base, this alternative could yield significant savings in terms of reduced workloads at responding agencies and in terms of improved service to the veteran.

3.3.7 Alternative Solution #4 to Problem #2. Digitize all human NBC exposure records and put all imaged records into a single interconnected system managed by a single central DoD agency. As a part of the records digitization process, records would be located and indexed. The indexing process would require that standard data be defined and that essential elements of information be determined.

3.3.8 Discussion of Alternative #4 to Problem #2. Much time and effort is currently spent in sending requests for evidence to multiple agencies, multiple agencies locating the same record, multiple agencies researching the same record, and responding to evidence requests. The digitization of records at a single office would significantly reduce the amount of time spent and the resources required to conduct these activities. Research time would be reduced to hours or minutes instead of months. Currently, many travel hours and funds are expended locating evidence to support veteran claims. A central data file would ensure the retention of information on human NBC exposures, preserving them electronically. Many of the records are currently in cardboard boxes in non-climate controlled warehouses. Digitization of existing records would enable multiple people to simultaneously access a given record, eliminating waits for records that are checked out. This alternative would require a high-level resource commitment, including: 1) the cost of gathering and indexing records; 2) the cost of digitizing records; 3) the cost of designing and implementing a system to serve up the digitized images, and; 4) the cost of creating interfaces between the system and authorized requesters.

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6 The central agency is discussed in paragraph 3.2.6 above.
3.4 Problem Statement #3

Lack of records accountability\(^7\) and clear definitions of responsibility for research, collection, maintenance, and disclosure of the information hinders timely and comprehensive searches, as well as timely responses to public and agency inquiries.

3.4.1 Alternative Solution #1 to Problem #3. Establish a single DoD office accountable for all DoD NBC records and documentation. The office would collect and centralize records, where possible, and assume accountability (as defined in the footnote) for records in cases where centralization is not possible. Currently, human NBC exposure records are managed by a variety of agencies. Some of the agencies (e.g., ESG and RECC) have a specific charter to be accountable for their records, other agencies do not. In some cases, the organization that generated the records no longer exists and the records have become the responsibility of another organization that is unsure of the nature of its record holdings. These problems make it difficult to determine where the responsibility and accountability for a particular type of exposure claim resides. This may cause researchers to approach many agencies in search of appropriate records. Additionally, many records remain unindexed and the nature of existing holdings is not always well known. A single accountable office would eliminate these problems.

3.4.2 Discussion of Alternative #1 to Problem #3. A central accountable organization would assure that the location of records is known. This would reduce research time, because researchers would have an index of all holdings and could quickly task either onsite and offsite researchers to respond to incoming queries. Since many records and data bases would be centralized under this alternative, many responses could be quickly generated in-house. This would enable remote sites to maintain access to records for other purposes, although accountability would remain with the central office.

\(^7\) Records accountability includes: 1) the accessibility and maintenance of records, and; 2) the research, collection, and disclosure of information contained therein.
This alternative would require a high resource allocation to support the initial indexing and collecting of all known NBC exposure records. However, reductions in time spent researching records and other previously mentioned efficiencies of centralization, should eventually result in a significant pay-back.

3.4.3 Alternative Solution #2 to Problem #3. Identify all relevant record collections and index, automate, declassify, and disclose the information to VA, veterans, veteran's organizations, and the public. Existing record collections would remain in situ while document and automation specialists indexed and digitized all existing NBC exposure records. The imaged records would all be available on-line to authorized users (e.g., VAROs) and limited access (subject to Privacy Act, national security, and other relevant government policy restrictions) would also be available to public organizations (e.g., the Disabled American Veterans).

3.4.4 Discussion of Alternative #2 to Problem #3. Current policy mandates the declassification of information that no longer has relevance to national security. This mandate has been levied on many human NBC exposure-related organizations that have not been allocated additional funds to accomplish the task. This has slowed down compliance with the directive. A central office that is charged with declassifying records could be provided adequate funding to comply with the declassification policy.

On-line access to digitized records would yield a significant reduction in the time required to conduct research to support veteran claims. Existing backlogs would be quickly eliminated. This alternative would require a high-level of resource expenditure for initial implementation, but would ultimately yield savings through the previously mentioned efficiencies of centralization.

3.5 Problem Statement #4

Inquiries from VA do not always provide sufficient information or data quality for DoD to conduct a timely search. Some VA policies or procedures cause the duplication of efforts within
DoD and hinder expeditious responses (i.e., duplicate, misdirected, and multiple requests for information). Internal VA distribution and use of information provided by DoD needs improvement.

3.5.1 Alternative Solution #1 to Problem #4. Requests should contain a standard core of information prior to dispatch from VA to DoD whenever possible. Requests for validation of human NBC exposures received by DoD from the VAROs do not always contain sufficient information to process the request. If the necessary information is not available, the request must be returned and reprocessed. This causes delays and causes frustration among VAROs, DoD agencies, and veterans. Current VA operating instructions outline the types of information necessary for DoD to provide an adequate response for information. DoD working group members agreed to review VA operating instructions and to define the essential elements of information. The basic elements defined by the group are: name (last, first, and middle for current name and name served under, if applicable); SSN (and Service Number, if applicable); place of birth; Service; period of service; unit; location of unit (and location of incident); exposure type; period of exposure; location of exposure; exposure-related disease; and description of incident (as provided by the veteran).

3.5.2 Discussion of Alternative #1 to Problem #4. This alternative should not require much in the way of resources, since little more than changing VARO instructions would be necessary. It should be noted, however, that many veterans do not know or remember all of the important details surrounding their exposure event. Furthermore, in the absence of a mechanism to enforce complete entry of required data (e.g., a computer data entry form that prohibits transmission of a claim with insufficient information), VAROs may still send incomplete claims. Nevertheless, some benefits will accrue due to better education of the VAROs as to what is necessary to improve their requests for evidence. More complete requests will result in faster turnaround of requests and will reduce the work load of responding agencies.

3.5.3 Alternative Solution #2 to Problem #4. VA will periodically provide DoD copies of request operating instructions for review and validation. Current operating procedures for VA are periodically updated. To date, DoD has not been involved in this review processes. VA has suggested that the DoD commands and agencies involved in processing human exposure requests
become involved in the review and verification of the information and requirements contained in the operating instructions. In addition, VA has a system called “fast notes” that is used to get information quickly to the VAROs. This system could be used to announce changes in operating procedures to the VAROs.

3.5.4 Discussion of Alternative #2 to Problem #4. This alternative should yield moderate benefits at a low cost, since the review process is not particularly time-consuming. Improved communications between VAROs and responding agency representatives would result in better requests and better definition of the different needs of each agency involved. The first review under this alternative has already been completed. DoD has reviewed the VA regulation and provided VA with recommended revisions.

3.5.5 Alternative Solution #3 to Problem #4. That VAROs query NPRC and receive information prior to submitting requests to DoD. Currently, to service a veteran’s human NBC exposure claim, VAROs simultaneously request service record information from NPRC and NBC exposure evidence from various DoD agencies. Since the DoD agencies don’t know that VA has already requested service record information from NPRC, they may request the same information from NPRC. This duplication of effort adds to the workload of NPRC and DoD. A procedure could be adopted for VAROs to make a single request to NPRC and, if NPRC’s information requires further development at other agencies, all information received by the VARO from NPRC would be shared with all organizations involved in processing the exposure claim. This step would save the cost of retrieving a record twice (or more) and the processing time involved in this duplication of efforts. This recommendation was discussed with the NPRC managers responsible for military records retrieval during an on-site meeting held 4 September. The NPRC managers were strongly in favor of this recommendation.

3.5.6 Discussion of Alternative #3 to Problem #4. This alternative could result in significant savings to DoD agencies while costing VA very little to implement. VAROs may perceive that ‘shotgunning’ requests will bring faster responses, but the group advises that ‘shotgunning’ requests slows down responses by overloading NPRC with unnecessary duplicate requests; as well as
increasing DoD response time because they are waiting for validation of Service information from a record that is currently checked out to answer VA. DoD agency workloads should also be reduced because they may not receive some requests at all (where NPRC provides the appropriate response) and because agencies will have to generate fewer requests to NPRC, since VAROs will attach documents received from NPRC to the requests.

3.5.7 Alternative Solution #4 to Problem #4. If information received from NPRC is insufficient to adjudicate the veteran’s claim, VA will provide all relevant information to DoD. In some cases, VAROs send requests with insufficient information for DoD to respond. In these cases, DoD organizations return the requests and ask for additional information. Many times, the information on the request is the only information available. If this is the case, VA should state that the information contained in the request is the only information available. If all sources are exhausted and there is still insufficient information to substantiate the claim, the DoD processing organization should state that no evidence can be provided due to insufficient information on the request. VAROs could then adjudicate the veteran’s claim on available information without further follow-up requests to DoD.

3.5.8 Discussion of Alternative #4 to Problem #4. This alternative should result in a reduction in DoD agency workload due to VA routing requests only once to the appropriate office, after the NPRC response has been obtained. A minimum set of essential data can be provided to VAROs, with the understanding that VAROs should not send any request to DoD without, at a minimum, all data that is essential for DoD to respond to a particular type of request provided with the request. This alternative mainly involves policy changes at VA and would cost very little to implement.

3.5.9 Alternative Solution #5 to Problem #4. DoD should provide a POC listing to VA. VA operating instructions contain a listing by type of exposure and a Service POC. In order for VA to consistently route requests to the correct POC, DoD must review the operating procedures and provide updated lists of points of contacts, addresses, and phone numbers.
3.5.10 Discussion of Alternative #5 to Problem #4. The Work Group provided input to the development of the POC listing, and the listing has been provided to VA for distribution to the VAROs. The listing provides a matrix of service and DoD POCs by agency and exposure type. The matrix is at Appendix C.

3.5.11 Alternative Solution #6 to Problem #4. Future VA requests for information could contain the name and phone number of the VA requester. Currently, VA requests for human NBC exposure evidence do not contain the name or phone number of the agent responsible for the case. DoD representatives find it difficult to identify and contact these individuals if there are questions that involve the request. In most cases, letters are exchanged when a phone call could have sufficed. This adds to the processing time and the frustration level of all parties.

3.5.12 Discussion of Alternative #6 to Problem #4. Implementation of this request would involve little cost to VA since only a procedural change would need to be made. DoD would see some reduction in workload due to elimination of the need to generate correspondence to obtain clarification on a request. VA should see a reduction in claim processing time in cases where DoD no longer needs to generate correspondence to seek clarification. VA has already provided guidance to VAROs to ensure that POC names are included on requests.

3.5.13 Alternative Solution #7 to Problem #4. DoD would participate in VA teleconferencing training sessions as appropriate. VA has developed a teleconference training program that is a successful means of distributing information to the VAROs. VA suggested that DoD representatives participate in selected training sessions to exchange information with VAROs regarding human NBC exposure request/response issues.

3.5.14 Discussion of Alternative #7 to Problem #4. This alternative could be quickly implemented and should provide some benefits resulting from improved communications between VAROs and DoD agencies. Implementation of this alternative will require little in the way of resources.
3.6 Work Group Achievements

The ERL Work Group attained some early achievements, including:

- Developing a POC matrix for use by VA, NARA, and internal Defense agencies
- Having DoD provide recommendations for changing VARO guidance relating to the transmission of NBC exposure evidence requests to DoD agencies by reviewing the VA M21-1 manual that covers this subject
- Agreeing that NRL would give a copy of all its WWII Navy Mustard Gas human testing database to VA and that VAROs would no longer send requests to the NRL for these records, since VA would have a complete list
- Agreeing that VA review their procedures to consider including VARO POC names and phone numbers on requests for NBC exposure-related evidence sent to DoD—so that direct contact can be made by phone when clarification or additional information is needed.

Table 3-1 highlights the solutions to the current problems and shows a ‘best guess’ estimate of the potential costs and benefits associated with each alternative solution. A more precise estimate of benefits and resource requirements would be obtained with an FEA of the alternative solutions.
Table 3-1. Cost/Benefit Projections for Proposed Solutions

<table>
<thead>
<tr>
<th>Problems &amp; Alternatives</th>
<th>Resource Requirements</th>
<th>Projected Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PROBLEM #1 Lack of DoD central control</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative #1 Establish DoD/VA information exchange group</td>
<td>L</td>
<td>M</td>
</tr>
<tr>
<td>Alternative #2 Establish a central DoD processing and research group</td>
<td>H</td>
<td>H</td>
</tr>
<tr>
<td>Alternative #3 Establish a central DoD processing/research/records group</td>
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<td>H</td>
</tr>
<tr>
<td>Alternative #4 Establish a central DoD processing actions office</td>
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<td>M</td>
</tr>
<tr>
<td><strong>PROBLEM #2 Lack of automation support</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative #1 Establish E-mail capability within DoD/VA</td>
<td>M</td>
<td>L</td>
</tr>
<tr>
<td>Alternative #2 Grant VA read-only access to DoD pending actions files</td>
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<td>M</td>
</tr>
<tr>
<td>Alternative #3 Grant VA read-only access to DoD exposure data bases</td>
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<td>M</td>
</tr>
<tr>
<td>Alternative #4 Digitize all DoD exposure records</td>
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</tr>
<tr>
<td><strong>PROBLEM #3 Lack of records accountability</strong></td>
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<tr>
<td>Alternative #1 Establish one accountable DoD exposure records office</td>
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<tr>
<td>Alternative #2 Identify and index all DoD exposure records</td>
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<tr>
<td><strong>PROBLEM #4 Insufficient inquiry information</strong></td>
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<tr>
<td>Alternative #1 All VA requests will contain a standard data set</td>
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<tr>
<td>Alternative #2 DoD will periodically review VA written procedures</td>
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<td>M</td>
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<tr>
<td>Alternative #3 VARO will perform initial inquiry to NPRC</td>
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<td>H</td>
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<tr>
<td>Alternative #4 VARO will provide all NPRC information with request</td>
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<td>H</td>
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<tr>
<td>Alternative #5 DoD will provide point of contact listing by exposure type</td>
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<tr>
<td>Alternative #6 VARO will place requesters name/phone number on all VA requests</td>
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<td>L</td>
</tr>
<tr>
<td>Alternative #7 DoD will participate in VA teleconference training</td>
<td>L</td>
<td>L</td>
</tr>
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</table>

**LEGEND:**
- Resource requirements - time and financing necessary to accomplish the recommendation:
  - High (H) Likely to require more than three fiscal years and cost more than $3,000,000.
  - Medium (M) Likely to require one to three fiscal years and cost between $500,000 and $3,000,000.
  - Low (L) Likely to be accomplished within one fiscal year and cost less than $500,000.
- Projected Benefits - The degree to which this alternative addresses the problem set:
  - High (H) This solution will virtually eliminate the current overall problem.
  - Medium (M) This solution will provide significant relief to the current overall problem.
  - Low (L) This solution will provide some relief to the overall problem set.
SECTION 4. CONCLUSIONS

Based on the ERL Work Group problem identification, and their subsequent work in prioritizing and recommending solutions, the overall consensus of the Work Group is to recommend that DoD establish a central office that has responsibility for managing all NBC human exposure information requests. The highest degree of centralization was a recurring solution to three of the four problems cited, and is the recommended solution. That solution is to consolidate all relevant records, records managers, and researchers in a single, fully automated facility staffed at the DoD agency level. This solution would have the following advantages:

- Provide VA with a single location for requesting information, thereby eliminating multiple and duplicate requests
- Reduce the number of DoD agencies now engaged in this kind of effort
- Conserve and concentrate fiscal and human resources expended on the current disjointed efforts
- Provide for a coordinated collection and retrieval of human exposure information contained in DoD records collections
- Ensure databases with standard formats and data, and the ability to interface and exchange information within DoD and with VA
- Provide oversight and direction to the issue of records accountability, maintenance, and disclosure
- Dramatically improve efforts to respond to veterans and former Service members, the general public, and inquiries from Congress and other Executive agencies.

Organizations currently exist within DoD that are set up to manage agency-wide efforts on specific types of human exposure. These agencies would serve very well as models for a centralized DoD office, or even be suitable for expansion to cover all facets of human exposure issues handled by many other organizations. These organizations are the U.S. Army Environmental Support Group, the Nuclear Test Personnel Review under the Defense Special Weapons Agency, and the Radiation Experiments Command Center under the Assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense Programs.
In order to make an informed and effective decision concerning centralized oversight and management of DoD human exposure records, it is recommended that an FEA be conducted to compare the feasibility and cost effectiveness of the recommended solutions and placement of the organization.
APPENDIX A

LIST OF PARTICIPANTS
APPENDIX A: List of Participants

The following personnel participated in the two ERL Work Group sessions held in Arlington, VA (on 23-24 July and 27-30 August 1996):

Table A-1. List of Participants

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
<th>Phone #</th>
<th>Fax #</th>
<th>Internet Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>COL Claud Bailey, Jr.</td>
<td>RECC</td>
<td>(703) 442-5675</td>
<td>(703) 847-0890</td>
<td>[email protected]</td>
</tr>
<tr>
<td>John Blische</td>
<td>USAMRICD</td>
<td>(410) 671-3948</td>
<td>(410) 671-1960</td>
<td>[email protected]</td>
</tr>
<tr>
<td>Richard L. Boylan</td>
<td>NARA</td>
<td>(301) 713-7250</td>
<td>(301) 713-7482</td>
<td>[email protected]</td>
</tr>
<tr>
<td>LtCol Dan Brown</td>
<td>HQ AFMO/SGOT</td>
<td>(202) 767-5078</td>
<td>(202) 767-5302</td>
<td>[email protected]</td>
</tr>
<tr>
<td>Kathy Ciolfi</td>
<td>AMSCB-CIH</td>
<td>(410) 671-4430</td>
<td>(410) 671-1982</td>
<td>[email protected]</td>
</tr>
<tr>
<td>Ersie Farber-Collins</td>
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<td>(202) 273-7268</td>
<td>(202) 275-1756</td>
<td>[email protected]</td>
</tr>
<tr>
<td>Frank Dowling</td>
<td>SRA International</td>
<td>(703) 558-8404</td>
<td>(703) 558-4723</td>
<td>[email protected]</td>
</tr>
<tr>
<td>Don Hakenson</td>
<td>ESG</td>
<td>(703) 806-7835</td>
<td>(703) 806-7846</td>
<td>[email protected]</td>
</tr>
<tr>
<td>Marty Hamed</td>
<td>OUSD (P&amp;R)</td>
<td>(703) 696-8710</td>
<td>(703) 696-8703</td>
<td>[email protected]</td>
</tr>
<tr>
<td>Chris Hill</td>
<td>SRA International</td>
<td>(703) 558-4756</td>
<td>(703) 558-4723</td>
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<tr>
<td>Rick Hirst</td>
<td>VA Central Office</td>
<td>(202) 273-7220</td>
<td>(202) 275-1728</td>
<td>[email protected]</td>
</tr>
<tr>
<td>LtCol Don Jordan</td>
<td>HQ AFMO/SGOE</td>
<td>(202) 767-5078</td>
<td>(202) 767-5302</td>
<td>[email protected]</td>
</tr>
<tr>
<td>COL Fred Kolbrenner</td>
<td>DMDC</td>
<td>(703) 696-7402</td>
<td>(703) 696-4110</td>
<td>[email protected]</td>
</tr>
<tr>
<td>Maria Lloyd</td>
<td>NRL</td>
<td>(202) 767-2541</td>
<td>(202) 767-6691</td>
<td>[email protected]</td>
</tr>
<tr>
<td>LTC Armando Lopez, Jr.</td>
<td>HQDA DSCOPS</td>
<td>(703) 697-3089</td>
<td>(703) 697-5156</td>
<td>[email protected]</td>
</tr>
<tr>
<td>Shirley Martin</td>
<td>DMDC</td>
<td>(703) 696-7403</td>
<td>(703) 696-4110</td>
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<tr>
<td>Judy Matthews</td>
<td>AMSTE-TM-II</td>
<td>(410) 278-1050</td>
<td>(410) 278-7653</td>
<td>[email protected]</td>
</tr>
<tr>
<td>LTC Harold B. McIntosh</td>
<td>ASD Health Affairs</td>
<td>(703) 565-7694</td>
<td>(703) 565-7705</td>
<td>[email protected]</td>
</tr>
<tr>
<td>Name</td>
<td>Organization</td>
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</tr>
<tr>
<td>Joe Mok</td>
<td>HQ AMC</td>
<td>(703) 617-6657</td>
<td>(703) 617-2968</td>
<td><a href="mailto:joe.mok@hqamc.army.mil">joe.mok@hqamc.army.mil</a></td>
</tr>
<tr>
<td>Tom Pamperin</td>
<td>VA Central Office</td>
<td>(202) 273-7247</td>
<td>(202) 273-1756</td>
<td></td>
</tr>
<tr>
<td>Brenda Peed</td>
<td>AMC</td>
<td>(703) 617-8959</td>
<td>(703) 617-7721</td>
<td><a href="mailto:bpeed@alexandria.emhl.army.mil">bpeed@alexandria.emhl.army.mil</a></td>
</tr>
<tr>
<td>Maj Meade Pimsler</td>
<td>HQ AFMO/SGOT</td>
<td>(202) 767-5078</td>
<td>(202) 767-5302</td>
<td><a href="mailto:pimsler@sg.usaf.mednet.af.mil">pimsler@sg.usaf.mednet.af.mil</a></td>
</tr>
<tr>
<td>D. Michael Schaeffer</td>
<td>DSWA NTPR</td>
<td>(703) 325-2407</td>
<td>(703) 325-2951</td>
<td></td>
</tr>
<tr>
<td>David Spivey</td>
<td>VA Central Office</td>
<td>(202) 273-7258</td>
<td>(202) 273-1756</td>
<td></td>
</tr>
<tr>
<td>Bob White</td>
<td>VA Central Office</td>
<td>(202) 273-7230</td>
<td>(202) 273-1756</td>
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</table>
APPENDIX B

ACRONYMS
### APPENDIX B: Acronyms

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<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tr>
<td>AFSG</td>
<td>U.S. Air Force, Office of the Surgeon General</td>
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<tr>
<td>AMC</td>
<td>U.S. Army Material Command</td>
</tr>
<tr>
<td>ASD</td>
<td>Assistant Secretary of Defense</td>
</tr>
<tr>
<td>BPR</td>
<td>Business Process Reengineering</td>
</tr>
<tr>
<td>CBDCOM</td>
<td>U.S. Army Chemical and Biological Defense Command</td>
</tr>
<tr>
<td>CG</td>
<td>Commanding General</td>
</tr>
<tr>
<td>DCSOPS</td>
<td>U.S. Army Deputy Chief of Staff for Operations</td>
</tr>
<tr>
<td>DEERS</td>
<td>Defense Enrollment Eligibility System</td>
</tr>
<tr>
<td>DFAS</td>
<td>Defense Finance and Accounting Service</td>
</tr>
<tr>
<td>DMDC</td>
<td>Defense Manpower Data Center</td>
</tr>
<tr>
<td>DNA</td>
<td>Defense Nuclear Agency</td>
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<tr>
<td>DoD</td>
<td>Department of Defense</td>
</tr>
<tr>
<td>DSWA</td>
<td>Defense Special Weapons Agency</td>
</tr>
<tr>
<td>ERL</td>
<td>Exposure Records Locator</td>
</tr>
<tr>
<td>ESG</td>
<td>Environmental Support Group</td>
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<tr>
<td>FEA</td>
<td>Functional Economic Analysis</td>
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<tr>
<td>FOIA</td>
<td>Freedom of Information Act</td>
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<tr>
<td>GAO</td>
<td>Government Accounting Office</td>
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<td>HRE</td>
<td>Human Radiation Experimentation</td>
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<td>NARA</td>
<td>National Archives and Records Administration</td>
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<td>NAS</td>
<td>National Academy of Sciences</td>
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<tr>
<td>NBC</td>
<td>Nuclear, Biological, and Chemical</td>
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<tr>
<td>NPRC</td>
<td>National Personnel Records Center</td>
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<tr>
<td>NRL</td>
<td>Naval Research Laboratory</td>
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<tr>
<td>NTPR</td>
<td>Nuclear Test Personnel Review</td>
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<tr>
<td>OASD(HA)</td>
<td>Office of Assistant Secretary of Defense (Health Affairs)</td>
</tr>
<tr>
<td>OSD</td>
<td>Office of the Secretary of Defense</td>
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<tr>
<td>Abbreviation</td>
<td>Description</td>
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<tr>
<td>OUSD (P&amp;R)</td>
<td>Office of the Under Secretary of Defense (Personnel and Readiness)</td>
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<td>PAT</td>
<td>Process Action Team</td>
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<tr>
<td>POC</td>
<td>Point of Contact</td>
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<td>PTSD</td>
<td>Post Traumatic Stress Disorder</td>
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<td>RECC</td>
<td>Radiation Experiments Command Center</td>
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<tr>
<td>SRA</td>
<td>Systems Research &amp; Applications International Corporation</td>
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<tr>
<td>TECOM</td>
<td>US Army Test &amp; Evaluation Command</td>
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<tr>
<td>USAMRICD</td>
<td>US Army Medical Research Institute of Chemical Defense</td>
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<tr>
<td>VA</td>
<td>Department of Veterans Affairs</td>
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<tr>
<td>VARO</td>
<td>Veterans Affairs Regional Office</td>
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APPENDIX C

DoD POINTS OF CONTACT BY EXPOSURE TYPE
## APPENDIX C: Points of Contact
By Exposure Type
As of: 31 December 1996

<table>
<thead>
<tr>
<th>Ionizing Radiation Experiments</th>
<th>Ionizing &amp; Non-Ionizing Radiation Exposure</th>
<th>Mustard Gas &amp; Lewisite Exposures</th>
<th>DoD Persian Gulf War Registry (All Services)</th>
<th>Post Traumatic Stress Disorder (PTSD)</th>
<th>Agent Orange (All Services)</th>
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<tbody>
<tr>
<td>All Joint involvement or Service unknown affiliation</td>
<td>Air Force Personnel</td>
<td>Chemical, Biological, Defense Command (AMSCB-CIH)</td>
<td>Director Environmental Support Group</td>
<td>(All Services except Marine Corps)</td>
<td>Director Environmental Support Group</td>
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<tr>
<td>Radiation Experiments Command Center (RECC)</td>
<td>HQ AFMOA/SGOE 110 Luke Avenue Rm 400 Bolling AFB Washington, DC 20332-7050</td>
<td>510 Hoadly Road Aberdeen Proving Ground, MD 21005-5055</td>
<td>7798 Cissna Road Room 101 Springfield, VA 22150-3197</td>
<td>(703) 806-7835 (703) 806-7846 (Fax)</td>
<td>(703) 806-7835 (703) 806-7846 (Fax)</td>
</tr>
<tr>
<td>Col Claud Bailey</td>
<td>LtCol Don Jordan</td>
<td>Mustard gas &amp; Lewisite exposures during testing, transporting, storage, and manufacturing</td>
<td>Ms Kathy Ciolfi</td>
<td>Mr Don Hakenson</td>
<td>Mr Don Hakenson</td>
</tr>
<tr>
<td>1. Experiments - intentional individual exposure</td>
<td>All Air Force ionizing &amp; non-ionizing radiation, chemical, &amp; biomedical exposures</td>
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<td>2. Experiments - intentional environmental releases</td>
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<td>a. Testing human effects</td>
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<tr>
<td>b. Testing extent of human exposure</td>
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<td>Ionizing Radiation Experiments</td>
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<td>Defense Special Weapons Agency</td>
<td>Defense Manpower Data Center</td>
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<td></td>
<td>US Marine Corps Historian (Marines Only)</td>
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<tr>
<td>ATTN: ESN/Nuclear Test Personnel Review</td>
<td>1600 Wilson Avenue</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6801 Telegraph Road</td>
<td>Suite 400</td>
<td></td>
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</tr>
<tr>
<td>Alexandria, VA 22310-3398</td>
<td></td>
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<tr>
<td>(703) 325-2407</td>
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<tr>
<td>1 (800) 462-3683</td>
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</tr>
<tr>
<td>(703) 325-2951 (Fax)</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>D. Michael Schaeffer</td>
<td></td>
<td></td>
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<tr>
<td>CDR. Melvin J. Ely</td>
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<tr>
<td>Post-war occupation of</td>
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<tr>
<td>Hiroshima and Nagasaki</td>
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<td>Aug 6, 1945 - July 1, 1946</td>
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<tr>
<td>United States atmospheric</td>
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<td>nuclear testing from 1945</td>
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<td>to 1962 (Note 1)</td>
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</tbody>
</table>
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By Exposure Type
As of: 31 December 1996

<table>
<thead>
<tr>
<th>Ionizing Radiation Experiments</th>
<th>Ionizing &amp; Non-ionizing Radiation Exposure</th>
<th>Mustard Gas &amp; Lewisite Exposures</th>
<th>DoD Persian Gulf War Registry (All Services)</th>
<th>Post Traumatic Stress Disorder (PTSD)</th>
<th>Agent Orange (All Services)</th>
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<tr>
<td>Air Force Personnel</td>
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<td>HQ AFMO/SGOT</td>
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<td>110 Luke Avenue</td>
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<td>Rm 400</td>
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<td>Bolling AFB</td>
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<td>Washington, DC</td>
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<td>(202) 767-5078</td>
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<td>(202) 767-5302 (Fax)</td>
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<tr>
<td>LtCol Dan Brown</td>
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<tr>
<td>All Air Force ionizing radiation, chemical &amp; biomedical experiments</td>
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<tr>
<td>Navy Personnel (Until 31 January, 1997 - VA Central Office will handle the database thereafter)</td>
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<tr>
<td>Naval Research Lab</td>
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<td>Chemical Testing</td>
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<td>Oct. 1942 - Oct. 1945</td>
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<td>Naval Research Lab</td>
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<td>20375</td>
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<td>(202) 767-2541</td>
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<tr>
<td>Ms Maria Lloyd</td>
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<td>Ionizing Radiation Experiments</td>
<td>Ionizing &amp; Non-ionizing Radiation Exposure</td>
<td>Mustard Gas &amp; Lewisite Exposures</td>
<td>DoD Persian Gulf War Registry (All Services)</td>
<td>Post Traumatic Stress Disorder (PTSD)</td>
<td>Agent Orange (All Services)</td>
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**Note 1:** NTPR does not include the following:

- Non U.S. nuclear tests
- Hanford Site
- Manhattan Engineering District of Manhattan Project
- Radiography
- Nuclear weapons research, outside testing, storage, maintenance, handling, and transportation
- Nuclear medicine
- Diagnostic X-rays
- Accelerators
- Reactors
- Navy Nuclear Propulsion
- Uses of radioisotopes
- Radar
- Underground testing
- Presence at Hiroshima/Nagasaki after July 1, 1946
APPENDIX D

DoD/VA REINVENTION PARTNERSHIP AGREEMENT AND INFORMATION ACCESS INITIATIVE MEMORANDUM
DoD/VA REINVENTION PARTNERSHIP

The Department of Defense and the Department of Veterans Affairs hereby establish a DoD/VA Reinvention Partnership to enhance cooperation, integrate programs, improve operations between and within both Departments, and provide better service to our customers.

We will take advantage of natural opportunities to work together to our mutual benefit and those we serve. All military service members will become veterans at some point and are already eligible for some veterans benefits such as home loans while on active duty. Streamlined processes and procedures in both Departments will permit us to treat active duty members and veterans in a seamless manner so there is one continuous interaction with the federal government.

We also have areas of our operations that should be mutually supportive so that both operations are as effective and efficient as possible. We will overcome the traditional organizational obstacles to cooperation and concentrate on finding a better way to accomplish our missions. Our intent is to accelerate reinvention efforts in both Departments through a Reinvention Partnership that will seek mutually beneficial opportunities for improving service to our customers, increasing efficiency in operations, cutting red tape, and generally finding better ways to do business. Our Partnership will strive to reinvent and re-engineer processes and operations to make our Departments work better and cost less.

Our DoD/VA Reinvention Partnership will be initiated by forming a permanent Partnership Executive Committee made up of senior DoD and VA executives to spearhead this effort. The Executive Committee will form short-term task forces and work groups as required consisting of subject matter experts from both departments to formulate options and solutions to specific issues, problems, or overlapping functional areas suitable for consolidation in whole or in part.

William J. Perry
Secretary of Defense

Jesse Brown
Secretary of Veterans Affairs

June 30, 1994
DoD/VA REINVENTION PARTNERSHIP

The members of the Reinvention Partnership Executive Committee will be:

Department of Defense
- Under Secretary of Defense for Personnel and Readiness
- Assistant Secretary of Defense for Health Affairs
- Assistant Secretary for Reserve Affairs
- Assistant Secretary of the Army (Manpower and Reserve Affairs)
- Assistant Secretary of the Navy (Manpower and Reserve Affairs)
- Assistant Secretary of the Air Force (Manpower, Reserve Affairs, Installations & Environment)

Department of Veterans Affairs
- Under Secretary for Benefits
- Under Secretary for Health
- Assistant Secretary for Policy and Planning
- Deputy Chief of Staff
MEMORANDUM FOR MILITARY PERSONNEL JOINT INTEGRATION GROUP

SUBJECT: DoD/VA Reinvention Partnership and Information Access Initiative

On June 30, 1994, the Secretary of Defense and Secretary of Veterans Affairs signed the DoD/VA Reinvention Partnership. The objective is to enhance cooperation, integrate programs, and streamline procedures and processes between the two departments in order to better serve Service members and veterans. A copy of the agreement is attached. Several cooperative initiatives have already been undertaken by DoD and VA to streamline procedures. The automatic transfer of medical records to the VA was implemented by all Services as of this May. A corporate IM working group is currently analyzing DoD Retired Pay / VA Disability Compensation Consolidation as directed by the National Performance Review.

As part of our efforts under the Reinvention Partnership, DoD and Va are preparing to examine current business processes associated with access to information from personnel and medical records. The processes will include DoD procedures for archiving personnel and health records of separating Service members, VA processes for requesting records, and DoD processes for retrieving and transmitting information from those records to the VA and other users. The objective of this study is to streamline, and standardize where possible, the processes and procedures to expedite the transmittal of information so that veterans may receive compensation and benefits. The National Personnel Records Center in St. Louis will also participate in this business process improvement analysis.

A series of workshops, and visits to Service and VA records centers, are planned to start the first week in October. Please provide the names of individuals, with functional knowledge of the processes to be studied, to participate in the work group. In order to finalize the initial workshop and provide travel information, it is requested that you provide the names and phone numbers not later than September 15. Attachment 2 is a copy of the DoD/VA Medical Records Working Group members. My point of contact for this effort is Marty Hamed. She can be reached on (703)696-8710 or by fax at (703)696-8703.

Norma St. Claire
Director
Information Resources Management

Attachments
Department of Defense

Report on Search for Human Radiation Experiment Records

1944 — 1994

Volume 1

Assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense Programs
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Technology Administration,
National Technical Information Service,
Springfield, VA 22161
Department of Defense

Report on Search for Human Radiation Experiment Records

1944 - 1994
Volume 1

Assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense Programs

June 1997
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APPENDIX 1  RESULTS OF DOD HUMAN RADIATION EXPERIMENT RECORDS SEARCH

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On behalf of the Department of Defense, I am pleased to present to the American people this report on our search for information on the Department’s participation in human radiation experiments, beginning with the dawn of the Atomic Age in 1944. Our effort was in support of an intensive, Government-wide search for all relevant records directed by President Clinton in January 1994, as part of the administration’s initiative for openness in government. Within the Department of Defense, the effort involved hundreds of people throughout the Military Services and Defense Agencies. In this regard, I recognize the tremendous effort required in a search of this magnitude and want to thank them for their dedicated work.

Within this report, the reader will find four basic types of information: first, guidance for the search issued by the President and more detailed instructions issued by other officials; second, extensive summaries of several projects which either were “human radiation experiments” or for other reasons have attracted wide public attention; third, brief descriptions of the more than 2,000 projects initially identified in the records search as having some connection between humans and radiation; and finally, references for obtaining additional information.

Of note, although most of the above projects actually involved common and routine medical practices, in the spirit of openness, all are included in this report. Further, in cases where we have not been able to reconstruct full information from the old records, this fact is so noted with an explanation that more data will be provided in a subsequent report.

I believe this report will answer many of the questions which the American people may still have about human radiation experiments, and I invite them to let us know of any more information that we might be able to provide.
BACKGROUND INFORMATION

The intent of this publication is to inform the public about the Department of Defense (DoD) involvement in ionizing radiation experiments, studies or projects with human subjects which occurred from 1944 to 1994. This information is part of DoD's extensive effort in support of President William J. Clinton's openness in government initiatives that began in January 1994. In the spirit of openness, this book includes a wide range of records retrieved by the DoD.

Defining human radiation experiments (HRE) is essential if the reader is to understand the "what" and the "why" regarding the contents of this publication. To focus this effort, Executive Order (EO) 12891, signed by President Clinton on 15 January 1994, established the Presidential Advisory Committee on Human Radiation Experiments (ACHRE) and provided the definition used by the DoD and other Federal departments and agencies in identifying HRE.

EO 12891 defined Human Radiation Experiments as:

1. Experiments on individuals involving intentional exposure to ionizing radiation. This category does not include common and routine clinical practices, such as established diagnosis and treatment methods involving incidental exposures to ionizing radiation.

2. Experiments involving intentional environmental releases of radiation that were designed to test human health effects to ionizing radiation, or were designed to test the extent of human exposure to ionizing radiation.

When reading this book, it is essential to remember the three components of an HRE:

1. There had to be "human" participation.
2. There had to be involvement of ionizing "radiation."
3. There had to be an "experimental" element.

In this regard, we are aware that many of the 2,600 studies initially reported by the DoD to the ACHRE did not meet the established criteria. However, to ensure a full accounting, the entire range of experiments/studies/projects was forwarded to the ACHRE for review and analysis. Such reporting was consistent with DoD's guidance which required researchers to err on the side of inclusion during the records search when there was insufficient information to determine whether or not the studies were human radiation experiments within the scope of the definition. Of the 2,600 studies forwarded to the ACHRE, 2,389 are listed in this book and provided without judgment. The difference between the two totals is due to analysis conducted by the DoD after forwarding of the studies to the ACHRE that identified some studies as being duplicate reporting, some that were not implemented, and others which were found not to involve humans. The results of this refined DoD records search for experiments or studies are included in appendix 1.

In some of the 1944 - 1974 projects, the RECC was unable to compile a complete description. In these instances, a notation has been made in the project entry that if this information becomes available, it will be provided in volume 2 to this publication.

In setting the scope, EO 12891 also identified certain events that required specific attention by the ACHRE. They are the "Green Run" release at the Hanford Reservation, the six radiation warfare tests conducted at Dugway Proving Ground in Utah, and four atmospheric radiation tracking tests conducted in 1950 near Los Alamos, New Mexico. These are addressed in this book along with information about both HRE and non-HRE events involving ionizing radiation that have stirred public interest. These are
total body irradiation studies, nasopharyngeal irradiation, cold weather tests involving radioactive iodine-131, human aspects research involving U.S. nuclear weapons tests, and food irradiation studies. Appendices 2 through 4 provide additional reference information.

Historical Overview of 1944 - 1974 and What Led to Human Radiation Experiments

In the years following World War II, a period of intense confrontation evolved between the communist and democratic governments of the world. Many former allies became fierce opponents in an era that became known as the Cold War. The two principal powers—the United States and the Soviet Union—came to be symbolically identified as superpowers advocating opposing ideologies. The military establishments in each camp heightened their preparations for what many expected to become an eventual state of open warfare.

Into this already highly charged environment came the threat of nuclear warfare. The United States developed the first atomic bombs during World War II and used them against Japan. The war ended soon after the United States dropped the bombs on Hiroshima and Nagasaki. The United States' monopoly of atomic weapons lasted only until 1949 when the Soviet Union detonated its first atomic bomb, thereby starting the nuclear arms race.

When a nuclear weapon explodes near the ground, most of the energy goes into three effects. Two of these are readily apparent and received most of the initial focus of attention: the blast (shock wave) and thermal energy (heat). Pictures of the aftermath of an atomic explosion portray the vast damage caused by these two effects. The vivid pictures of Hiroshima and Nagasaki after the atomic bombing focused on the effects of blast and heat.

The third effect was completely new in the annals of warfare: ionizing radiation. The short-term effects of high-level exposures to ionizing radiation generated by an atomic bomb were self-evident because they led to almost immediate death. What was least known were the long-term effects of a less-than-immediately lethal exposure. The body of knowledge about these effects was woefully deficient as the United States began preparing for a possible nuclear conflict. The need to expand the body of knowledge about this phenomenon was pressing, and initiatives were undertaken to meet the need. The newly formed DoD, along with other agencies, began research into the effects of ionizing radiation.

Ionizing radiation effects were not completely new to science. Ionizing radiation had been used in both industrial and medical procedures before World War II. As the nuclear age began, the benefits and hazards of exposure to ionizing radiation were just being realized. Although it could be deadly in certain instances, ionizing radiation also showed great promise in treating serious illnesses and analyzing metals and substances.

X-ray machines emitting ionizing radiation enabled doctors to "see" illnesses or injuries in the body whose diagnosis previously required exploratory surgery or educated guesses. In industrial uses, x-ray machines permitted viewing the insides of welds and metals to identify defects. Many lives would be saved by detecting such deficiencies.

However, in many of the early applications of ionizing radiation, it soon became clear that more knowledge about the effects of long-term exposure to ionizing radiation was necessary. It also became apparent to both the military and scientific communities that they shared a common interest in broadening the body of knowledge in this arena. A period of cooperation began between these two communities to develop the critically needed knowledge about ionizing radiation. This document is a record of that cooperation and the research activities that were part of this joint search for additional knowledge.

The Beginning of the Human Radiation Experiment Record Search Effort

Even before the end of the Cold War in the early 1990s, questions arose concerning U.S. Government
involvement in human subject ionizing radiation research. In November 1986, U.S. Representative Edward J. Markey of Massachusetts reported that the U.S. Government had conducted experiments exposing humans to radioactive material. However, this report received relatively little public attention at the time. Shortly after the end of the Cold War, there was renewed interest about human subject experimentation that occurred during the Cold War era. In the early 1990s, this interest began to accelerate.

In November 1993, the Albuquerque Tribune published a series of articles by reporter Eileen Welsome citing a group of hospital patients who had been injected with plutonium as part of a Government-sponsored research study begun before the end of World War II. In the same month, a congressional report identified a number of cases of planned environmental releases of radiation at nuclear weapons production sites after World War II. In early December 1993, Secretary of Energy Hazel O'Leary publicly stated that, in addition to conducting unannounced nuclear weapons tests, the U.S. Government may have used human subjects in ionizing radiation research.

The Department of Energy (DOE) opened a national help line on 24 December 1993 to provide the public with a means to submit reports of possible or suspected experimental exposures. On 3 January 1994, the Human Radiation Experiments Interagency Working Group was established, chaired by the Secretary to the Cabinet and composed of the Departments of Defense, Energy, Justice, Health and Human Services, and Veterans Affairs, as well as the Central Intelligence Agency, the National Aeronautics and Space Administration, and the Office of Management and Budget. This group focused its effort to identify ionizing radiation experiments involving human subjects, hereafter referred to as HRE.

In support of this initiative, Secretary of Defense Les Aspin, on 7 January 1994, instructed the DoD to compile information on the Department's radiation experiments. Secretary Aspin appointed the Assistant to the Secretary of Defense (Atomic Energy) (ATSD(AE)), Dr. Harold P. Smith, Jr., as the DoD focal point for this effort. Concurrently, President Clinton responded to growing public interest in this issue by establishing the ACHRE by EO on 15 January 1994.

The ACHRE was charged with the responsibility to:

- Review experiments conducted from 1944 to 1974 (later extended to 1994)
- Evaluate ethical and scientific standards and criteria on human radiation experiments conducted or sponsored by the U.S. Government
- Prepare a final report to the President on its findings.

The year 1974 was originally established as the end period because, on 30 May 1974, the Department of Health, Education, and Welfare (DHEW) (now Health and Human Services [HHS]) issued regulations protecting human subjects in research.

The DoD also established the Radiation Experiments Command Center (RECC) on 31 January 1994 under the direction of the ATSD(AE) to act as the central repository of records for the DoD effort. The RECC was charged with achieving a full accounting of DoD's involvement in any ionizing radiation research and experimentation on human subjects during the past fifty years. The RECC:

- Coordinated the DoD effort in the HRE records search with the services and DoD agencies
- Conducted an extensive examination and review of relevant documents at the National Archives and National Records Centers throughout the United States
- Coordinated the declassification of more than 1,200 documents
- Initially identified approximately 2,600 possible DoD-sponsored projects or experiments (a high number due to DoD policy to err on the side of inclusion to ensure full disclosure. Subsequently, this number was reduced to 2,389 after
duplicates and erroneous submissions were identified.)

- Collected and forwarded copies of approximately 10,000 records to the ACHRE
- Coordinated the DoD’s review of the ACHRE’s draft Final Report to ensure completeness and accuracy
- Participated in six congressional hearings as well as several briefings on DoD-sponsored activities.

Additionally, the RECC began an outreach program to respond to public inquiries. Under this process, the RECC received DoD-related inquiries forwarded by the DOE national help line, as well as direct inquiries from the public, members of Congress, and the White House. To date, the RECC has received almost 7,000 inquiries.

After researching these inquiries, the RECC found that very few involved any human radiation experimentation. Approximately 40 percent of the inquiries involved U.S. atmospheric nuclear weapons testing participants. The Defense Special Weapons Agency (DSWA), formerly the Defense Nuclear Agency (DNA), administers a separate program for these participants called the Nuclear Test Personnel Review (NTPR) program. The RECC referred all identified U.S. atmospheric nuclear weapons test participants to the NTPR program.

A significant number of inquiries were related to approved and accepted medical procedures of the day. Other exposures occurred in occupational situations not related to human subjects research. There were also a significant number of inquiries that did not contain enough information from which to draw a conclusion.

With release of the ACHRE Final Report and the conclusion of the committee’s work on 30 October 1995, the DoD reaffirmed its commitment to ensuring full and complete disclosure of its involvement in any human radiation experiments.

On 2 November 1995, Dr. Smith further amplified Secretary Perry’s reappointment memorandum by stating that “the RECC has begun initial work to publish a book to reflect DoD’s commitment to openness by summarizing what DoD found during its human radiation experiments review.” This publication is the result of that effort.

Notes


On 15 January 1994, Executive Order (EO) 12891 identified human radiation experiments (HRE) in the following manner:

1. Experiments on individuals involving intentional exposure to ionizing radiation. This category does not include common and routine clinical practices, such as established diagnosis and treatment methods, involving incidental exposures to ionizing radiation.

2. Experiments involving intentional environmental releases of radiation that (a) were designed to test human health effects to ionizing radiation; or (b) were designed to test the extent of human exposure to ionizing radiation.

Using the definitions in the EO, the Department of Defense (DoD) established guidance to search its records. The search criteria had three components that a project had to satisfy to be considered a possible human radiation experiment: (1) there had to be human subject involvement, (2) there had to be an experimental component, and (3) radiation had to be involved in some way. During the records search, if there was doubt as to whether a record completely satisfied all three of these components, the guidance was to err on the side of inclusion. Dr. Harold P. Smith, Jr., Assistant to the Secretary of Defense (Atomic Energy), stated,

For the purpose of this initial identification of possible experiments, organizations submitting reports should err on the side of inclusion. Reported activities that are outside the scope of the records search can then be excluded prior to actual records retrieval.

Many of the records identified were not experimental but concerned projects that used radiation only as an evaluation or diagnostic tool.

The determination of whether a procedure was experimental was often difficult to make. In its Final Report, The Advisory Committee on Human Radiation Experiments (ACHRE) concluded:

In a medical setting, it is sometimes hard to distinguish a formal experiment designed to test the effectiveness of a treatment from ordinary medical care in which the same treatment is being administered outside a research project. The patient receiving the treatment may discern no difference between the two.... Similarly, in an occupational setting in which employees are put at risk, it is often difficult to distinguish formal scientific efforts to study effects on the health of employees from routine monitoring of employees' exposure to hazards in the workplace for the purposes of ensuring worker safety.

The boundaries among medical, clinical, occupational, and experimental exposures are often blurred and difficult to precisely discern. In compiling the list of possible radiation experiments, the DoD was often faced with the same dilemma of trying to discern a true experiment from medical treatment. For this reason, the policy to err on the side of inclusion was implemented to ensure that every possible experiment was identified and received close scrutiny in evaluating its true intent.

Approximately 2,600 projects and studies were initially identified and reported to the Radiation Experiments Command Center (RECC) and the
ACYRE by the DoD. These projects occurred between 1944 and 1994 and were provided by the Army, Navy, Air Force, Defense Special Weapons Agency (DSWA), and the Armed Forces Radiobiology Research Institute (AFRRI). This appendix is a listing of approximately 2,400 projects and studies sponsored or conducted by the DoD. This lower number is the result of eliminating studies that were proposed but not performed as well as duplicate submissions from the original 2,600.

The list is arranged in two parts. The first part lists projects that took place between 1944 and 1974, and the second section lists projects that occurred between 1975 and 1994. This division is consistent with the approach taken by the DoD and the other represented agencies of the Human Radiation Interagency Working Group to focus the investigation on HRE conducted before the establishment of the Federal “Common Rule” (see appendix 2). The basic principles of the Common Rule were adopted by the Department of Health, Education, and Welfare (DHEW) in 1974.

WHAT INFORMATION IS DISPLAYED

1944 – 1974

These years define the period on which the Interagency Working Group and ACHRE focused to determine the degree of governmental involvement in HRE. Approximately 300 projects have been identified that occurred during these years. The list in this section is organized by the sponsoring or conducting service, the facility, organization, or location name where the projects were conducted, the start date, the RECC identification number, the project title, a brief abstract drawn from available information relating to the experiment, and a list of documents obtained by the services that pertain specifically to the experiment. In some instances, a document associated with the project will be identified as an “event profile.” This is a summary developed by the reporting service/agency from their own records to describe the project. In other instances, a document associated with the project will be identified as a “search printout.” This is the result of online database searches for journal articles and reports related to specific studies. In some of the 1944-1974 projects, the RECC was unable to compile a complete description. In these instances, a notation has been made in the project entry that if this information becomes available, it will be provided in volume 2 to this publication.

1975 – 1994

Approximately 1,900 projects were reported to the RECC for these years as possibly involving human use in ionizing radiation experiments. This number is greater than the actual number of experiments due to DoD’s policy to err on the side of inclusion. Included are duplicate reporting, clinical investigations and treatments, and other routine uses of radiation that, on later examination, were determined to be appropriate nonexperimental uses of radiation. As opposed to the 1944-1974 listing, there are no abstracts. There is only a topical
Appendix I—Results of DoD Human Radiation Experiments Records Search

The approximately 2,400 projects from 1944 to 1994 reported here are the result of an intensive review of documents in many archives, records centers, libraries, medical centers, and other records repositories. To assist in finding a specific project, the information is listed as follows:

1. Alphabetically by service or agency which sponsored the project
2. Then alphabetically by site name (facility, organization or location name)
3. Lastly, chronologically by year.

Please note: Some projects were sponsored by one service or agency but conducted at another service's facility. For example, the Air Force reported a project that it sponsored but which was conducted at the Walter Reed Army Medical Center. This project is listed in the Air Force section since it was an Air Force project. However, a person looking for this project would look logically in the Army section since it was held at an Army facility. However, it would not be there. For this reason, if the project you are searching for is not found in one service section, it is suggested you search all the other sections.

Notes

(To obtain copies of the following documents, see appendix 2.)


DZ = David Zeman
MH = Marty Hamed
SC = Norma St. Claire
JT = Jim Turner

JF This will be on the record and...

DZ I'm sure it will be cherished for generations!

JF Yes, I'm sure it will be. On my computer it will be. And it will be not more than 30 minutes, but I was just talking with David, and he can probably shorten that.

MH Okay.

JF Hi -- thanks for making yourself available. I know you're very busy, so I appreciate this very much.

MH You're welcome.

DZ First of all, do you prefer Marty or Martha? Which way should I refer to you?

MH Marty.

DZ Jim had taken a stab at your title, which is quite long, but could you put into layman's terms what the nature of your job is?

MH I work interagency issues, personnel issues with other federal agencies.

DZ I take it that's how you got involved in helping, trying to find the names of these World War II veterans?

MH That's correct.

DZ As Jim has probably told you, I'm researching what efforts the VA and the Defense Department made in the 1990s to try to seek out and award benefits to World War II servicemen who had gone through chemical testing in gas chambers and in field exercise at various military installations, and I was hoping I could get your perspective on what kind of work that involved for the Defense Department and how you feel the Defense Department performed its role, in terms of gathering the names of as many soldiers and sailors as possible and forwarding those names to the VA.
MH Okay, how would you like me to start? Do you want to ask me questions, or do you just want me to...

DZ Just what essentially did you recall about what kind of work that was performed?

MH Okay, let me walk you through what we did. One of the first things we did in the department was, we identified the five major sources of information on the test subject. Do you want those?

DZ Sure.

MH Okay, those happen to be Dugway Proving Grounds in Utah, Edgewood Arsenal in Maryland, Army Chemical Warfare School in Alabama...

DZ Is that the Camp [Sibert]?

MH No, that’s Fort McClellan. The Naval Research Laboratory in Maryland, which is right outside of Washington here.

DZ Excuse me, Fort McClellan was where?

MH Ft. McClellan is in Alabama.

DZ Okay, I’m sorry; the Naval Research...

MH Naval Research Laboratory in MD; and then there was a repository, the Washington National Records Center; that’s part of the National Archives.

DZ Okay, so those are the five main places where you hoped to find the records.

MH Right. And what we did was, as soon as we were issued, you know — this became the issue with... [aside, asking someone in the room] Secretary Perry? [yes, comes the answer] ...Secretary Perry (Defense Secretary Perry at the time) — what we did is we started I believe in 1993, and then up through 96-97 we sent teams up to these sites to review the documents and extract names and other important information from the records. We went to... Am I going too fast for you?

DZ No, go ahead.

MH We went to technical libraries at these installations — some of them have technical libraries — some of them had archived research records in, you know, like warehouse facilities or in storage; and we were able to go out, and the teams went to these installations four or five times. We didn’t just go once. We got a lead? — we kept going back collecting.

DZ What’s an example of the kind of thing, the kind of lead that might just pop into your office one day that might make you want to return?

MH Well, what would happen maybe is, if we couldn’t find information and document it — and a lot of times we couldn’t with personnel records
because a lot of them weren’t available — but a veteran might self report a test. Sometimes it might be that one of us would have taken a note, ‘cause I told you that sometimes we would collect not just the names but we would note that there was a test, and we would write that down. We might get back and match that, the veteran’s claim with our notes, and then if we were back out there, get back and look for more information. So it wasn’t just a one-time thing.

DZ And I imagine some veterans might have come in and been able to produce rosters, service rosters that gave you the names of other...

MH That’s right, that’s right.

SC As a matter of fact, some of the files had rosters on...

MH Yes, we were able to get some of the muster rolls, where they had people come in, and they also had, like, the morning reports. And the other thing that the veterans gave to us, and we also found when we were looking, were these general orders that would assign somebody to a specific installation...

DZ I’m sorry, what orders were they called? What kind of orders?

MH General orders.

DZ Oh, general orders. Okay.

MH ...or sometimes they were commendation orders where someone had participated in a test, and it had a few names.

DZ Right, okay.

SC Marty, explain to him a little bit about what these conditions of the files were in, how they were laid out and everything.

MH Let me give you a little background on what we were working with when we were going out. We weren’t always going into office settings and going through file cabinets. Now, a lot of times we were — some of the places that had historian’s offices had filing — but for instance, at one installation, we were in a warehouse with no heat and no water.

DZ Where was that?

MH That was out at Dugway. They have a very large repository of boxes, in addition to a technical library.

DZ Right.

MH And we had to go through those boxes, and we would have to go through them page by page. And that’s what we did: we sat out in warehouses with jeans and gloves on. We’d each pull the boxes to the door so the sun would come in so we’d be warm.
DZ How many people were sort of full-time devoted to this? Did it just change all the time?

SC Well, it was on and off because, you know, we’d do it for a while and have to do other things; it was, you know...

DZ Right — around other work?

SC Yes, exactly — ad hoc. But Marty, how many — you had Christy [or Chris Dayton; then SC and MH were both talking at once, mentioning names such as Wyatt, Fred, Cole Brenner], and then subcontractors were helping for a while.

MH And I borrowed people from the services. If I were going to, say to look for records that were Navy records, I would borrow someone from the Navy that I knew would recognize what we were after. Or we would take people with us that had background in military personnel, so that if there was anything that would lend itself to personnel use, that they would recognize it.

DZ Did you come up with sort of final estimates or numbers of these veterans that you were able to extract out?

MH Yes, we set up a database. We were able to get over 3,000 names from the Naval Research Laboratory (they had kept them and documented pretty much who was in the tests). And then by going through this additional work — you know, veteran self-reporting, going out and pulling information, and also veterans would go in to the VA, and sometimes we would exchange information back and forth with the VA — we got another 3,400 names. So the database that was compiled has about 6,400 names in it.

DZ And are these Navy and Army?

MH Yes, those are Army and Navy.

DZ Okay, you said 3,000 names from the Naval Research Laboratory and you said another 4,400 names?

MH 3,400.

DZ Oh — 3,400 — okay, so 6,400 total. Okay, and I believe I actually have that database now; your employee people had sent it to me with whatever... [confusion; overlapping voices]

MH They did? Okay.

DZ Okay, so looking back on it now, how do you feel about the effort that was made, and your ability — realizing that a lot of records no longer existed, and you earlier described the condition of the warehouses and so forth, do you feel pretty good about the job your agency did?
Yes, I do, I think that we really did a Herculean effort, frankly; we kept going back; we had people who were experts in chemical weapons and in personnel working this. There was tremendous support for the office of the Secretary of Defense.

Perry?

Yes, Mr. Perry was very influential. Yes, that was our boss at that time, and we actually spent additional funds; we spent several hundred thousand dollars on studies trying to find additional test sites and anything else that we could that had names, using contractors, so it wasn’t just the effort of the civilians, the civilian employees; we went outside and got, you know, extra help from contractors — and I think that we tried to not leave any stone unturned.

We followed every lead...

Boy, we did!

... either finding what was at the end of it or the frustration that there was no place to go.

One of the things we did, I can give you an example of: If we pulled names from a file, like say at the Edgewood Arsenal, and it was a name like John Brown — well you can imagine how many people may have that name, and during the war you may have four or five of those people with that name through that place in a certain time period. We actually took that exact name and we had the National Archives in St. Louis run the list of the John Browns and went out there and sat down and looked through each one of those records to see if we could verify which one it was that may have had the exposure.

Okay, by process of elimination?

Absolutely. We went through hundreds of records out there.

What’s your recollection of how well the Pentagon and the VA were able to work together on that issue?

Well, I’ve been working with them for a long time with the VA, and I think we worked very well with them. Every time we uncovered information, we kept feeding it to them directly and immediately.

How?

Well, let’s see: We gave them paper, and you know we were on the phone with them back and forth. We didn’t have — the database was not completely compiled at first, but they got the database as soon as it was done, too.
DZ It wasn't like you waited a few years and then turned over everything...

MH Oh, no.

DZ You were turning it over incrementally as you went along.

MH As we were working — my office is in almost daily contact with the Department of Veterans Affairs, and that's been true from even back then. That was the agency that I worked with the most in the past.

DZ Okay.

MH Okay? So no, we were in constant contact with the Department of Veterans Affairs. As a matter of fact, occasionally they would give us information back. If a vet would come in, you know — what we had in the old files were just service numbers because they didn't have social security numbers then — if a veteran would come in and they would file on one of these things, then we would get a social security number to connect to something; it would help us look for more information.

DZ Okay.

MH We actually traded information back and forth, too.

DZ And when you were collecting information, trying to get every little bit you could on an individual soldier or sailor, were you doing it with an eye toward making it easier for them to be contacted directly or to be able to find where they were now?

MH Right. We actually called, we talked to veterans, we called, we were able to track down — believe it or not, there were some of the scientific researchers who were still alive; of course they were retired — but we spoke with them. We spoke with quite a few veterans personally; a lot of us did; we had contact with them.

SC I think Marty probably had the most contact; she was actually trying to locate people.

DZ Okay.

MH And we would; we would call and ask — on a couple occasions, we called and said, "We have this here; are you this John Smith?"

DZ Just as you and your team were working to confirm before passing it on to the VA?

MH Yes. Also it would give us the idea whether or not we were in the right ballpark here, if we were looking at personnel records, if we could get personnel records. I'm sure you're aware, because I know you've done research into this, our efforts with the Army participants were terribly
hampered by the fact that there was a fire at the national archives in St. Louis in 1973.

DZ Right.

MH And it just wiped out the World War II personnel files — and in those files would have been a lot of people's medical information, too, their medical records — and that may be where the exposure information would have been, so that was very difficult to work around.

DZ ... some hospitalization during their service or during ... 

MH Well, even a sick call — if someone might have made a sick call, just over to the clinic... it may not have even been a hospitalization.

DZ Okay. Where is Kolbrenner now, do you know? I think I asked this of Jim.

MH He lives in the area. To my knowledge, yes, he's still in the Washington area.

DZ Okay. I'd like to talk to him 'cause his name surfaced in a bunch of issues.

MH He's a chemical weapons officer that they brought on to work with that.

SC He worked 100% of his time.

MH Yes, he worked 100% of his time.

DZ Do you know where he works now; is he with some consulting firm?

MH He probably — I know he works, so I'd hazard a guess that he's with a consulting firm, but I don't know who he works for.

SC He is a private citizen now.

DZ Okay. Now around this time, then-congressman Goss (now the CIA director) was pushing for a new round of commendations for these guys and not just — many had gotten their commendations back at the time they served, but many had not — and he was trying to push for commendations. Do you know how many of those were eventually issued and whether or not they included the kinds of notifications of potential health risks and so forth that the VA was promising to send these men directly?

MH Okay. I do not know exactly how many were issued, but I know that they were done. When we were able to find a veteran that was still-living — the common... and if we were able to track them down from — so, okay, if we could confirm that they were living and their whereabouts, they were sent a commendation. Now I believe that those commendation letters did contain more information on being able to file, or to contact the VA, but I am not sure. I can't confirm that because I don't have any of those files anymore and I can't remember, to tell you the truth.
DZ And you don’t know how I might be able to confirm that, do you?

[Some sotto voce comments ending with “Fred.”]

MH You know, David, I...

DZ Kolbrenner maybe?

JF I don’t know if he would know how many either.

DZ Okay. When Goss had introduced this in Congress and called for that as well and it didn’t get passed as a separate measure — it got passed as what they call a “sense of Congress,” which is this...

MH We sent out certificates of commendation. We had them done over here and they were sent out.

DZ I know the commendations were — I forgot how many people — but it is unclear whether or not that accompanying notification that you might be subject to health risks and who to call and so forth; I don’t know whether that was sent, and it sounds like you’re not sure either.

MH Well, I’m wondering if — see, I can’t speak for what the VA may have done either.

DZ Okay. Couple more questions: When we first started here, we talked about me going into the files and getting started and getting documents that were relevant. I assume those are the files that I’ve come across in researching this one Army unit that I’m looking into where some of the files say “VGAS” on it, or “extracted for VGAS”: V as in victory, G-A-S.

MH Okay.

DZ Are those your fingerprints, your office’s fingerprints when you came across files, or do you have any idea what that is?

MH No, we didn’t — we made copies; we didn’t take things out of the box, like I didn’t bring originals back here. We copied what we needed or we wrote names down. That does not sound like any — because, no, I don’t think they were coming in behind us.

SC Someone else may have been...

DZ Obviously I’m not going to quote you on [...?] speculation, but who/what might that have been, do you know?

MH What did it say?

DZ They’re like little printed up stamps, you know, that will just be put on some of the documents in some of these Army veterans’ files, in their service files, that say “extracted for VGAS,” and it tended to be in the late-1993 time period.
When you took the files out to copy them, did anyone know that you had taken them, was there anybody there, you had to say "we're taking this set of files to copy them"?

No, we went down to a Xerox machine and did it ourselves.

So nobody would have known what set you looked at?

Were you looking in personnel jackets, David, or were you looking at other types of information?

No, I was in the St. Louis facility, the National Personnel Records Center. I filed FOIA requests for the soldiers who signed waivers to get access to them.

You were looking in their official military personnel file?

Correct.

I have no idea what that is; I haven't seen that. I don't know what that would be... VGAS... I don't know.

... C, not V as in ... ?

No, mustard is like N, like in nitrogen... No, I don't know what that would be.

Is Jim still there?

Yeah, I'm here. I just put on mute here so you didn't [have to] listen to me.

Jim, do you have any idea what that could be?

Never heard of it before.

Okay.

What else are they going to ask you?

Marty, I was asking how well you worked with the VA because what we've essentially found is that from talking with the VA and some records, that it looks like — from everything we came up with, and I've told this to Jim — that the Defense Department held up its part of the bargain and did what it said it would do, when you're having the names of thousands of guys and going to obscure rosters and morning reports, and so forth. But the VA had promised these and promised Congress that it would try to track down as many of these veterans as possible individually and give them the kind of notifications that we've talked about with regard to the context of the commendations — and they didn't do that. They ended up doing the unpaid public service announcements and didn't try to contact any of these veterans directly, and I was wondering if that squared with your memories, whether
you guys were under the impression that individual search for veterans would be completely [something sounding like eye-nd] to veterans [something garbled] by veterans are scarce.

MH I don’t know exactly what they did because really I wasn’t over there, David, but I know we gave them everything we had as soon as we got it. We sent them groups of names, lists of names, and the database. We sent it both to their medical personnel and their benefits personnel. That’s what I can tell you that happened to it.

DZ Okay, and again I’m not trying to get you to speculate on something you don’t know firsthand.

SC We don’t know what they did with it.

DZ Are there ever times when your office works with other government agencies in order to try to find current addresses, such as cross-referencing with the records of maybe the IRS or other agencies in order to get a current address for someone you might only have a service number for?

MH You mean from this World War II mustard gas?

DZ For any older veterans.

SC The Department does that quite often, not out of our office.

DZ I’m sorry, ma’am?

MH She was saying the Department of Defense does do that, but not this office, but yes, we do cross-check with other agencies sometimes when we’re trying to find someone.

DZ Okay.

SC When you’re talking about going to the IRS to look at social security numbers, that would not be done by our office here.

DZ Okay, it would be done by the Defense Department; that’s not unusual for agencies to use the resources of others.

SC No.

MH We have authorized users of that type of information; it’s very tightly controlled, but yes, we do cooperate with each other across agency lines.

SC But of course, to use the social security number, you’d have to have it, and we more often than not, we didn’t have it.

DZ Right. Again, the reason I asked is because some of the VA officials had gone before one of the House subcommittees in March of 93 to assure them; and once these names were gathered by you guys, they would make use of IRS and OSHA, and cross-reference and try to get current addresses, and it
sounds like that's something that's sort of generally done, but I wanted to
get a sense from you guys whether that's...

MH and SC  [couldn't understand response]

DZ Is there any point that I should have asked you that I haven't asked you yet?
Is there anything you wanted to add, that you wanted to point out to me
regarding your efforts back then?

MH Just that, as I told you, I thought the Department made a Herculean effort. I
know that a lot of us that worked on it were very personally invested in it

DZ How come?

SC Marty's father was a World War II veteran.

MH You talk to people, they call on the phone, they would call the office, you
know, "I'm dying, can you help me?" And you know, it was heartbreaking,
and a lot of us, I know, we really, we were on a mission. That's a personal
thing there --- we were on a mission. It's like I said: we tried to leave no
stone unturned.

MH Yeah. It sounds like it would be very easy for the kind of work you do to turn
it into a sort of abstraction, you know, but I guess when the veterans are
calling you with their ailments and so forth, it becomes more personal.

MH Oh, no, when you're talking to them or a spouse, and you know how
important it is, and they're telling you what ailment they have, and you
know what that means, believe me you're digging.

SC Let me tell you, the people who work here in the Department already...

MH v... ... ..............................................................

SC In Marty's case it's especially so because of her father and all, but we kind of
come built in with this sensitivity and desire to protect the troops and, you
know, do what we have to do to ...

DZ Yeah, yeah. Oh, one last thing: You had mentioned at the onset that these
searches had gone on into 1997?

MH Well, probably more like 1996, 'cause I was trying to remember, I probably
did them up through 1994, maybe into 95, and then, but I think Kolbrenner
may have retired in 96, so 97 probably not his [last trip?].

DZ Okay, great. And according to 96 that would have been more like reacting to
certain information [something garbled], as opposed to the sort of sustained
effort you were making in the earlier years, right?

MH I don't know. They were going out... Yeah, I had been out, then they were
going out; and it was kind of like we were checking each other. But they
were still going out and doing some pretty in-depth stuff. Fred, I think, had at least a team of two or three people that he'd take out. The most I ever went out — I had a team of three I was out with many times, many times, and he had a team of two or three that he was out with many times.

DZ So you weren't just directing things from your office; you were out at facilities.

MH No, I was out there...

SC Marty was actually...

MH I was in the warehouse dragging the boxes to the sunny spots, yes.

DZ Well, Marty, thank you so much, thank you both so much for your time. I really appreciate it.

MH Thank you. It was our pleasure.

DZ Okay, bye-bye.
ABOUT THIS SERIES

MILITARY DATA, FAMILIES HELP PROVIDE CLUES TO THE TESTING

Free Press data analyst Victoria Turk, as well as researchers Shelley Lavey, Patrice Williams and Chris Kucharski contributed to this series.

This report is based on thousands of military and medical records, including computer databases, obtained under the Freedom of Information Act from the U.S. Defense Department, the Department of Veterans Affairs, the U.S. Army and Navy and Edgewood Arsenal, which now is part of Aberdeen Proving Ground near Baltimore.

Scores of veterans from the 1st Chemical Casual Company, or their families, signed forms granting the Free Press access to military and VA records and, in some cases, civilian medical records. Family members offered access to private journals, correspondence, photos and memoirs.

The Free Press also relied on birth and death records; probate records; state and federal court rulings; records from the Institute of Medicine, an independent, nonprofit government organization that provides policy-making advice on health issues; transcripts of congressional testimony and more than two dozen medical studies on biological and chemical agents.

Among publications that proved valuable were "Veterans at Risk: The Health Effects of Mustard Gas and Lewisite"; "Archives of Memory: A Soldier Recalls World War II," by 1st Chemical veteran Howard Hoffman and his wife, Alice Hoffman; "Gassed: British Chemical Warfare Experiments on Humans at Porton Down" by Rob Evans; "Deadly Allies: Canada's Secret War 1937-1947" by John Bryden, and "Acute Exposure Guideline Levels for Selected Airborne Chemicals, Vol. 3" by the National Research Council.

The Free Press interviewed more than 100 World War II veterans, their families or physicians.

Also interviewed were U.S. scientists and Army historians, veteran service organization officials, members of Congress and officials with the Army, Navy, Defense Department, Veterans Affairs and the Institute of Medicine.

The Richmond Times-Dispatch first focused attention on the U.S. WWII chemical program in 1990. CBS's "60 Minutes" and the Washington Post brought additional public attention to the issue in 1991.

Free Press data analyst Victoria Turk, as well as researchers Shelley Lavey, Patrice Williams and Chris Kucharski, contributed to this series.

Others who provided research assistance were Dick Bielen of the U.S. Locator Service in St. Louis, who helped obtain veterans' files; Cathy Liverman and Dr. Constance Pechura of the Institute of Medicine; Jeffrey Smart, command historian at Aberdeen Proving Ground, and Dr. Paula Schnurr of the VA's National Center for Post-Traumatic Stress Disorder in Vermont.

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DUTY, HONOR, BETRAYAL: How U.S. turned its back on poisoned WWII vets

As enlisted men, they were the military's lab rats

BY DAVID ZEMAN
FREE PRESS STAFF WRITER

The room is small and cramped, like a vault. The soldiers are in full combat gear, rifles in hand, packs anchored on their backs. As the steel door slams shut, the men look about, this way and that.

And the ground begins to hiss. Army Pvt. Sidney Wolfson notices it at once, a faint green aerosol seeping from the floor, rising in lazy corkscrews around his waist, arms and chest and across his eyes.

It's adamsite, what the troops come to know as puke stuff, a vomiting agent. The soldiers cower. They flop on their bellies and retch. Wolfson rises to leave, but can't. He pounds and pounds and screams for the doctors, but he can't leave. He can't get out!

"It's like I'm in jail," he says, quietly now. And he fidgets. Six decades after exiting the chambers of his youth, Sidney Wolfson sits in his Farmington condo and squirms. He is 85 and frail, but the dream is still vivid, the image keen.

He was young and fit once, part of the 1st Chemical Casual Company, a unit of 100 bright soldiers who struggled through chamber tests of mustard agent, lewisite, phosgene and other poisons on a military base near Baltimore in 1943.

November 10, 2004

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Some are still struggling.

This is the story of patriots deceived -- not once but three times: first as young recruits, conned into entering chambers of lethal gas during World War II; then as war-hardened soldiers, shipped home with no warning of the time bombs lurking in their bodies; and finally as aging veterans, misled by a government that promised to find them, wherever they lived, and compensate those who were harmed.

"At no time after these experiments was I notified or told anything," said Franklin Smith, echoing the account of many men. "They shipped my butt over to the Pacific and that was the last I heard from the War Department."

By the end of World War II, the military had exposed more than 70,000 Army and Navy recruits to poison gases in various forms -- from swabs of mustard agent on their arms, to the more than 4,000 servicemen who marched into chambers or through fields soaked with chemicals. The mission was noble: to develop protective gear and ointments that would insulate troops from enemy chemical attack. The means were not:

Officers deceived the men about the health risks and intimidated those who balked.

The recruits, many still teenagers, were sworn to secrecy. In the decades that followed, some of these veterans sought benefits from the Department of Veterans Affairs for illnesses linked to the tests. But the military had a ready reply: The tests never happened. Not until 1991, when four Navy vets swayed an influential congressman to their cause, did the Pentagon acknowledge the secret program and apologize. The government, at long last, vowed to make amends.

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acknowledge the secret program and apologize. The government, at long last, vowed to make amends.

But the Free Press has found that Washington broke its promise. The VA, which pledged a painstaking effort to track down and compensate the men, contacted nobody. Not one letter. Not a single phone call -- even after the Pentagon turned over lists of thousands of potential victims. The VA relied mainly on unpaid public service ads in veterans magazines, even though the agency was aware that most veterans don't see those publications.

In recent years, a few veterans who did press claims were rebuffed -- often with form letters, and even when it was clear they had diseases linked to the wartime experiments.

VA Secretary Anthony Principi, who as deputy secretary in 1991 pledged to "do right" by the veterans, said in an interview last month he was unaware the veterans had been ignored.

"My assumption was that steps were taken to do what was possible to reach as many as we could find and to provide them with the benefits they've earned," he said. "If more needs to be done, it will be done."

The men of the 1st Chemical Casual Company represent only a sliver of the WWII recruits exposed to poison gases. But to the government, they are less than that. The unit does not even exist in Washington's official database on the testing program. It's almost as if they were never there.

But they were.

And 61 years later, they're still waiting for help.
The soldiers grabbed their gear and stepped wearily from the train.

It was Sept. 3, 1943, and after riding all night through the Appalachians, the men found themselves standing before the front gate of Edgewood Arsenal, a leafy Army outpost on Chesapeake Bay, 20 miles northeast of Baltimore.

It looked swell, that's for sure.

From its inception in 1917, Edgewood's 3,400 acres of rolling farmland and pleasant rivers belied the serious and occasionally deadly work performed in its covert factories. Horses still ambled across fields once crossed by Susquehannock Indians and George Washington's troops. The grounds of the Gunpowder Neck peninsula were thick with sweetgum and blackberry. Overhead, bald eagles shared the breeze with osprey, sandpipers and other shorebirds.

Though the soldiers could not see it from where they stood, the Aberdeen Proving Ground, a testing ground for artillery and other ordnance, lay just to the north across the Bush River.

The twin posts of Edgewood and Aberdeen had sprung up in World War I after the Germans unleashed chlorine gas on Allied troops in Belgium. Edgewood quickly became the headquarters of chemical warfare research, its factories producing chlorine, a lung irritant; chloropicrin, a vomiting gas; phosgene, a lethal choking agent, and mustard gas, a blistering compound that could be lethal if inhaled.

Notoriety soon followed.

"At Baltimore, we began to hear about the terrors of this place," wrote one dashingly named World War I recruit, Jet Parker, as he rode a train to Edgewood in 1918. "Everyone we talked to on the way out here said we were coming to the place God forgot! They tell tales about men being gassed and burned ..."

Another private, Alexander London, wrote a grim ode to Edgewood's perils:

"... If a little drop of any gas would touch the head or face,

It meant a speedy ride and a long stay at the base.

A pal of mine was working at the filling plant one night,

When a poison shell exploded and my pal lost his sight.
He suffered untold agonies, for the poison entered deep,

It was a sight to make brave men stop in their tracks and weep."

But to the 1st Chemical soldiers who arrived in September of '43, Edgewood must have seemed like heaven itself.

The men had entered the Army seven weeks earlier, in a nasty slice of hell known as Camp Sibert, Ala.

They were an unconventional group of Army grunts, that's for sure. Nearly all were college boys or on the way to college. They studied chemistry, which is why they had been earmarked for Sibert, in the military's chemical weapons service.

Most had joined eagerly. Walter Butinsky, the nearsighted son of Ukrainian immigrants, wanted in so badly he memorized the reading test to pass his induction exam. Abe Hedaya, a 19-year-old Brooklyn boy, dropped out of his beloved Columbia University. Franklin Smith could have stayed home to support his widowed mother. But with her blessing, he joined, too. Six buddies signed from the University of Scranton. Six more arrived from Mississippi State University.

And for what, they must have wondered as they arrived in the steamy Alabama summer.

They were put to work building barracks and roads for the 5,000 soldiers descending on Sibert. They received "a spade, a shovel and a short pep talk almost before they had officially reported to their company officers," one historian wrote.

The barracks, if you could call them that, were wooden beams covered by tar paper, with wood-burning stoves at each end. They shielded the men from summer rains, but not from the heat. And certainly not from the insects that drove the soldiers to distraction.

"I wanted to get the hell out of Alabama," said Lee Landauer, a gruff, compact recruit from Baltimore. "Camp was terrible. We were sleeping in tar-covered paper bags."

As for social life, there was nearby Gadsden, or as some recruits called it, Gonorrhea Gardens.

"When you went out there, there was nothing to get out for," Landauer said. "So you never went out again. It was just a hell of a place."

The men were only a few weeks into training when a commander gathered them one day and offered a deal: If they volunteered for chemical experiments in Maryland, they would receive 10-day furloughs. These many years later, the men differ on the particulars of...
what was said that day. But they do agree on two things. The commander was not terribly specific. And the opportunity to decline the offer was never really on the table. "You're not told too much, just line up and shut up," is how Richard Wickens, who now lives in Albuquerque, N.M., described it.

Smith recalled, "There was a great deal of talk about what a wonderful thing this was to do for our country and you guys are heroes and it would save a great many lives.

"I was a totally green 19-year-old. I had grown up in a remote little farming town in Oklahoma called Texhoma. The war was going full blast, and we were all dedicated to winning. They certainly convinced me at the time their motives were pure."

New Jersey recruit Michael Geiger had his own reason to join.

"I think I lost 30 pounds in three weeks in Alabama," Geiger said. "You'd go out on 10- to 20-mile hikes every day -- you couldn't even eat at night, you were so tired. All you wanted to do was drink the water. Any change couldn't have been worse. I ran up and signed."

Even for Southerners, the Maryland shore had its appeal.

"I looked forward to it," said Cham Canon, a self-described country boy from Mississippi. "But with some apprehension, because we did not understand until we got there what we would be doing."

What they would be doing wasn't entirely clear to a lot of the soldiers. "I thought we would be doing studies, working with chemicals," said Wolfson, the recruit from Michigan. "When we got there, lo and behold, it was a different story."

At first, good food and leisure

The soldiers settled in at Edgewood, happy to have quarters with four walls and a ceiling. Spread before them were single beds, widely spaced. Over there were the latrines -- sparkling clean. On the grounds, the men noticed an absence of military staples: no surly officers, no saluting at every corner, not even many uniforms.

That first day, the soldiers savored their first decent meal since leaving their mothers' kitchens. "They gave you all you wanted to eat -- bacon and eggs, real steak," Landauer said. "At Sibert, all you got was chopped beef stew, seven days a week."

This, they could live with.

After a day or so of leisure, the men of 1st Chemical were ushered into Edgewood lab buildings, where they changed into chamber gear: cotton
undershirts and shorts; khaki or herringbone twill pants, shirts and jackets; canvas leggings; a wool hood and white wool socks. The clothing was soaked in agents meant to neutralize the test chemicals, which left the garments stiff and hot.

The gas masks, with their conical snouts and wide lenses, made the men look like immense insects, though they usually kept the poison at bay. Usually. High levels of chemicals could overwhelm some masks. And even a two-day stubble of beard could break the seal around the face.

The men gathered their rifles and backpacks and marched for 30 minutes until perspiration soaked their bodies. They were then placed in single-file lines, a yard apart, before a chamber door.

They entered in groups of five to seven. It might be the chamber in Building 325, a 9-foot-by-9-foot cube of hollow tile; or one of two chambers in Building 358; or the glass cylinder chamber in Building 357.

The door was quickly shut. Researchers peered in through a small porthole as they jotted notes. The mustard vapor entered with a whisper, running through a hose in calibrated bursts. The soldiers recognized the faint odor of garlic, or a pleasing sweetness. The vapor was colorless or a light yellow and they were quickly enveloped as it probed the seams of their trousers, or the rim of their masks, searching for a pathway to their skin.

The warmer the conditions, the more potent the gas became. Indeed, the tests were designed to mimic jungle conditions in the Pacific, where Allied forces guessed the Japanese might unleash chemical shells. In some tests, the exposure level equaled that faced on World War I battlefields. As the men marched in 90-degree-plus heat, with the chamber's humidity kept at 84 percent, they perspired under their arms, inside their hoods, or near their knees and genitals.

They were soon drenched, which only heightened the mustard's ardor for human skin.

Once the gas reached skin, it snaked through pores deep into the tissue, or entered the bloodstream. Within minutes, the mustard quietly went to work, binding to strands of DNA deep within cells, causing them to mutate and die. The damage was irreversible.

Mustard's toll was not immediately apparent. It took hours or days for soldiers' skin to turn crimson along sweaty regions like the thigh or buttocks; or where skin was bare, like the hands or neck.

The skin began to itch and burn like a griddle. A day later, the red patches turned to watery blisters 2 inches high. The fluid was actually
the body's tissue, which had liquefied under the assault.

"They told us not to puncture it," Smith said. "But if you turned your arm a quarter turn, the weight of the fluid would tend to separate the skin from your arm. So some guys just punctured these things, because it hurt so bad."

Painkillers helped.

Other men suffered grotesque burns on their genitals, causing their scrotum and penis to swell and blister, the skin to peel away in strips. Years later, some discovered cancerous skin growths or genital scarring that made it difficult to father children.

Sometimes, frayed uniforms left elbows or legs exposed. Other times, the gear was almost comically inadequate. Take, for instance, the neck and ear protection afforded soldiers in some tests, as described in a 1943 Army record: "Two socks wrapped around the neck, with the upper portion of a sock covering each ear. The socks are held in place by string and by the gas mask straps."

Equipment breakdowns were common in the trials, which lasted up to two months. Faulty masks allowed vapors to bind to the eye, causing soldiers' eyelids to swell and spasm.

Their noses ran steady, like the onset of a cold. They emitted a dry cough and began to vomit. The mustard had reached their lungs, inflaming the tracheal lining, which might simply slough away. Years would pass, even decades, before other problems arose.

A willing sacrifice

America, as historians remind us, was a far different place in the 1940s from the era since Vietnam. Isolationist sentiments that prevailed when war erupted in Europe in 1939 largely evaporated after Japan attacked Pearl Harbor in December 1941. Millions of men enlisted to fight. Millions of women joined factories that fed the war machine. Children collected scrap metal for tanks. Civilians rationed sugar, coffee, gas and other staples. Sacrifice was the theme and urgency its byword against a potent and frightening enemy. The notion that a few people might sacrifice for the greater good of our troops was neither controversial nor seriously questioned.

The United States spent more than $25 million on ethically dubious studies to find antidotes for conditions faced by troops: orphans were injected with dysentery; prison inmates were given malaria; mentally ill people were infected with influenza.

Against this backdrop, military scientists were exhorted to improve the protective gear used by American troops. Young recruits -- still
"We desperately needed research in a variety of areas to move the war effort forward," said David Rothman, director of the Center for the Study of Society and Medicine at Columbia University. "Patient consent, which had been recognized earlier as a major consideration, was now ignored because the military's needs seemed to trump all others. It was purely a utilitarian calculus: the greatest good for the greatest number."

America's fear of chemical attack was well founded. The Germans had released chlorine and mustard gas against the Allies in World War I; Japan and Italy had used poison agents in the 1930s. Such was the fear that the Walt Disney Co. designed a Mickey Mouse gas mask so children would not be afraid to use masks in the event of an assault.

In their initial research, U.S. scientists used goats, cats and other animals to test mustard and other blistering agents on the skin. But they found it difficult to extrapolate the results to human skin. Scientists thought they solved this dilemma by using Mexican hairless dogs, but abandoned the plan after the dogs proved too costly.

They eventually concluded only human skin would do. Citing tests already under way in Canada and England, U.S. officials played down the health risk to humans.

"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," Alfred Richards, the chairman of a government committee on medical research, wrote to Secretary of War Henry Stimson in April 1942.

The Army and Navy secretaries formally approved the test program a month later.

**A break from camp**

That autumn -- one year before the men of 1st Chemical arrived -- the first 200 soldiers from Camp Sibert were shipped to Edgewood for "patch tests" on their arms. The arrangement ended badly. Sibert's officers howled about the loss of their soldiers. And it soon became apparent that few soldiers at Sibert were eager to replace the first wave of volunteers.

That "may have been due to the look of the scars on men returned to the training companies," wrote Rexmond Cochrane, a military historian stationed at Sibert during the war.

So commanders in Washington hatched a plan to make the tests more
palatable. They promised the men furloughs and a change of scenery in exchange for their willingness to test "summer uniforms." It worked. By war's end, at least 4,000 soldiers and seamen were tested at more than a half-dozen facilities beyond Edgewood -- from Florida to Illinois, Utah, Panama and, in great numbers, at the Naval Research Laboratory in Washington.

Insurrection was never a problem. Commanders made sure of that.

"The fact that has been most obvious throughout these experiments is that when the men first begin the work they should not be told too much," a Navy commander wrote in August 1943. "If they are, it sets up a fear reaction that remains for varying lengths of time and definitely affects their 'virgin' runs in the chamber, and, occasionally, requires a removal from the chamber before the run is completed. However, after the first two runs in the chamber, the men become veterans and can be told almost anything without affecting their morale."

That sounded about right to Landauer of Baltimore who, despite encounters with mustard gas, lewisite and what he believed to be nerve agent, preferred his lot at Edgewood to the perils of combat in Europe.

"It was a question of having a pretty good life and figuring these guys aren't going to kill you," Landauer said of the Edgewood scientists. "Once you last three or four days in the chamber without dying, you figure, 'What the hell!'"

Only rarely did recruits balk. When that happened, the Navy memo noted, "A short explanatory talk, and, if necessary, a slight verbal 'dressing down' has always proven successful. There has not been a single instance in which a man has refused to enter the gas chamber."

Recruits who complained of nausea, headaches, laryngitis or eye infections were told their "physical unfitness" -- not the tests -- was to blame. "Occasionally," the memo continued, "maligners and psychoneurotics are discovered. These cases have all been handled so far by minimizing their symptoms and then sending them into the chamber."

As critics would note decades later, U.S. scientists downplayed the dangers despite research dating to 1928 of long-term ailments linked to mustard gas. Medical journals in the United States and abroad reported bronchitis, emphysema, bronchial asthma and conjunctivitis among World War I chemical casualties. By the late 1930s, delayed-action blindness also was reported.

But these medical findings were never shared with the World War II guinea pigs.
Watching the rabbit die

Some men in 1st Chemical were sent into chambers without masks. Joining the soldiers in one test was a very unhappy rabbit. The men trudged in and waited for the vapors. It is unclear which gas was being tested that day, but whatever it was, it didn't sit well with the rabbit, which fell over and died.

"I can still see the expression on this one poor guy's face," Landauer recalled. "He was pounding on the door. He wanted to get the hell out of there."

On another day, Pvt. John Berzellini, an asthmatic, grew increasingly anxious as his mask filled with drool and mucus. Hours passed, but the researcher monitoring the test would not allow Berzellini to leave. He had to tilt open the mask to drain the fluids, exposing his face to vapors. "He was forced, asked, cajoled to stay in there," recalled Bill Chupka, who was inside the chamber with his friend. "I suppose that if he collapsed he would have been removed immediately."

In Building 326, meanwhile, soldiers were exposed to another blistering agent, lewisite, an arsenic-based compound with the scent of geraniums. Touted as the dew of death by newspapers of the day, lewisite never quite fulfilled its promise as a more lethal successor to mustard gas. While mustard bided its time, lewisite caused immediate pain and blisters. Yet the oily liquid was not nearly so toxic as a battlefield vapor and eventually fell into disfavor.

Blistering agents were not the only poisons at Edgewood.

Some men said they were subjected to what they described as low levels of nerve agents, designed to incapacitate enemy soldiers during an attack. Among other things, exposure to the agent caused the men's pupils to shrink to the size of pinpricks and blurred their vision for days.

"They took us out to shoot at the rifle range," Landauer said. "Then we came back and they put us in a chamber, eight to 10 of us, for less than a minute. It was some kind of nerve gas. Then it was back to the rifle range to re-shoot the same targets. By the time we got out there, we couldn't see the targets.

"Our buddies had to cut our food up for us that night."

What's remarkable about these accounts is that the Pentagon has always maintained it did not conduct human testing with nerve agents -- such as sarin -- until after World War II.

Pentagon officials did not respond to requests for comment on whether nerve agents were tested.
Though the tests were harrowing, the time between them was a pleasure.

The men passed their downtime, which was considerable, reading books, playing cards and getting to know each other. The base had a library and movie theater. Its staff arranged dances with local girls. Soldiers usually could find enough friends for a game of baseball or volleyball. Walter Butinsky whipped all comers at chess. On days off, the men took a train or bus to Washington or Baltimore for burlesque shows or dates. For the Eastern boys who went home on weekends, the greatest fear was that their parents would see their burns and raise hell with the military.

Jesse Schraub, who had never left Brooklyn before enlisting, remembers one humid evening having dinner back home, wearing long sleeves to cover his burns. "The pain was excruciating, but of course, I wasn't supposed to tell anybody," Schraub said. "I was afraid of what my dad's reaction would be."

Some men formed close bonds. In their first weeks at Edgewood, some Christian soldiers took on extra kitchen and guard duty so their Jewish buddies could go home for Yom Kippur. The men held friendly wagers over whose arm yielded the biggest blister. For those with more severe burns, friends stood ready to help them comb their hair, or use the bathroom.

"It was the first time I began to feel like a person in the Army, like an individual," Howard Hoffman wrote in a war memoir.

For some men, it was a sad day when, in late October, they were returned to Alabama.

"My husband was very happy at Edgewood," Nellie Strauss said of her husband, Alfred. "He was a good soldier and he felt he was doing his duty. He never complained."

Nellie concedes she was pretty tickled, too.

"He was way over 200 pounds when I married him, and he went down to 170 pounds when he came home," she said.

"He looked gorgeous."

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VETERANS KEPT THE MILITARY'S SECRET, SOME UNTIL DEATH
AFTER CHEMICAL TESTS REVEALED, REDRESS PROMISED
DAVID ZEMAN FREE PRESS STAFF WRITER

Al Felgendreger entered World War II an anonymous Army grunt. He exited a war hero, gaining three Bronze Stars in the Pacific.

Friendly and bright, Felgendreger returned to Philadelphia after the war to embrace his new wife and his own lofty ambitions.

His life was busy, secure, overflowing with promise.

And then, suddenly, it was not.

In 1955, Felgendreger suffered what his wife Eleanore characterizes as a nervous breakdown. The outgoing chemist was now depressed, sluggish, and reluctant to leave home. There were times when he drank too much. He asked his pastor to care for his wife and three children if something happened to him. He spent two months in a hospital.

"I've always wondered," Eleanore says now, "if those tests could have caused that."

The tests that haunt Eleanore Felgendreger do not appear in her husband's Army records. Like thousands of World War II soldiers and sailors, Felgendreger's work as a human guinea pig was omitted from his file. In the autumn of 1943, he served in the 1st Chemical Casualty Company, a unit exposed to mustard agent and other poisons in the gas chambers of Maryland's Edgewood Arsenal -- tests that would stalk some men, physically and psychologically, until their deaths.

Tests they were forbidden to discuss.

With the help of a psychiatrist, Felgendreger eventually regained his footing and returned to work.

But he never discussed his breakdown again.

Best and the brightest

If ever an Army unit was poised for excellence, it was the 1st Chemical Casualty Company.

Mostly young science buffs, the soldiers of 1st Chemical had been culled from science programs across the country for chemical warfare training. But they soon learned that their value to the Army was more as lab rats than lab scientists.

They were shipped to Edgewood and herded into chambers to test how long uniforms, ointments and gas masks could withstand chemicals that might be unleashed in combat. When the experiments ended two months later, some, like Felgendreger, would gain Bronze Stars and Purple Hearts overseas, or embark on estimable careers in science, medicine or academia.

Their ranks included Ivy League professors, computer pioneers, chemists at Fortune 500 firms, a Guggenheim Fellow, and another fellow who pursued the life of a pastry chef.

Scanning the resumes, one might assume Edgewood was but a brief interlude in a soldier's life -- distasteful, perhaps, but long since forgotten.

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Yet many soldiers quietly took Edgewood to their graves. Sworn to secrecy, or just plain stoic, the men of 1st Chemical rarely spoke of the harrowing experiments at the Maryland camp -- not to their families, and not to their doctors, even as they succumbed to diseases they traced to Edgewood. Decades later, no one can say for sure whether Felgendreger's collapse also was linked to those chambers. What is known is that, for many of these men, the silence that surrounded the project began to feel like a prison, one that separated them from their wives and children, one they felt they could never escape. In 1983 -- 40 years after the chamber tests -- Lee Landauer of suburban Baltimore began treatment for skin cancer that still bedevils him. His elderly mother delicately broached the subject of his service. What, she asked, really happened at Edgewood?

"Nothing I can tell you," the ex-platoon sergeant said.

And that was that.

Some families learned of the chambers and their psychological hold on the soldiers only after the men died. They would be sorting through papers left by the men and discover a journal or note that betrayed a well-guarded despair.

"See what happens when one has been involved with Army poison gasses?" Albert Jasuta, a veteran with leukemia and lung disease, wrote, seven weeks before his death.

To be sure, of the scores of soldiers from 1st Chemical interviewed for this article, several spoke favorably of their work at Edgewood and defended the military's decision to expose at least 4,000 soldiers and sailors to dangerous levels of toxins in chamber and field tests. Germany and Japan had used chemical and biological weapons in the past, they noted. The United States had a duty to protect its troops, to learn all it could about how mustard might spread along the front lines of Europe, or the tropics of the Pacific.

"We were going against Hitler!" said Brooklyn recruit Abe Hedaya, pausing to let his point register. "He was crazy, and we had to get him!"

Whatever the program's merits, this much is certain: Pentagon officials lured young recruits from boot camp with the promise of furloughs, then bullied them if they tried to back out. They misled the men about the health risks involved, then denied the tests ever took place. For nearly 50 years, the secret held.

Even as some men faltered.

Worse than combat

For many relatives, the soldier who marched off to Edgewood in '43 was different from the one who returned after the war. Of course, that is generally true of soldiers in all conflicts; war changes those who fight it. But something about the experiences of the chemical volunteers in sealed chambers, and their inability to talk about their experiences, transformed them in ways even combat never would.

Pvt. Francis Earnshaw Jr., a lanky blond chemical engineering student from West Virginia, saw his military career collapse one afternoon in November 1943, a few weeks after he left the chemical testing at Edgewood and returned to boot camp at Camp Sibert, Ala. As his company drilled that day, Earnshaw was overcome with anxiety and laid down in the field, unable to move until other soldiers carried him to bed. When Camp Sibert doctors saw him later, Earnshaw's lip quivered and he fought back tears. He'd been having headaches, he said, brought on by "nerves." He was hospitalized for a month.

"He does not have enough confidence to feel that he will be able to adjust," an Army psychiatrist wrote. "Diagnosis: Psychoneurosis, anxiety type, manifested by sleeplessness, nervousness and mild depression."

Earnshaw's records are typical of ailing chemical soldiers in that they make almost no reference to the experiments that preceded his hospitalization. From his file, it is unclear whether Earnshaw even told doctors he had taken part in chemical tests. This was not unusual. Even doctors stationed at Edgewood during the war were often not told what chemicals had injured their patients.

Earnshaw received an honorable discharge in December 1943. Yet even though he was released on medical grounds, the government denied his claim for disability, ruling that his nervous condition was unrelated to his military service.

He died of a heart attack in 1997, having never discussed Edgewood with Mary Jo, his wife of 50 years.

Not every soldier's life ended badly -- far from it. For many in the unit, the postwar years were marked by academic success and staggering career advancement.

After his war service, Bill Chupka left the coal country of eastern Pennsylvania for a classical education at the University of
Fraternity life, as Chupka tells it, was more "Masterpiece Theatre" than "Animal House."

"The evening conversations were, very civilized arguments more typically centered on Socrates, Plato, Aristotle ... Nietzsche, Einstein, national politics and other serious affairs," Chupka, now professor emeritus of chemistry at Yale and a former Guggenheim Fellow, recalled in an e-mail. "The music was exclusively classical and opera."

Other soldiers flourished as well. Walter Butinsky became patent counsel for Eli Lilly and Company. Roy Wiig was a pioneer in computer program development at IBM. John Hogan returned to Bountiful, Utah, as a family doctor. Thomas Mullen was an engineer at B.F. Goodrich. Cason Callaway Jr. became a respected businessman and philanthropist in Pine Mountain, Ga.

The veterans of 1st Chemical grew comfortably into middle age, gradually putting their war service behind them, or so they thought.

Cold War changes

As the Cold War shifted the focus of military research, Edgewood also evolved.

From 1950 well into the 1970s, Edgewood scientists -- concerned that the communists were developing truth serums -- began their own research into mind control. They began testing the effects of LSD and other hallucinogens on U.S. servicemen and civilians, often without their consent. It was not until the early 1970s that the military's treatment of its servicemen was seriously scrutinized as evidence also emerged that Americans were being mistreated in a variety government research ... from bacteria injected into children at an Ohio orphanage; to radiation exposure on prison inmates; to the Tuskegee Experiment, in which government researchers declined to treat 400 impoverished black men for syphilis so the scientists could monitor the course of the illness.

Like the World War II chemical program before them, the studies marked an unsettling shift in scientific research. With each new experiment, wrote medical ethicist David Rothman, clinical investigations were being designed "to benefit not the research subjects, but others."

Yet while dozens of government abuses were exposed, the World War II chemical tests remained shrouded in the decades-old vow of secrecy.

In the 1970s, a few Army and Navy veterans claimed illnesses they traced to chemical testing. But one by one, the Defense Department thwarted the claims by simply denying the experiments took place.

Most veterans accepted the rejections and faded away.

Nat Schnurman plowed on.

Finally, some answers

Schnurman, who lives on a bluff above the James River outside Richmond, Va., was sitting with his wife in his doctor's office one day in 1975, wondering why his body seemed to be breaking down at age 50. He had lung disease, hearing loss and vision problems. He had chronic pain in his legs, chest and stomach. After undergoing medical examinations for decades, he was at a loss to explain his faltering health.

His doctor, who by coincidence had once trained at Edgewood, asked Schnurman if he had ever worked with chemicals.

"No," Schnurman replied.

"Were you ever in the service?"

"Yes."

"Were you ever in any..." and here the doctor paused, "special programs?"

Joy Schnurman, who until then had known nothing of her husband's participation in mustard gas testing, recalls vividly what happened next.
"Nat just turned white as a sheet," she said. "And then the tears came and came, and out came the story."

Schnurman joined the Navy at 17 and was sent to Bainbridge Naval Training Center in Maryland, where volunteers were being recruited to test "summer clothing."

He was sent to a gas chamber at Edgewood six times in seven days. On his last visit, a blend of mustard gas and lewisite was piped in. Schnurman was overcome with toxins, vomited into his mask and begged for release. The request was denied. His next memory is of coming to on a snowbank outside the chamber.

He completed his Naval service, but his health steadily grew worse. He told no one of the tests at Edgewood until that 1975 doctor's visit.

Schnurman filed for benefits from the VA and spent the next 17 years pursuing records that would support his claim. Blocked at every turn by a bureaucracy that denied access to his files -- that denied in fact that he was ever at Edgewood -- Schnurman eventually collected box loads of documents.

His cause also benefited from renewed attention to chemical warfare in the late 1980s, most notably by Iraq's use of mustard gas on its own Kurdish population and in its war with Iran. In 1989, an Australian documentary, "Keen as Mustard," exposed how the Australian government denied the claims of its World War II soldiers because it did not want to reveal its role in human testing. That same year, a Canadian journalist exposed Canada's World War II program. In July 1990, the Richmond Times-Dispatch published the first of many stories on U.S. chemical gas veterans.

Around the same time, Schnurman's story caught the interest of producers at "60 Minutes" and Porter Goss, a Florida congressman. Goss, who is now CIA director, lobbied colleagues in Congress to compensate Schnurman and other World War II chemical volunteers for their illnesses.

But not until June 11, 1991, days before a "60 Minutes" expose on Schnurman's saga, did the Pentagon acknowledge the WWII program for the first time. The VA immediately announced it would compensate veterans who took part in chamber or field tests, or who were exposed to high levels of toxins in the production or transport of chemicals, for any of seven illnesses.

VA promises action

Because the military destroyed or hid many records relating to chemical testing, the VA also said it would relax the evidence required to prove an illness was linked to service. Under the new rules, veterans exposed to poisonous gases would only have to show they later suffered from laryngitis, chronic bronchitis, emphysema, asthma or some other diseases to win benefits.

The VA asked a committee of the National Academy of Sciences to see if any other diseases could be linked to the chemicals. Jay Katz, a Yale University law professor and ethicist, urged the committee to look beyond the medical literature and demand that the military track down every veteran, or his family, and warn them of the health risks. "The soldiers who 'volunteered' for these experiments had every expectation that they would be treated fairly by their officers and surely by the physicians," he wrote. "As doctors, we ask our patients to trust us, and this trust was manipulated, exploited and betrayed... You have no choice but to recommend that [the volunteers] be apprised of what had been done to them. Doing otherwise is an abdication of medical responsibility."

In January 1993, the committee issued "Veterans at Risk," a chronicle of the mistreatment of World War II chemical volunteers. The servicemen, the committee found, were recruited "through lies and half-truths."

"Most appalling," the committee wrote, "was the fact that no follow-up medical care or monitoring was provided for any of the World War II human subjects," for thousands of chemical warfare production workers or for the hundreds of military personnel who survived a mustard gas ship explosion in Bari, Italy, in 1943.

The committee urged the VA to identify "each human subject in the WWII testing program's chamber and field tests," as well as chemical production workers so they could "be medically evaluated and followed by the VA."

Even for dead veterans, "their surviving family members deserve to know about the testing programs, the exposures and the potential results of those exposures," the committee said.

The report also added to the list of diseases linked to testing: respiratory cancers, skin cancer, a variety of skin abnormalities, leukemia, chronic pulmonary disease, sexual dysfunction, and mood and anxiety disorders such as post-traumatic stress disorder.

The report dismissed the argument that the exigencies of war justified the tactics used to recruit volunteers. The military's use of its own personnel in LSD and radiation programs "demonstrated a well-ingrained pattern of abuse and neglect," the panel concluded.

Upon the report's release, the Defense Department quickly accepted the recommendations, apologized, and pledged to help the VA find the men.

"The years of silent suffering have ended for these WWII veterans who participated in secret testing during their military service," declared Anthony Principi, then acting VA secretary.

The VA announced it already was taking steps to find veterans involved in the tests and grant them the benefits they deserved. The agency directed its regional offices to track Navy and Army claims involving chemical exposure. "This log should be kept current and available for random review," the directive said.

The VA asked the Defense Department for any rosters of servicemen involved in the tests. Once the names were gathered, the VA pledged to collaborate with the Internal Revenue Service and the National Institute for Occupational Safety and Health to obtain current addresses for the veterans so they could be contacted directly. Valid claims could fetch up to $1,730 a month in disability, as well as free medical care. Widows also could qualify.

By early 1993, government assurances were plentiful and upbeat.

"Be assured this will not be treated as business as usual," President Bill Clinton declared in February 1993.

Nobody really knew how many WWII gas veterans and chemical workers were still alive.

"It may be in the tens of thousands," Goss told a House subcommittee. "That is an astonishing number of people to have gone through a process, which we have, as a government, officially denied ever happened."

But for many of the soldiers in the 1st Chemical Casual Company, the assurances were too late.

Albert Pike, who owned a medical supply store in Akron, Ohio, died of lung cancer and respiratory failure on May 8, 1990, 13 months before the military came clean.

He received no benefits for those diseases.

Pike, however, had received compensation for mustard burns shortly after the war. On Jan. 30, 1946, one day after he was honorably discharged, the VA awarded Pike a monthly disability pension of $11.50 for the burns.

During the long illnesses that killed him at age 67, Pike never contacted the VA to file a new claim. And for many years after "Veterans at Risk" was published, his family never heard from the government. But in 1998, his children said, Pike's widow received a letter from the military inquiring about his health. The answer was in Pike's VA file, if anyone had bothered to look. The VA had paid $450 for Pike's burial. It classified his death as 'non-service related.'

His widow was given a flag

A LIFETIME OF SECRET BATTLES

A junior at Yale when he entered the Army, Frank Cavanagh suffered mustard burns on his scalp, neck and hands in Edgewood's chemical testing chambers, before commanding a chemical mortar unit in the Pacific.

He died Jan. 2, 2002, in a West Palm Beach, Fla., hospital after a 30-year battle with squamous-cell skin cancer on his scalp, neck, ears, face and torso. He refused to file a claim with the Department of Veterans Affairs, even though he "was constantly having things cut off and burned off," said Carol Hickman, his daughter.

"I said to him, 'I'm sure you can go to the VA,' " Hickman said. "He wouldn't even discuss it."

After his death, she found a military roster from Edgewood among his belongings. She searched for the soldier listed below her father's name, a search that took her back to Yale, where that soldier, William Chupka, is now a professor emeritus.

Three weeks after burying her dad, the professor told Hickman about her father's sacrifice in 1943, and she finally learned the story of Edgewood.

NO BENEFITS FOR A DECORATED VET

A Chicago Army recruit, Zenon Siepkowski won a Purple Heart and Bronze Star while fighting in Europe. He died in 1999 from respiratory failure after years of battling leukemia, both of which have been linked to chemical testing. He never sought...

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benefits from the VA and the government never contacted him.

After he died, his family asked the VA to help pay for his burial. The VA refused, saying Siepkowski was "not . . . entitled to disability compensation" when he died. "We never followed up on that," said his son Richard Siepkowski, "because it just wasn't worth it."

HE CATALOGED TESTING PROGRAM

One of six Army recruits from the University of Scranton who volunteered for testing, Albert Jasuta was treated in his final years for cataracts and pulmonary fibrosis (lung scarring) that left him short of breath and coughing to clear his lungs.

He was hospitalized with acute myelogenous leukemia in 2000, suffered a stroke and died.

Afterward, his daughter Jill was sorting through papers at his home near Philadelphia and discovered a cache filled with military secrets. For years, he had quietly saved scraps of articles and government studies on the WWII testing program, underlining passages on diseases that matched his own.

"See what happens when one has been involved with Army poison gases ..." he wrote seven weeks before his death.

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Illustration: Photo: Photo Edgewood Arsenal Archives; Photo J. KYLE KEENER/Detroit Free Press; Photo Schnurman family photo
On the morning of March 10, 1993, as a blizzard barreled toward the East Coast, two senior officials from the Department of Veterans Affairs sat before a congressional panel and explained how the VA planned to track down thousands of World War II veterans exposed to hazardous chemicals.

"There is no doubt this is a dangerous occupational exposure," Dr. Susan Mather told the House subcommittee. "So we will get their current names and addresses from IRS and then we will notify them directly of their exposure and ask them to come in."

Nearly two years had passed since the Pentagon first acknowledged that it deliberately injured at least 4,000 soldiers and sailors in secret chemical tests during World War II. The Pentagon pledged to search for lists of these veterans for the VA.

Sitting below crystal chandeliers and a 30-foot arched ceiling accented with gold trim, Mather, a VA assistant chief of environmental medicine and public health, and John Vogel, deputy undersecretary for benefits, assured the congressmen the VA would actively pursue the men. "One cannot lose sight of the fact that medical care may be needed for these people," Vogel said.

Rep. Michael Bilirakis, R-Fla., pressed the point: "You are not waiting; you are not sitting back, basically, and waiting for claims to be filed by them?"

"Oh, no, not at all," Vogel said.

Starting the fight

Just north of Washington, a veteran of the 1st Chemical Casual Company, wracked with skin cancer, felt the jolt of history.

Lee Landauer picked up his newspaper in suburban Baltimore one morning and learned -- for the first time, he said -- that the military misled his unit about the dangers of the chemical tests; that the poisons used on him in 1943 could kill him 50 years later. He learned something else, too: Washington stood ready to help.

Landauer felt liberated. The secret was out; his sacrifice acknowledged. And, for the first time in a decade, the cancer that had picked at his face, arms, neck, back and chest could be explained.

"They made it sound like the government wanted to see me," Landauer said.

He pulled on his jacket and headed downtown to file a claim.

For the aging warriors of the 1st Chemical Casual Company, the flurry of attention the World War II program received in Washington in the early 1990s produced a rush of memories, and a disturbing new lens through which to view them.

As young recruits in 1943, they were locked in gas chambers with mustard, lewisite and other poisons to test protective clothing. They were told to keep quiet about the tests, to accept the nausea and burns to their skin, eyes or throat. In return, they were offered extended furloughs and the promise that their scars would heal, that the pain was temporary.

Patriots to the bone, the men of 1st Chemical had respected their oaths, even as their bodies began to falter and their
suspicions rose about the chambers they once had entered so willingly. One study showed that a majority of servicemen sworn to secrecy kept their pledge even 50 years later, still believing they'd be sent to Leavenworth if they talked.

But now with the secret finally, wonderfully, cathartically, out, it was time to rethink old assumptions. Did years of sun cause their skin cancer, as they always had believed? Did cigarettes cause their emphysema? Was it their two months at Edgewood or a lifetime of lab work that made them sniffle and hack all winter?

Entering a gas chamber with their buddies seemed like such a small sacrifice when they were recruits. A half-century later, the experiments began to take on a more menacing cast.

"Someone once asked him why he did it," Elsie Weaver said of her husband, William, who suspected he had health problems linked to the testing and died in 1988. "He said, 'Well, I was 18. When you're 18, you don't think you'll be dying of anything the government is going to give you.'"

It is difficult to say how many of the 100 soldiers from the 1st Chemical unit were still alive when the government finally owned up to the experiments in 1991. Many had died obscurely years earlier, their lives -- and deaths -- a mystery to a government that now vowed to find them.

But that was in the past. Whatever Washington's mistakes, it now professed a commitment to locate chemical test veterans, wherever they lived.

"The years of silent suffering have ended for these WWII veterans who participated in secret testing during their military service," Anthony Principi, then-acting-secretary of Veterans Affairs, declared in 1993.

"Be assured," echoed President Bill Clinton, "this will not be treated as business as usual."

It was time to take care of these men.

Up stepped Alfred Strauss.

A contrary diagnosis

In June 1993, at age 80, Strauss wrote to the VA from his Century Village apartment in Deerfield Beach, Fla.

The retired chemist's medical records showed he suffered from several ailments linked to World War II testing: emphysema, chronic coughing and congestion, chronic obstructive lung disease and bronchitis. He just could not seem to catch his breath.

The VA sent Strauss to be examined by Ft. Lauderdale doctor Edward Michaelson.

In a Nov. 12, 1993, report, the doctor pinned Strauss' ailments on his weight -- he was 5 feet 9 1/2, 202 pounds -- and a prior smoking habit. Inaccurately noting that Strauss had no history of bronchitis or emphysema, the doctor wrote, "It does not appear as if any exposure to inhaled irritant chemicals or fumes have contributed to his mild to moderate respiratory problem."

Perhaps the doctor was right. It was difficult to say, 50 years later, whether chemicals or nicotine caused Strauss' breathing problems. But the VA's stated policy was to resolve such conflicts in favor of the veteran. The VA had relaxed its requirements for granting mustard gas claims because the military's own policies -- the decades of secrecy, the reluctance to include chemical records in personnel files -- made it more difficult for veterans to prove their claims. The VA nonetheless rejected Strauss' claim, relying on the doctor's report. Reached recently at his Florida office, Michaelson said federal privacy law prevents him from discussing individual patients. He said, however, that linking a patient's lung disease to past chemical exposure is a complex task, requiring doctors to consider all aspects of a patient's history as well as the chemical involved.

"Just because someone was exposed to something doesn't mean they suffered any permanent impairment related to that exposure," he said. "The answer you're looking for is not a simple answer."

VA officials declined to comment on the specifics of Strauss' claim.

But Principi -- who was not at the VA when Strauss' claim was rejected -- told the Free Press last month such cases are troubling, if true.

If the chemical test veterans are being forced to prove their ailments were caused by the experiments, VA officials "are not applying the presumption correctly," Principi said. "If it's clear from the medical evaluation that you have a certain disease and there is clear, concrete evidence that you were exposed to mustard gas during some period of time, then you're deserving of compensation. I mean it's as simple to me as that."
False hopes

Around the time Strauss wrote to the VA from Florida, Sidney Wolfson of Farmington received an excited phone call from his brother.

"Sid," his brother Chuck said, "I've got something I'm sure you will be interested in." It was a newspaper article from Washington, perhaps the same one that Landauer had scanned in Maryland, or that had prompted Strauss to write from south Florida. Wolfson recalls reading the article and feeling relieved. "It was the first time I understood I was able to talk about it," Wolfson said. "It made me feel a little better."

He felt sure the VA would embrace his claim.

His medical file showed treatment for asthma, emphysema, bronchitis, lung disease, depression, anxiety and sexual dysfunction -- all linked to chemical testing at Edgewood.

Unlike most veterans, Wolfson maintained a meticulous record of his Army service. He had kept a photograph of his Edgewood unit, and a 1944 commendation from the Chemical Warfare Service thanking the men for enduring "pain, discomfort, and possible permanent injury" through "exposure to chemical agents."

In a shaky scrawl, Wolfson filled out a VA request for compensation, saying he had never sought benefits before, but his faltering condition and his wife Florence's deteriorating health made it difficult for him to earn extra money preparing taxes for other retirees. "Hopefully, I will be entitled to some compensation which will benefit our late years," he wrote.

But like Strauss in Florida, Wolfson's VA exam sealed his fate. He was sent to a VA-approved osteopath, who concluded that Wolfson was free of every disease linked to chemical testing.

Lung disease, asthma, bronchitis, emphysema -- all gone. Even the scarring on his arms from mustard patch tests was no longer visible, the doctor said -- despite clear evidence of arm burns, visible today.

The VA officially denied Wolfson's claim seven months later. In its rejection letter, the VA found, among other things, that he produced "no record of exposure to mustard gas in service." This, despite the fact that his name and service number appear on the roster and commendation order of chemical test volunteers in his VA and military files.

"You have the right to appeal this decision," the VA wrote in March 1994.

But Wolfson said he felt defeated. He accepted the ruling and moved on.

Retreat and surrender

Why did the men of 1st Chemical give up? Why would soldiers, some of whom risked their lives overseas, surrender so meekly to a rejection letter?

A few said they felt guilty seeking benefits for injuries suffered outside of combat. Others were dispirited from past VA skirmishes. Indeed, the files of several 1st Chemical soldiers show how they were forced to haggle with the VA for even minor benefits immediately after the war. Others received stern letters ordering them to return "overpayments" of as little as $17 in pay after their discharge.

John L. Hannon, a 1st Chemical volunteer from Delaware, was repeatedly denied benefits after the war for injuries common among chemical test veterans -- blurred vision, conjunctivitis, congestion, breathing problems and anxiety.

In 1999, Hannon again sought benefits, this time for anxiety, nose and eye problems. In denying his claim in 2000, the VA wrote, "(T)he evidence does not show full body exposure to mustard gas during active military service."

In fact, Hannon's file meticulously records his exposure.

"This man volunteered and participated in tests conducted by the Medical Division," states an Edgewood record in his VA file. Hannon suffered "2 plus erythema [blisters] on hands" after being "exposed to H [mustard] vapor in the chamber." The chemicals' toxicity produced "slight systemic effects."

Hannon, too, declined to appeal.

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As the 1990s rolled on, illness and death took a firmer hold on the men of 1st Chemical.

That is not unexpected in men reaching their 60s. But it was the way they were faltering -- from cancers, skin and respiratory diseases -- that raised questions about the legacy of Edgewood.

1994: John Hogan, a physician in Utah, went to his grave believing the chronic pain on his leg could be traced to a frayed Army uniform that allowed chemicals to burn his skin. "It would flare up and be burning and red and itchy; he just knew it was from the mustard gas," said his wife Valera. "He'd say, 'If that thing didn't have holes in it, I'd have been all right.'"

1995: John Berzellini, an asthmatic locked in a chamber for hours as his mask filled with mucus and drool, died of heart failure in Maryland. The skin on his hands was as delicate as crepe paper. And every winter he was bedridden for weeks with what his wife Irene called "a bronchial thing."

1997: Francis Earnshaw, the West Virginia recruit sent home for "nerves" only to have his disability claim rejected, died in Ohio. Mary Jo, his wife of 50 years, did not learn the details of his Edgewood training until recently, when contacted by a reporter. "He was a guinea pig," she declared.

1998: Paul Walters, a Missouri jeweler, died of leukemia, without ever telling doctors about Edgewood's chambers.

1999: Zenon Siepkowski died after a battle with leukemia and respiratory disease.

Five veterans. Five deaths. None sought benefits for the illnesses that tormented them.

After Siepkowski's death, though, his family did apply for burial benefits. The request was rejected -- the VA declared his respiratory problems were unrelated to his service.

"We never followed up on that," said his son Richard. "It wasn't worth it."

Some Pentagon assistance

But as the men of 1st Chemical faded, a small team of Pentagon workers was aggressively attacking its mission, combing through archives and remote warehouses -- three, four or five times -- to find the names of soldiers, sailors or other Americans exposed to chemicals.

The obstacles were daunting. Many Army and Navy chemical rosters had long since vanished, or contained only last names. More critically, millions of World War II Army files perished in a 1973 fire at a St. Louis, Mo., records center, leaving Pentagon sleuths to search elsewhere.

Martha Hamed, a Pentagon supervisor assigned to the project, recalls spending winter days in the mid-1990s shivering in an unheated Utah warehouse, dragging boxes of veterans' records to a sunny spot on the floor to keep warm.

Col. Fred Kolbrener, a now-retired project leader, said, "We literally went down a shelf -- 'You've got this shelf, I've got that one' -- and we just read everything on that shelf. If we found anything at all that might have names in it, we grabbed it."

Pentagon workers sometimes called veterans directly to ensure they had the right man. "A lot of us were personally invested in it," said Hamed, whose father fought in World War II. Veterans "would call the office and say, 'I'm dying, can you help me?' It was heartbreaking. So we were on a mission. We tried to leave no stone unturned."

From 1994 through 1997, the Pentagon compiled roughly 6,500 names -- forwarding lists to the VA as they were gathered. "A couple times a month we'd be dropping stuff off at their offices," Kolbrener said. The Pentagon even sent new commendations to some 772 chemical volunteers.

Officials at the Institute of Medicine, the scientific body that helped analyze the World War II program in 1993, said in an Aug. 2, 1995, internal memo: "Once the DOD decides to investigate fully, the amount they can accomplish is amazing."

"Unfortunately," the memo added, "Col. Kolbrener has reported that the VA has not responded very quickly once it is proven that a given individual was, in fact, exposed."

Indeed, while the Pentagon searched for veterans' names into 1997, the VA had quietly stopped tracking mustard gas claims three years earlier, when media and congressional attention began to wane.
The Free Press discovered the VA failed to directly notify any veterans or chemical workers of the health risks posed by the tests or their eligibility for benefits. No letters, no phone calls. The agency did not even run Pentagon lists through Internal Revenue Service computers or other government agencies to find current addresses for the chemical veterans, as it had promised Congress.

Even today, the VA cannot produce records on chemical claims after 1994. What records they have show the agency processed slightly more than 2,000 claims by September 1994, granting benefits to 193 people -- less than 10 percent.

Who filed claims? Some were guinea pigs at places like Edgewood. Others helped make or transport chemical weapons for the military. Still others were ordinary enlisted men who may have mistaken the routine training exercises of their war years for true chemical tests.

Different people. Different circumstances. One common trait: They approached the VA. The VA didn't go to them.

And the men of 1st Chemical? They are still not officially acknowledged. The government database on the test program does not list the unit among those that participated in chemical experiments.

Kolbrener, now a security analyst with Virginia-based Xacta Corp., said last week he had no idea the VA had not searched for the people identified by his team. "I would think that that's why we were doing it," Kolbrener said.

The VA officials who testified to Congress in 1993 cannot, or will not, explain now what went wrong.

"I really don't know," Mather said. "At that time, outreach was very much the responsibility of veterans benefits, and Mr. Vogel was the undersecretary for benefits."

Vogel, who left the VA, refused comment. He referred questions to Quentin Kinderman, his assistant policy director. Now retired, Kinderman said, "I'm not sure I can really answer that. It really surprises me we would have dropped the issue at that time without doing something."

Those answers stunned Jim Slattery, the Kansas congressman who chaired the 1993 hearing.

"When government officials from the executive branch come before a committee in Congress and make a commitment, that's a sacred commitment and it must be honored," said Slattery, now a Washington attorney. "It's very disappointing."

Principi, the VA secretary, said he was unaware of any problems with the chemical program until the Free Press raised questions about it in the summer. He noted he left the agency in January 1993, when Clinton took office, and did not return until 2000.

"Quite honestly, you hate to learn about these things from others, that veterans have not been receiving their benefits," Principi said. "But the important thing to me is when a problem has been identified, to try to fix it, to try to help people. They served their nation honorably" so the VA must "do what we can to provide health care and compensation to them. That's always been my bottom line and still is my bottom line. If more needs to be done, it will be done."

Harold Gracey, chief of staff to VA Director Jesse Brown during the Clinton years, said he, too, was unaware there were concerns about mustard-gas claims.

"I can't imagine that there was a lack of follow-through," said Gracey, an executive at a technology firm near Washington. The VA's only direct contact with mustard-gas volunteers came in a 1996 study on the psychological trauma faced by chemical volunteers. The study found that mustard-gas volunteers had a higher rate of post-traumatic stress disorder than even World War II combat veterans. About four in 10 World War II guinea pigs interviewed in the study had some degree of post-traumatic stress disorder more than a half-century later.

VA researchers sought out 500 mustard-gas veterans, eventually interviewing 363 by phone. To make the veterans feel comfortable answering questions, the researchers promised they would not share their conversations with other VA offices.

Dr. Paula Schnurr, deputy director of the VA's post-traumatic stress research center, said the study cost $230,000. VA officials concede they could have used the same methods to search for the roughly 4,000 men used in chamber and field tests during the war. Assuming half of those men were alive in 1996, it would have cost the VA less than $1 million to find them and gauge their eligibility for benefits.

Principi, a combat-decorated Vietnam veteran, said last month it was not too late to act.

"If the VA promised to do a direct mailing and we did not do a direct mailing, having had their location and their addresses, then I would say we did let them down," he said. "If we did not, if my successor did not, whomever, me or anybody else, then I..."
say we need to go back and take another look and see what should be done."

Tied up in red tape

Last summer, Lee Landauer, the veteran with skin cancer from Baltimore, offered a visitor a glimpse of his ravaged body. He has scabs on his nose, cheeks, forearms and elbows. He removed a pink golf shirt to reveal craters where lesions had been surgically scooped out.

Ten years had passed since Landauer drove into Baltimore to file a claim.

That visit was brief and crushing.

"They didn't ask me one question," he said. "The guy didn't take any notes, he didn't interview me. I thought he would keep me there and talk to me for an hour or so, maybe give me a physical exam, or even a flu shot."

"But when I get there, they didn't ask me squat. They didn't want to see me, really."

Still, he filled out the paperwork, forwarded his medical records -- and waited.

Nearly a year later, Landauer was still waiting.

"I have been trying since last December 1994 to get into the VA for my skin cancer," he wrote the VA in September 1995. "Anything you could do to speed up this process would be greatly appreciated."

In November 1995, the VA rejected his claim, saying he presented "no record of squamous cell carcinoma," the type of skin cancer linked to the World War II tests.

Actually, Landauer's medical records show "squamous cell carcinoma" dating to 1978 -- as well as bronchitis, emphysema and chronic obstructive pulmonary disease, all of them linked to chemicals. And yet, like so many of his Edgewood mates, Landauer shrugged and accepted it.

Landauer, 82, and his wife, Sheila, now live in a retirement condo in Sun City West, Ariz. In recent years, he worked as a grocery bagger at an Albertson's near his home -- the couple needed the medical coverage.

That coverage was tested last March when Landauer was hospitalized with pneumonia. Sheila, the determined advocate he will never be, had had enough. "You've got to go to the VA to get some medical care," she said.

So in June, Lee Landauer took one last shot with the VA. Sheila drove him to the agency's sprawling complex in downtown Phoenix, and he once again filled out paperwork for disability. The couple were told not to expect a decision until year's end.

Because Landauer had been on medical leave from his grocery job, he was allowed to see VA doctors while he awaited the agency's decision.

As autumn arrived, Sheila Landauer was nearly frantic. Her husband had received his last disability check -- for $85 -- from his grocery job, and his medical insurance was set to expire in the spring. They had taken to accepting financial help from their children.

"After March, it's over," Sheila said in October. "Everything is over."

But then last week, the Landauers' fortunes began to shift.

On Nov. 1 -- 10 days after the Free Press sent the VA a summary of Landauer's case -- the agency granted his disability claim for lung disease and bronchitis. The VA said he would now receive $817 a month and continuing medical care, making him the first soldier from 1st Chemical to be so compensated. The ex-platoon sergeant allowed himself a smile. For one exhilarating moment, it didn't matter that the VA had rejected essentially the same request 10 years earlier. It didn't matter that the VA has still not addressed his strongest claim: for the cancer that was eating at his face and torso. That was for another day. For now, he said, "I am tickled to death."

Sheila Landauer clutched the letter and wept.

Haunting reminders

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Edgewood Arsenal does not look terribly different today from the morning in September 1943 when the men of 1st Chemical arrived as young recruits. The grounds are still sprinkled with meadows and stables. Eagles still fly overhead.

Although the grass is not always scrupulously tended, the squat, white structures remain. Some chemical plants have been converted into administrative buildings; others stand as rusty hulks, their beams and the earth beneath them too toxic to be disturbed.

Reminders are everywhere of Edgewood's pedigree.

Edgewood has been on the Environmental Protection Agency's Superfund list for years. Storage yards still hold 1-ton mustard containers. Its grounds and surface water have tested positive for laboratory waste, PCBs, radiological compounds, napalm, nerve agent, white phosphorus, munitions and traces of mustard.

And Edgewood remains a home to chemical research.

Sixty years later, many of the same challenges exist for military scientists. The protective masks used by the military still fail too often. And scientists are still searching for a surefire antidote to mustard gas -- though they now use real guinea pigs in lab tests.

Meanwhile, veterans filing claims are urged patience. The VA is attempting to reduce a backlog of more than 300,000 disability claims as it deals with budget cuts.

But the VA secretary remains full of promise.

Last month, during a speech at a Texas convention of former prisoners of war, Principi announced to a crowd of cheering vets that they now were entitled to medical benefits for heart disease or stroke -- without being forced to prove their captivity caused their illness.

He praised the veterans' courage and patriotism.

"This is an issue," he said, "that has been studied and debated too long."

VETERAN'S PLEA

Sidney Wolfson of Farmington submitted a handwritten request for compensation to the Department of Veterans Affairs after learning in 1993 that he could finally talk about the World War II chemical tests at Edgewood Arsenal. The VA denied his claim.

Following is an excerpt from Wolfson's letter, noting his service in the 1st Chemical Casual Company:

"By the way, we...were admonished to never reveal these tests as they could fall into wrong hands!

I never applied for any compensation or benefits ... I have worked part-time (as a tax preparer) since retiring from the IRS as extra aid to living expenses ... However, at age 74 & with increase in dizzy spells, may have to give that up. My wife who has a heart and high blood pressure condition underwent back surgery 2 years ago ... and still needs my attention.

Hopefully I will be entitled to 'some' compensation which will benefit our late years. Any consideration appreciated."

A PENSION, BUT NO VA APOLOGY

Albert Pike, who owned a medical supply store in Akron, Ohio, died on May 8, 1990, of lung cancer and respiratory failure, a year before the Pentagon acknowledged the World War II chemical program. In 1946, one day after his discharge from the Army, the VA awarded Pike a monthly disability pension for mustard burns on his arms. But Pike never sought benefits for the illnesses that would kill him at 67.

AFTER TESTS, HE HELPED OTHERS

Paul Walters once told his wife, Cora, how one group of soldiers was sent into the gas chambers one day, while his group was given drops of mustard on the arm. Walter's group spent the next few days tending to the eating, grooming and bathroom needs of the chamber soldiers, who had blisters all over their bodies. Walters, a jeweler in St. Charles, Mo., died of leukemia in 1998, his wife said. He never told his doctors about the secret chemical tests.

http://nl.newsbank.com/nl-search/we/Archives?p_action=print&p_docid=1067253CFA76... 09/24/2007
John Hogan was 17 and in high school when he left Bountiful, Utah, for the Army. He didn’t squawk when he was sent to Edgewood. He didn’t complain about the frayed uniform he wore in its chambers.

"He felt the uniforms had holes in them," said Valera, his wife. "They weren't really secure." Hogan suffered burns on his left leg, which caused him discomfort for the rest of his life, she said. Hogan, who returned to Utah and became a doctor, applied ointments to relieve the redness and itching. In 1994, he died of pancreatic cancer. The government never contacted his family. His wife said they often wondered whether the testing led to his ailments. "He'd say, 'If that didn't have holes in it, I'd have been all right.'"

Contact DAVID ZEMAN at 313-222-6593 or zeman@freepress.com"
Information Paper on DoD Efforts to Identify World War II Chemical Weapons Test Subjects

Background: In January, 1993, the National Academy of Sciences Institute of Medicine published a report titled Veterans at Risk: The Health Effects of Mustard Gas and Lewisite. In March of 1993, the Secretary of Defense, William Perry, sent a memorandum out in DoD that released veterans who may have been participants in chemical weapons tests and studies from any oaths of secrecy they may have taken at the time of the tests. He also declassified documents pertaining to these tests and research programs that would provide the location of installations and programs that used human test subjects, the identification of military units stationed at each of the sites during the testing period, and the location of facilities that participated in operational missions that would have likely caused human exposures. There were several subsequent Congressional hearings on this subject in 1993 and 1994.

Actions: DoD identified five major sources of information on test subjects from WWII mustard gas experiments and from 1993 through 1996 repeatedly sent teams to these sites to review documents and extract names and other pertinent information from records maintained in technical libraries, and archived research records.

Information was in boxes and filing cabinets, was often not labeled or categorized, and required teams to look at each piece of paper in the collection. One installation had over 400 boxes in a holding area, and over 60,000 documents in its technical library. Another had over 8,000 linear feet of filing cabinet space and boxes.

Veterans and some researchers that were still alive and able to be contacted were interviewed for any additional information that might provide leads on test sites, other participants, and outcomes of tests.

Also, DoD conducted studies during 1993 and 1994 to try to identify test sites and test subjects through the use of contractors specializing in chemical/biological warfare analysis and to document and disseminate information to the VA that would expedite verification of veterans' claims.

Results: Over 3,000 names were obtained from the Naval Research Laboratory. Another 3,400 were collected from the various kinds of records at the installations and from veterans themselves. The database compiled contains about 6,400 names of Army and Navy personnel.

Identification of test subjects and verification of participation and/or exposure was very difficult for Army personnel because subjects were often identified by number not name. The loss of many WWII Army military personnel records in the 1973 fire at the National Personnel Records Center in St. Louis greatly hampered verification of participation and exposure.

All information was shared with the Department of Veterans Affairs in order to assist in verifying exposures so that veterans could collect appropriate entitlements and benefits in the form of medical treatment and disability compensation. VA was given the database of 6,400 names compiled by DoD, and the report and data on test sites compiled by a contractor specializing in chemical weapons information and analysis.


Prepared by: Martha Hamed, OUSD (P&R), JR&IO, (703)696-8710
**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.

**U. S. Army Medical Research and Development Command, Ft. Detrick, MD**
100 linear feet (filing cabinets and boxes), paper
7000 sets of microfiche
200 minutes of film media

**Naval Research Laboratory**
11 Scientific Notebooks from 1942-45 (2,300 names extracted)
Large volume of technical reports, papers, 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 1973 destroyed: Army personnel records, 1912 - 1960
USAF personnel records, 1947-1963
(to date, have completed about 20% reconstruction of records)
Extensive collection of morning reports and unit information

**University of Chicago**
82 Boxes of Records from Vice President for Special Projects from WWII DoD Contracts

**CBIAC (Chemical Warfare/Chemical & Biological Defense Information Analysis Center) Edgewood, MD**
Responsible for collection, review, analysis, appraisal and summary of available CW/CBD information and data and for providing these data to interested users in support of DoD CW/CBD research and development.
## CHEMICAL WEAPONS EXPOSURE PROJECT FILES

### FILE CATEGORY LOCATION

**CASE FILES**
- CASE FILES - CLOSED: CAB 1, DRAWER 1
- CASE FILES - C. OSED: CAB 1, DRAWER 2
- CASE FILES - CLOSED: CAB 1, DRAWER 3

**ADMINISTRATIVE FILES**
- ADM 1-OSD FREEDOM OF INFORMATION REQUESTS (FOI): CAB 1, DRAWER 4
- ADM 2-CONGRESSIONAL CORRESPONDENCE (SEE EXP 60 CONGRESSMAN SERRANO SAN JOSE PROJECT): CAB 1, DRAWER 4
- ADM 3-GENERAL CORRESPONDENCE: CAB 1, DRAWER 4
- ADM 4-RCS DD-P&R(AR)1919 CHEMICAL WEAPONS PROJECT: CAB 1, DRAWER 4
- ADM 5-DD 2733 CHEMICAL WEAPONS DATA COLLECTION DD 2736 COMMENDATION CERTIFICATE: CAB 1, DRAWER 4
- ADM 6-OMB PACKAGE: CAB 1, DRAWER 4
- ADM 7-FEDERAL REGISTER SYSTEMS NOTICE: CAB 1, DRAWER 4
- ADM 8-INQUiry STATUS LISTING: CAB 1, DRAWER 4
- ADM 9-MIPR'S: CAB 1, DRAWER 4
- ADM 10-DMDC PROFILE: CAB 1, DRAWER 4
- ADM 11-IRS INTERAGENCY AGREEMENT: CAB 1, DRAWER 4
- ADM 12-VISIT REQUESTS: CAB 1, DRAWER 4
- ADM 13-INFO SOURCES - CBDCOM, LIBRARY OF CONGRESS: CAB 1, DRAWER 4
- ADM 14-NAV HISTORICAL CENTER: CAB 1, DRAWER 4

**HEARINGS AND REPORTS**
- HEA 1-GAO REPORT 93-89 VETS DISABILITY (OSD CASE 9262): CAB 1, DRAWER 4
- HEA 2-Hearing March 10, 1993 Compensation, Pension and Insurance Subcommittee, House Veterans Affairs Committee, Testimony of Lt. General Alexander (Folder): CAB 1, DRAWER 4
- HEA 3-Hearing February 10, 1994 House Subcommittee on Military Forces and Personnel, Committee on Armed Services, Hearing on HR 1055, Testimony of Jeanne Fites (Folder): CAB 1, DRAWER 4
- HEA 4-Hearing May 6, 1994 Senate Committee on Veterans Affairs, Open Air Testing, Mustard/Lewisite, Persian Gulf, Processing Service Medical Records, Jeanne Fites was backup witness for Dr. Martin (HA) (Folder): CAB 1, DRAWER 4
- HEA 5-Hearing September 28, 1994 Committee on Government Operations, Oversight Hearing on Cold War Era Human Subject Experimentation, Testimony of Jeanne Fites (Folder and Briefing Book): CAB 1, DRAWER 4
- HEA 6-Hearing September 10, 1975 Subcommittee on Administrative Practice and Procedure, Senate Judiciary Committee and Subcommittee On Health, Senate Labor and Public Welfare Committee, Statement Of Army GC on Army Drug Testing Program (Harold Blauer) (Folder): CAB 1, DRAWER 4
CHEMICAL WEAPONS EXPOSURE PROGRAM FILES

EXP 1-SECDEF MEMOS (2) D 9 MARCH 1993
EXP 2-REPORTS OF SERVICES EXPOSURE RECORD HOLDINGS
EXP 3-CHEMICAL WEAPONS EXPOSURE BACKGROUND
EXP 4-RECORDS SEARCHES
EXP 5-CW EXPOSURE DATABASE BACKGROUND
EXP 6-EXPANSION OF CW EXPOSURE TO BIOLOGICAL/LSD
EXP 7-LSD DOCUMENTATION (HOLMESBURG PRISON)
EXP 8-MKULTRA PROJECT-CIA BEHAVIOR MODIFICATION
EXP 9-CONGRESSMAN GOSS CONSTITUENT LETTERS
EXP 10-OCONUS CWS UNITS 1944-1946
EXP 11-TRANSPORT OF CHEMICAL WEAPONS 1946-1986
EXP 12-ARMY MORNING REPORTS FROM NPRC
EXP 13-TETRACHLOROETHANE (TCE) IMPREGNATED CLOTH
EXP 14-CHEM AGENT RESISTANT COMPOUND (CARC) PAINT
EXP 15-PROJECT SHAD (SHIPBOARD HAZARD AND DEFENSE)
EXP 16-MUKDEN POW CAMP
EXP 17-DEFOILANTS/HERBICIDES-AGENT ORANGE
EXP 18-VA/DOD EXCHANGE OF INFO-VA CIRCULAR
EXP 19-COMMENDATION SPECIAL ORDERS (COPY IN BOOK)
EXP 20-ARMY COMMENDATION RIBBONS
EXP 21-WWII COMMENDATION CERTIFICATES
EXP 22-BACKUP FOR MEDICAL CARDS (BINDER IN BOOKCASE)
EXP 23-ACCESS TO USN PERSONNEL FILES AT NPRC
EXP 24-VERIFICATION OF NAVY RECORDS AT NPRC
EXP 25-KIRK ARMY CLINIC MEDICAL RECORDS
EXP 26-CHEMICAL IDENTIFICATION TRAINING
EXP 27-M1 WAR GAS IDENTIFICATION SET
EXP 28-CW EXPOSURE STUDY TASK FORCE (CWEST)
EXP 29-CW VIRUS STUDIES/VACCINES
EXP 30-MRICD(EDGEWOOD) MEDICAL VOLUNTEERS 1955-1972
EXP 31-BACKUP FOR EDGEWOOD MEDICAL VOLUNTEERS
EXP 32-HISTORY OF EDGEWOOD TESTING PROGRAM/LONG-TERM HEALTH EFFECTS OF SHORT-TERM EXPOSURE
EXP 33-LOCATIONS OF CW TESTING/RESEARCH
EXP 34-BATTTELLE CONTRACT BACKGROUND INFORMATION
EXP 35-BATTTELLE FINAL REPORT CWEST EVENT DATABASE
EXP 36-SERVICE RECORDS OF WWII CWS UNITS
EXP 37-NAVY LAWSUIT/ARMY TEST PARTICIPANTS/KOREAN POW'S
EXP 38-NUCLEAR TEST PERSONNEL REVIEW (NTPR)
EXP 39-VOLUNTEER TEST SUBJECTS
EXP 40-NEWSPAPER/MAGAZINE ARTICLES
| EXP 41 | WWII CW HISTORY/CW UNIT HISTORIES | CAB 1, DRAWER 4 |
| EXP 42 | NATIONAL RECORDS CENTER, CHICAGO, IL | CAB 1, DRAWER 5 |
| EXP 43 | CAMP DETRICK, MARYLAND | CAB 1, DRAWER 5 |
| EXP 44 | CAMP BLANDING, FLORIDA | CAB 1, DRAWER 5 |
| EXP 45 | ROCKY MOUNTAIN ARSENAL, CO | CAB 1, DRAWER 5 |
| EXP 46 | CAMP POLK, LA | CAB 1, DRAWER 5 |
| EXP 47 | HART'S ISLAND/LIDO BEACH, NEW YORK | CAB 1, DRAWER 5 |
| EXP 48 | CAMP MAXEY, TEXAS | CAB 1, DRAWER 5 |
| EXP 49 | CHEMICAL SCHOOL, FT. MCCLELLAN, AL | CAB 1, DRAWER 5 |
| EXP 50 | DUGWAY PROVING GROUND, UTAH | CAB 1, DRAWER 5 |
| EXP 51 | SAN JOSÉ PROJECT (SJP) | CAB 1, DRAWER 5 |
| EXP 52 | ONDAL, INDIA 771ST DEPOT CHEMICAL CO | CAB 1, DRAWER 5 |
| EXP 53 | MISCELLANEOUS BIOLOGICAL INFORMATION | CAB 1, DRAWER 5 |
| EXP 54 | EDGEWOOD ARSENAL NOTEBOOKS | CAB 1, DRAWER 5 |
| EXP 55 | CHEMICAL AGENT ABBREVIATIONS/DESCRIPTIONS | CAB 1, DRAWER 5 |
| EXP 56 | ARMED FORCES INSTITUTE OF PATHOLOGY | CAB 1, DRAWER 5 |
| EXP 57 | CHEMICAL WARFARE BOARD | CAB 1, DRAWER 5 |
| EXP 58 | 295TH/296TH INFANTRY, (PUERTO RICAN UNITS) | CAB 1, DRAWER 5 |
| EXP 59 | 333RD/368TH STATION HOSPITALS | CAB 1, DRAWER 5 |
| EXP 60 | SAN JOSÉ PROJECT | CAB 1, DRAWER 5 |
| EXP 61 | CONGRESSMAN SERRANO CORRESPONDENCE ON SAN JOSÉ PROJECT | CAB 1, DRAWER 5 |
| EXP 62 | EXPOSURE RECORDS WORKING GROUP - VA/DOD DRAWER 5 | CAB 1, DRAWER 5 |
| EXP 63 | BARI, ITALY | CAB 2, DRAWER 2 |
| | SS JOHN HARVEY/SS SAMUEL TILDEN/ | CAB 2, DRAWER 2 |
| | SS LYMAN ABBOTT/SS JOHN L. MOTLEY/ | CAB 2, DRAWER 2 |
| | SS JOSEPH WHEELER/SS JOHN BASCOM | CAB 2, DRAWER 2 |
| EXP 64 | COMMENDATION CERTIFICATES - LISTINGS | CAB 2, DRAWER 2 |
| | COPIES OF CERTIFICATES SENT TO DMDC STORAGE - JULY 2001 - SEE ATTACHED LIST | CAB 2, DRAWER 2 |
| EXP 65 | RESERVATIONS TO COMMENDATIONS | CAB 2, DRAWER 2 |
| EXP 66 | NATIONAL ARCHIVES, COLLEGE PARK, MD/ | CAB 2, DRAWER 2 |
| | FT. WORTH, TX/PHILADELPHIA, PA | CAB 2, DRAWER 2 |
| EXP 67 | INFO FROM CBDCOM, EDGEWOOD, MD | CAB 2, DRAWER 2 |
| EXP 68 | CONTRACT DATABASE (DRAFT) 1995 | CAB 2, DRAWER 2 |
| EXP 69 | WEEKLY ACTIVITY REPORTS | CAB 2, DRAWER 2 |

**NAVAL RESEARCH LABORATORY (NRL) RECORDS**

| NRL 0 | NRL SCIENTIFIC NOTEBOOKS | CAB 2, DRAWER 1 |
| NRL 1 | CHAMBER TEST PARTICIPANTS | CAB 2, DRAWER 2 |
| NRL 2 | OTHER - BAINBRIDGE PATCH TESTS, PROTECTIVE CLOTHING, BETHESDA, OINTMENT, VOLUNTEERS NOT USED | CAB 2, DRAWER 2 |
| NRL 3 | LIBRARY REPORTS 1993 | CAB 2, DRAWER 2 |
NRL 4-MISCELLANEOUS CAB 2, DRAWER 2
NRL 5-CHAMBER TEST GROUP SHEETS CAB 2, DRAWER 2
NRL 6-NOTEBOOK 5043 CASUALTY LOG CAB 2, DRAWER 2
NRL 7-NOTEBOOK 4296 ARM CHAMBER TESTS CAB 2, DRAWER 2
NRL 8-NOTEBOOK 4691 EXPERIMENTS ON SYNTHESIS OF HYDRIDES CAB 2, DRAWER 2
NRL 9-CHAMBER TEST INDEX CAB 2, DRAWER 2
NRL 10-CHRONOLOGICAL FILE-PATCH AND OINTMENT TESTS CAB 2, DRAWER 2
NRL 11-INITIAL PHYSICALS (GROUPS 3-86) CAB 2, DRAWER 2
NRL 12-BLOOD COUNTS (GROUPS 10-83) CAB 2, DRAWER 2
NRL 13-PROPOSED TEST PLANS 1944-1945 CAB 2, DRAWER 2
NRL 14-SENSITIVITY TESTS CAB 2, DRAWER 2
NRL 15-VARIATION CHAMBER CAB 2, DRAWER 2
NRL 16-VARIATIONS IN CC2 IMPREGNATION CAB 2, DRAWER 2
NRL 17-SUIT DESIGN VARIANCES CAB 2, DRAWER 2
NRL 18-H BASIC TESTS CAB 2, DRAWER 2
NRL 19-HN-1/3 BASIC TESTS - 1 1/2 LAYER STANDARD CAB 2, DRAWER 2
NRL 20-CARBON SUIT TESTS CAB 2, DRAWER 2
NRL 21-NRL RESPONSES TO VETERANS - 1992 CAB 2, DRAWER 2
NRL 22-NRL RESPONSES TO VETERANS JAN-JUN 1993 CAB 2, DRAWER 2
NRL 23-NRL RESPONSES TO VETERANS JUL-DEC 1993 CAB 2, DRAWER 2
NRL 24-NRL RESPONSES TO VETERANS - 1994 CAB 2, DRAWER 2
NRL 25-NRL RESPONSES TO VETERANS - 1995 CAB 2, DRAWER 2
NRL 26-TEST DOCUMENTATION-NAT SCHNURMAN CAB 2, DRAWER 2

CHEMICAL EXPOSURE REPORTS ARMY AND NAVY (SEE ATTACHED LIST-ARM01 THROUGH TOX23)

DEFENSE ADVISORY COMMITTEE RECORDS CAB 2, DRAWER 4

FILES SENT TO DMDC STORAGE - SEE LIST ATTACHED
<table>
<thead>
<tr>
<th>ID #</th>
<th>REPORT #</th>
<th>TITLE</th>
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<tbody>
<tr>
<td>ARM 01</td>
<td>TDMR103</td>
<td>First four field tests of protective clothing against HS</td>
<td>18 Aug 37</td>
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<td>ARM 02</td>
<td>TDMR120</td>
<td>Irritant smoke dispersion of DA in 75-mm shell</td>
<td>01 Jan 38</td>
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<td>ARM 03</td>
<td>TDMR420</td>
<td>Propane and mustard-Vesicant action &amp; pain producing effect</td>
<td>11 Nov 42</td>
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<tr>
<td>ARM 04</td>
<td>TDMR504</td>
<td>Tests conducted at Gadsden, Alabama on three</td>
<td>14 Dec 42</td>
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<tr>
<td>ARM 05</td>
<td>TDMR512</td>
<td>Comparative vesicant action of and Penetration</td>
<td>19 Dec 42</td>
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<tr>
<td>ARM 06</td>
<td>TDMR614</td>
<td>TRIS-2 fluorohydroxyamine vesicant action on men</td>
<td>08 Apr 43</td>
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<tr>
<td>ARM 07</td>
<td>TDMR677</td>
<td>Vesicant action-sesquimustard &amp; certain sesqui-Mustard-type compounds submitted by Dr. Lazier</td>
<td>12 Jun 43</td>
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<tr>
<td>ARM 08</td>
<td>TDMR731</td>
<td>Value of Permeable protective shorts as a means of reducing # of casualties from exposure to H</td>
<td>09 Sep 43</td>
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<tr>
<td>ARM 09</td>
<td>TDMR845</td>
<td>Vesicant protection afforded by permeable Protective Clothing</td>
<td>21 Aug 44</td>
</tr>
<tr>
<td>ARM 10</td>
<td>TDMR994</td>
<td>Protection afforded by single layer protective Outfits against successive H vapor exposures</td>
<td>12 Mar 45</td>
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<tr>
<td>ARM 11</td>
<td>TDMR1012</td>
<td>H vapor protection afforded by various protective</td>
<td>27 Jun 45</td>
</tr>
<tr>
<td>ARM 12</td>
<td>TDMR1042</td>
<td>Protection afforded by 1 ½ layer protective outfits</td>
<td>22 May 45</td>
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<tr>
<td>ARM 13</td>
<td>TDMR1090</td>
<td>Set, Gas Identification, Instructional M2</td>
<td>27 Jul 45</td>
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<tr>
<td>ARM 14</td>
<td>TDMR1212</td>
<td>H vapor protection afforded by foam impregnated</td>
<td>12 Feb 46</td>
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<td>ARM 15</td>
<td>TDMR1291</td>
<td>Evaluation of experimental protective hoods by</td>
<td>24 Apr 47</td>
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<tr>
<td>ARM 16</td>
<td>TDMR1357</td>
<td>Preliminary tests in gas of facepiece protector with O1 Oct 46</td>
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<td>ARM 17</td>
<td>TRLR1</td>
<td>Lewisite-determination of vesicant action on man</td>
<td>21 Aug 43</td>
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<td>ARM 18</td>
<td>TRLR29</td>
<td>An evaluation of the protective properties of S-330 ointment</td>
<td>27 Apr 44</td>
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<tr>
<td>ARM 19</td>
<td>TRLR34</td>
<td>Evaluation of the irritant &amp; decontaminant properties of S-330 and S461 ointments</td>
<td>31 May 44</td>
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<tr>
<td>ARM 20</td>
<td>TRLR43</td>
<td>Comparative physiological effect of H on Nisei and caucasian soldiers</td>
<td>12 Sep 44</td>
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</table>

**DESCRIPT**

- Names of volunteers entered in database.
- Arm tests 5-21 Sep 42 contains.
- Arm test-men from Camp Sibe.
- Appears to be drop tests, contains.
- Research on new potential vesicant Arm Tests.
- Names of 30 2nd LT's from Edgew.
- Pool input, contains pictures, Edgew.
- A literature survey of information.
- Six subjects, no names, Edgew.
- Chamber tests-80 names in database.
- Chamber-21 names entered some on SO2.
- M2 set to replace M1 set.
- 8 names entered some on SO2.
- Chamber/wear trial names needed.
- S02 in chamber-10 names entered.
- Arm chamber-20 military and casino.
- 25 names entered in database of.
- Names listed on SO152.
- Volunteers were from Camp Sibe.
- Nisei-38 enlisted men from Camp Sibe.
- Ft Sam Houston, TX. Caucasians.
- Pickett & Ft. Eustis, VA. 82 in.
| ARM 21 | TRLR47 | Gassing chamber for human tests: Construction and Operation. | 25 Oct 44 |
| ARM 22 | MDR16 | Treatment by distillation of water contaminated with chemical warfare agents. | 15 Dec 45 |
| ARM 23 | MDR24 | The chemical action of mustard within the body. | 10 Oct 24 |
| ARM 24 | MDR146 | Biocchemical detection of G Agent poisoning. | 01 Apr 48 |
| ARM 25 | MDR169 | Symposium on psychological research in The Chemical Corps. | 22 Oct 48 |
| ARM 26 | MDR187 | Pulmonary effects following chronic exposure to HS vapor. | 01 May 48 |
| ARM 27 | MDR200 | Research activities of Army Chemical Corps Medical Division. | 01 Jul 49 |
| ARM 28 | MLRR71 | Effectiveness of M9 gas mask against GB under Conditions of mild activity. | 01 Jul 51 |
| ARM 29 | MLRR82 | Pulmonary effects of inhalation of low Concentrations of GB in man. | 01 Sep 51 |
| ARM 30 | MLRR104 | Penetration of mustard vapor through protective Cloth (FL2) in contact with human skin. | 01 Mar 52 |
| ARM 31 | MLRR114 | Clinical observations on volunteers exposed To low concentrations of GB. | 01 May 52 |
| ARM 32 | MLRR146 | An accident involving vapor exposure to A nerve gas. | 01 Nov 52 |
| ARM 33 | MLRR151 | Case report of a severe human poisoning by GB For monkey and man. | 01 Dec 52 |
| ARM 34 | MDRR49 | Toxicity of GB vapor by cutaneous absorption. | 01 Apr 51 |
| ARM 35 | CWLR4-17 | Summary Report on Project New Year. | 01 Jan 60 |
| ARM 36 | CWLR2004 | Effects of V-Agent organic phosphate anticholinesterase compound EA1508 in man following accidental exposure. | 16 Mar 56 |
| ARM 37 | CWLR2025 | V Poisoning in Man. | 22 May 56 |
| ARM 38 | MRL(EA)1 | The oral ingestion of 1070 by humans. | 16 Sep 43 |
| ARM 39 | MRL(EA)20 | Pathologic changes in tissues of Bari victims. | 18 May 44 |
| ARM 40 | 61-TE-1519 | Respiratory virulence of aged aerosols of Pasteurella Tularensis SCHU-S4 for man. | 20 Jun 44 |
| ARM 41 | 61-TE-1564 | Respiratory virulence of Pasteurella Tularensis. | 24 Jan 62 |
ARM 42 62-TE-1713 Respiratory virulence of aged aerosols of Pasteurella Tularensis, Strain SCHU S4 for man 15 Aug 63
ARM 43 Notebk1003 Medical Division Notebook-PS chamber gas masks 18 Apr 51
ARM 44 Notebk1079 Medical Division Notebook (2 pages) 12 Sep 51
ARM 45 Notebk466 Medical Division Notebook 20 Jun 51
ARM 46 EATM112-11 Effects of BZ on Temperature Regulation in Man 01 Oct 69
ARM 47 CRDLR3015 VX Percutaneous Studies in Man 01 Aug 60
ARM 48 MD EA 57 Use of M-4 ointment in first aid treatment of liquid lewisite burns on human skin 18 Jun 42
ARM 49 MD EA 82 Clinical and laboratory evidence of the nontoxic Effect of lewisite vesicle fluid on the skin 20 May 43
ARM 50 MD EA 89 Evaluation of irritant, protective & decontaminating properties of S-461 ointment
ARM 51 None Incapacitating dose of CS by inhalation
ARM 52 None Abstract of Clinical records-accidental exposures at Edgewood Arsenal, MD in 1944 30 Jun 53
ARM 53 None Use of volunteers in research
ARM 54 None Toxicology of tear gases CN, CS
ARM 55 None Draft-locations of Army toxic CWS activities 1940-1970 (mostly disposal/storage operations)
ARM 56 None Report on H filled M47A2 bombs dropped on Isle M'Ba (New Caledonia) 30 Oct 43
ARM 57 None Corps of Engineers Defense Environmental Restoration Program 01 Jul 94
ARM 58 None Engineering Tests of Training Masks at Ft. Meade, Maryland in 1937 09 Nov 37
ARM 59 None Disposal of unserviceable M47A2 mustard bombs 01 Jun 45
ARM 60 None Exposure of Volunteers to various vaccines 30 Sep 63
ARM 61 None Tentative report of test on cover, protective, indiv. 11 Oct 43
ARM 62 None Wear trials and chamber tests 1942
ARM 63 None Volunteers for Test Purposes 21 Jul 43
ARM 64 None Case studies of mustard exposure at Bushnell 20 Apr 44
ARM 65 None Report on Joint Tests of Impregnated Clothing 04 Nov 42
ARM 66 None Review of Testing Safety 01 Sep 69

SCHU-4 Strain for man and monkey

Full names of 16 volunteers not in database. Occupation during Chem School training, and Chemical Warfare School (CWS)

Contains last names, some initials.

Various tests in 1950-51+.

Contains initials of 24 Army employees.

Contains initials of 103 test participants.

2 pages, contains initials

Arm tests, lewisite arm test 175 subsequent

Testing conducted 1959-1968, includes

Names in database. Occupation during Chem School training, and

Contains authorization of program.

Reference to sheep kill at DPG 1942

Personnel wearing impregnated clothing after each bomb was dropped.

Formerly used defense site Chabot

Contains names and photos of 16 unknown, names not in database.

Disposal of mustard bombs by

Numerous reports, contains name list of personnel/institutions as: 12th Infantry spray trial-no chemical residuum (MR) used. Camp G, Mabrey Field, Tallahassee, FL.

10 white & 10 black (71st Chemical Bn) used. Draft CWS hot discussing establishment 7 men exposed, contains name.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Date</th>
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<tbody>
<tr>
<td>ARM 67</td>
<td>GO 11 General Order 11 establish the San Jose Project</td>
<td>06 Jul 44</td>
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<tr>
<td>ARM 68</td>
<td>None Historical Record San Jose Project</td>
<td>27 Sep 44</td>
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<tr>
<td>ARM 69</td>
<td>SJPR9 Dropping trials with M47A2 bombs charged mustard on jungle terrain</td>
<td></td>
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<tr>
<td>ARM 70</td>
<td>SJPR11 Field Tests</td>
<td>01 Dec 44</td>
</tr>
<tr>
<td>ARM 71</td>
<td>BWPR15 Accidental exposures 1-CX, 2-H</td>
<td>24 Jan 45</td>
</tr>
<tr>
<td>ARM 72</td>
<td>SJPR18 Firing trial 4.2&quot; chemical mortar shell charged mustard gas on jungle terrain</td>
<td>13 Oct 44</td>
</tr>
<tr>
<td>ARM 73</td>
<td>BWPR18 Six LC500 pound CG filled bombs dropped</td>
<td>26 Feb 45</td>
</tr>
<tr>
<td>ARM 74</td>
<td>SJPR20 Dropping trials w/M70 bombs charged mustard gas on jungle terrain</td>
<td>01 Oct 44</td>
</tr>
<tr>
<td>ARM 75</td>
<td>BWPR20 Report of medical officer on two accidental exposures to CK</td>
<td>10 Mar 45</td>
</tr>
<tr>
<td>ARM 76</td>
<td>BWPR21 Covers numerous subjects, gives future SJPR numbers for some subjects</td>
<td>13 Apr 45</td>
</tr>
<tr>
<td>ARM 77</td>
<td>BWPR22 Employment of infantry observers at San Jose</td>
<td>16 Feb 45</td>
</tr>
<tr>
<td>ARM 78</td>
<td>BWPR23 Attitude of Infantry Commanders &amp; Medical Officers towards troops w/vesicant injuries</td>
<td></td>
</tr>
<tr>
<td>ARM 79</td>
<td>SJPR24 Relative sensitivity to liquid mustard gas of Continental &amp; Puerto Rican troops in a tropical climate</td>
<td>27 Oct 44</td>
</tr>
<tr>
<td>ARM 80</td>
<td>SJPR25 Protection of hands against liquid mustard in tropics</td>
<td>19 Oct 44</td>
</tr>
<tr>
<td>ARM 81</td>
<td>SJPR26 Use of M-5 anti-gas ointment on clothing as an emergency protective device</td>
<td>31 Oct 44</td>
</tr>
<tr>
<td>ARM 82</td>
<td>SJPR34 Assessment of multiple cluster bombing w/E27R1 31 Aug 45</td>
<td></td>
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<tr>
<td>ARM 83</td>
<td>SJPR61 Evacuation of San Jose Island</td>
<td>10 Nov 46</td>
</tr>
<tr>
<td>ARM 84</td>
<td>SJPR62 Status of reports and tests</td>
<td>05 Dec 48</td>
</tr>
<tr>
<td>ARM 85</td>
<td>SJPR80 H spray penetration of jungle canopy</td>
<td>30 May 45</td>
</tr>
<tr>
<td>ARM 86</td>
<td>Various Cover sheets for numerous reports</td>
<td>1942-1948</td>
</tr>
<tr>
<td>NAV 1</td>
<td>NRL P1898 Prophylaxis &amp; treatment of burns caused by CW</td>
<td>24 Apr 42</td>
</tr>
</tbody>
</table>

At Toxic Exposure Aid Station

Obtained from National Archives.

Lists tests 1-81 with descriptions.

Contains 3 other documents on Test 25 Jul 44. Numbers of men traversed area, no names.

Lists tests conducted 1 Sep-26I.

Covers 21 Dec 44-4 Jan 45, Bi.

Gives names of staff, covers 1-30 Nov 44.

Field test-observer numbers given.

CK escaped from M70 bomb det.

Gives observer terms, disposition with mustard burns

Troops supplied by Mobile For.

Panama Canal Dept. Infantry

Contains definition of casualty.

Determine differences in reaction of Continental & Puerto Rican troops (Personnel) and 45 Puerto Rican.

Contains observer #’s-20 men per page.

Contains observer #’s.

Covers 1 Nov 47-31 Oct 48. SJ

Islands, due to failure of U.S. &

Reach a lease renewal agreement.

Covers 1-30 Nov 48.

Report of mustard bomb trials on

List in folder

Arm test, 63 volunteers, no name.
<table>
<thead>
<tr>
<th>NAV 2</th>
<th>NRL P1899</th>
<th>In series of controlled experiments on human subjects Prophylaxis &amp; treatment of burns caused by CW Agents (2) Prophylaxis as applied to prevention of burns by liquid mustard with S-461 ointment</th>
<th>Arm test, 13 volunteers, no names</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAV 3</td>
<td>NRL P1953</td>
<td>Prophylaxis &amp; treatment of burns caused by CW Agents (3) Prophylaxis of M-1 burns w/modified S-461 ointment</td>
<td>Arm test, 91 volunteers, no names</td>
</tr>
<tr>
<td>NAV 4</td>
<td>NRL P2208</td>
<td>Chamber tests w/human subjects: I. Design and Operations of chamber; II. Initial tests of Navy Protective clothing against H vapor</td>
<td>Describes experiments 1, 2 and Notebook 2912</td>
</tr>
<tr>
<td>NAV 5</td>
<td>NRL P2219</td>
<td>Chamber tests w/human subjects III. Design, Operation and calibration of a chamber for exposing forearms to H vapor</td>
<td>Arm test, no names</td>
</tr>
<tr>
<td>NAV 6</td>
<td>NRL P2239</td>
<td>Chamber tests w/human subjects IV. Tests of Carbon clothing against H vapor</td>
<td>Patch and chamber tests.</td>
</tr>
<tr>
<td>NAV 7</td>
<td>NRL P2322</td>
<td>Evaluation of activated carbon as an antiseptic Agent in protective clothing</td>
<td>94 Marines participated in wearing trials</td>
</tr>
<tr>
<td>NAV 8</td>
<td>NRL P2343</td>
<td>Tropical Wearing Trials of Protective Clothing</td>
<td>Arm tests</td>
</tr>
<tr>
<td>NAV 9</td>
<td>NRL P2364</td>
<td>Controlled laboratory experiment to compare lesions resulting from application of mustard, lewisite &amp; nitrogen mustards to skin of human forearms</td>
<td>94 Marines participated in wearing trials</td>
</tr>
<tr>
<td>NAV 10</td>
<td>NRL P2406</td>
<td>Wearing trials of protective clothing at Camp Lejeune, NC</td>
<td>First Marine wearing trial August 94</td>
</tr>
<tr>
<td>NAV 11</td>
<td>NRL P2464</td>
<td>Chamber tests w/human subject V. Arm Chamber Exposures to HN vapors</td>
<td>Arm chamber tests using HN-1</td>
</tr>
<tr>
<td>NAV 12</td>
<td>NRL P2483</td>
<td>Chamber tests w/human subjects VI. Arm Chamber exposures to L vapor</td>
<td>Arm chamber tests using Lewisite</td>
</tr>
<tr>
<td>NAV 13</td>
<td>NRL P2528</td>
<td>Chamber tests w/human subjects VII. Effect of concentration of H vapor &amp; time of exposure on the protection afforded by CC2 impregnated clothing</td>
<td>Man break chamber tests. Body chamber trials</td>
</tr>
<tr>
<td>NAV 14</td>
<td>NRL P2579</td>
<td>Chamber tests w/human subjects IX. Basic tests With H Vapor</td>
<td>Chamber tests and sweat tests (subject numbers given for tests)</td>
</tr>
<tr>
<td>NAV 15</td>
<td>NRL P2590</td>
<td>Chamber tests w/human subjects X. Protection Afforded by CC2 impregnated clothing under Various conditions of exposure</td>
<td>Man break chamber tests.</td>
</tr>
<tr>
<td>NAV 16</td>
<td>NRL P2597</td>
<td>Chamber tests w/human subjects VIII. Evaluation Of worn CC-2 impregnated clothing</td>
<td>Summary of wear trials-Bainbridge Key West</td>
</tr>
<tr>
<td>Reference</td>
<td>Description</td>
<td>Date</td>
<td></td>
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<td>-----------</td>
<td>-------------</td>
<td>------</td>
<td></td>
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<tr>
<td>NAV 17</td>
<td>Chamber tests w/human subjects XI. Evaluation of modified aqueous CC-2 impregnation systems</td>
<td>18 Aug 45</td>
<td></td>
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<tr>
<td>NAV 18</td>
<td>Chamber tests w/human subjects IX. Basic Tests with H Vapor</td>
<td>31 Aug 45</td>
<td></td>
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<tr>
<td>NAV 19</td>
<td>Chamber tests/human subjects XIII. Special tests of CC-2 and carbon protective clothing</td>
<td>18 Aug 45</td>
<td></td>
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<tr>
<td>NAV 20</td>
<td>Chamber tests/human subjects XII. Tests of new carbon clothing</td>
<td>26 Nov 45</td>
<td></td>
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<tr>
<td>NAV 21</td>
<td>Chamber tests/human subjects XVII. Supplementary Tests of CC-2 protective clothing</td>
<td>15 Nov 45</td>
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<tr>
<td>NAV 22</td>
<td>Chamber tests/human subjects XIV. Test of new carbon clothing</td>
<td>1 Dec 45</td>
<td></td>
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<tr>
<td>NAV 23</td>
<td>Chamber tests/human subjects XIX. Studies of Clothing Designs</td>
<td>10 Dec 45</td>
<td></td>
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<tr>
<td>NAV 24</td>
<td>Chamber tests/w/human subjects XVIII. Tests with HN vapors</td>
<td>09 Jan 46</td>
<td></td>
</tr>
<tr>
<td>NAV 25</td>
<td>Chamber tests/w/human subjects XX. Hyper-Sensitivity to H as demonstrated by Patch tests before &amp; after chamber exposure to H vapor</td>
<td>15 May 46</td>
<td></td>
</tr>
<tr>
<td>NAV 26</td>
<td>Five NRL letters to Bureau of Ships</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NAV 27</td>
<td>OSRD Inhibition of vesiculation in mustard gas, H, Lesions of human skin by BAL</td>
<td>01 Mar 45</td>
<td></td>
</tr>
<tr>
<td>NAV 28</td>
<td>OSRD4852 I. Neotizing action of certain substances related to 05 Mar 45 Mustard gas, H, or to the nitrogen mustards II. A Comparison of vesicant action on human skin by Mustard gas, H, &amp; mixtures of H with wetting agents</td>
<td></td>
<td></td>
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<tr>
<td>NAV 29</td>
<td>OSRD4853 Development of methods for testing abilities of agents to combat effects of mustard gas, H, and other vesicants upon the skin</td>
<td>24 Mar 45</td>
<td></td>
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<tr>
<td>NAV 30</td>
<td>OSRD4854 Search for decontaminating &amp; treatment agents For skin exposed to mustard gas, H</td>
<td>24 Mar 45</td>
<td></td>
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<tr>
<td>NAV 31</td>
<td>OSRD 4855 Penetration of vesicant vapors into human skin</td>
<td>24 Mar 45</td>
<td></td>
</tr>
</tbody>
</table>

Chamber test
Chamber test-man break/suit breach
Chamber test and patch tests.
Second wearing trial by Marine
Chamber tests on impregnated clothing

See NAV 32 for authorization list.

Page 20-index of all men who volunteered for the test.
NRL is on file with the Physical Records Section of the Bureau of Ships 1944/45 concerning arm and chest.
OSRD Progress Report-no number.

Volunteers were initially taken for active training using small amount of mustard gas. Other agents were needed which would interfere with the Naval Reserve Midshipmen, University. Testing was later carried out at the Naval Receiving Station Disciplinary

Final report under contract 9-23-44 at the Rockefeller Institute for Medical Research in New York City, Edg.
Naval stores, none

Authorization letters for Navy WWII testing program

Four Navy TDMR’s - cover pages

University of Chicago Toxicity Laboratory (UCTL)

Studies on the Mechanism of Antu Poisoning

Comparison of the Prophylactic value of M-4 & S0461 ointments on human skin against HS.

Report of the Dork Program: Feasibility study & Human assessment of BZ disseminated under field conditions

TOX 05 UCTL Toxicity & Irritancy of Chemical Agents-Informal 15 Oct 45 Monthly Progress Report

Tests of Protective Ointments-Progress Report 16 31 Dec 42

IMPR-9-4-1-5 Toxicity of Chemical Warfare Agents 10 Jun 43

IMPR-9-4-1-6 Toxicity of Chemical Warfare Agents 10 Jul 43

IMPR-9-4-1-7 Toxicity of Chemical Warfare Agents 10 Aug 43

IMPR-9-4-1-22 Toxicity of Chemical Warfare Agents -Studies in the Wind Tunnel 10 Nov 44

IMPR-9-4-1-24 Toxicity of Chemical Warfare Agents -Studies in the Wind Tunnel 10 Jan 45

IMPR-9-4-1-25 Toxicity of Chemical Warfare Agents. Last report under contract w/NDRC and University of Chicago, 2/28/45 University will operate under contract with the CWS. 28 Feb 45

IMPR 1 Toxicity & Irritancy of Chemical Agents 15 Apr 45

Intrapulmonic accumulation & effects of inhaled Lubricating oil & SGF #1 oil in monkeys 27 Jan 45

Great Lakes chamber tests 24 Jul 44

Gadsden, Alabama

Volunteers from Great Lakes NTs

Animal tests, human chamber eye

Volunteers from Naval Training

Observers not available used own

Great Lakes NTS-Arm tests, also 6 at a time, bare from waist to shins every 5 minutes. Mentions 1,800

Volunteers from Great Lakes NTs

Animal tests 12 Feb-15 Apr 45
<table>
<thead>
<tr>
<th>TOX</th>
<th>Project/Report</th>
<th>Title/Details</th>
<th>Date</th>
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<tbody>
<tr>
<td>TOX 15</td>
<td>OSRD5194</td>
<td>Tests for Vesicancy on Human Skin</td>
<td>01 Jun 45</td>
</tr>
<tr>
<td>TOX 16</td>
<td>OSRD4638</td>
<td>Tests for Decontamination of mustard &amp; nitrogen</td>
<td>27 Jan 45</td>
</tr>
<tr>
<td>TOX 17</td>
<td>OSRD1899</td>
<td>A modification of the Drod</td>
<td>14 Sep 43</td>
</tr>
<tr>
<td>TOX 18</td>
<td>UCTL #56</td>
<td>Effects of temperature, humidity &amp; season on Reactions of human skin to mustard vapor</td>
<td>30 Nov 45</td>
</tr>
<tr>
<td>TOX 19</td>
<td>None</td>
<td>Joint Chemical Spray Project Sub-Committee</td>
<td>10 Jul-14 Sep 44</td>
</tr>
<tr>
<td>TOX 20</td>
<td>None</td>
<td>Chemical Warfare Agents &amp; Related Chemical Problems (Summary Technical Report of Division 9, NDRC)</td>
<td>1946</td>
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<tr>
<td>TOX 21</td>
<td>None</td>
<td>Rockefeller, Cornell Universities and Ohio State University</td>
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<tr>
<td>TOX 22</td>
<td>None</td>
<td>Massachusetts General Hospital, WWII Conscientious Objectors</td>
<td>1944/45</td>
</tr>
<tr>
<td>TOX 23</td>
<td>None</td>
<td>Information on testing at Great Lakes Naval Training Center</td>
<td></td>
</tr>
</tbody>
</table>

Volunteers from Great Lakes Naval Training Station tested reaction to negro skin. Page 27.

UCTL tests, OSRD 5194 & OSRD 3620 Mechanism.

Mustard gas, experimental studies of radioactive sulfur.

Over 6,000 men tested with 230,000 tests at Naval Training Stations in 9th Navy.

Apparatus used for vesicant armament.


Were bare from waist to shoulders in basic training at NTC Great Lakes.

Of commendation was prepared. In service record, notations were made.

Army-Navy Chemical spray testing at Proving Ground. Section III, page 1.

Cases first obtained from personal experience.

Men were exposed through 3 operational areas, Square, I on the back and over.

Parts III-VI gives information on list of contractors, contract numbers.

No chemical experiments 20 volunteers.

Cases that have been verified.
BOX 1
Commendation Certificates dated 1/22/1997 - 218
Commendation Certificates dated 1/15/1997 - 52
Commendation Certificates dated 12/18/1996 - 70
Commendation Certificates dated 11/22/1996 - 50
Commendation Certificates dated 11/15/1996 - 52
Commendation Certificates dated 10/17/1996 - 109
Commendation Certificates dated 6/21/1996 - 37
Commendation Certificates dated 7/16/1996 - 1
Commendation Certificates dated 6/11/1996 - 11
Commendation Certificates dated 5/17/1996 - 55
Commendation Certificates dated 5/9/1996 - 67
DAC Travel Vouchers FY 1991
DAC Travel Vouchers FY 1990
DAC Travel Vouchers FY 1989
DAC Travel Vouchers FY 1988
DAC Travel Vouchers CY 1987
DAC Travel Vouchers CY 1986

BOX 2
DAC Representation Funds FY 1981-FY 1995
DAC Read Ahead - June 25-26, 1998 Meeting, Richmond, VA
DAC Read Ahead - February 26-27, 1998 Meeting, Sacramento, CA
DAC Read Ahead - September 11-12, 1997 Meeting, San Antonio, TX
DAC Read Ahead - March 10-11, 1997 Meeting, Atlantic Beach, FL
DAC Read Ahead - November 21-22, 1996 Meeting, Santa Fe, NM
DAC Read Ahead - February 1-2, 1996 Meeting, Newport Beach, FL
DAC Read Ahead - September 21-22, 1995 Meeting, Kennebunkport, MA
DAC Read Ahead - March 24-25, 1993 Meeting, Charleston, SC
DAC Read Ahead - July 15-17, 1991 Meeting, Monterey, CA
1987 Psychometric Decision List
Joint Committee on the Standards for Educational and Psychological Testing, Mar 1996
Miscellaneous DAC Info 1987 - 1995
FY 1994 and Prior Annual Advisory Committee Reports
Chemical Weapons Exposure Study
Stored Records From DMDC by Box and Barcode
Transferred to TMA CBRN in 2005

List Restored 9/2007 from Xerox Handwritten Notes to Type
There are Five Pages of Xerox Bar Code Labels with this List

Box #1 RMI ML 42617
Scientific Notebook

<table>
<thead>
<tr>
<th>Book</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
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<tr>
<td>7</td>
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<td>8</td>
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</table>

Box# 2 RMI ML 42618

Certificates for WWII Chemical Test Personnel

Veterans At Risk Mustard Gas and Lewisite (3) note 2007-this appears to be # copies of the book?

Personnel Listing and Medical Records Chemical Warfare Service Volunteer Medical Division 1944-1945 Bushnell Field, FL; Edgewood Arsenal, MD; Dugway Proving Ground, Utah

Record Copy of Briefing Book for Jeanne Fites 27 April 1994

Medical Research in Chemical Warfare (Yellow book)

Box #3 RMI ML 42619

Commendation Certificates

<table>
<thead>
<tr>
<th>Date</th>
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<tbody>
<tr>
<td>1-22-97</td>
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<tr>
<td>1-15-97</td>
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<td>12-18-96</td>
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<td>6-11-96</td>
<td>12</td>
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<tr>
<td>5-9-96</td>
<td>67</td>
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</tbody>
</table>

US Army Activity in U. S. Biological Warfare Programs (2) Volumes 1 & 2

NRL Correspondence with Dept. of Veterans Affairs Headquarters

Box #4 RMI ML 42620

Commendatory Special Orders (Copy)

Institute of Medicine Veterans at Risk Health Effects of Mustard Gas and Lewisite Book April 1992

P&R Briefing Book Hearings on Experiments with Human Test Subjects Sept 28, 1994

Actions Taken by NRL to assist DVA in processing Veteran claims for exposure to Mustard gas and Lewisite.

U. S. Naval Admin Histories of WWII 1976

WWII Histories & Historical Reports on U. S. Naval History Division 1977

ARM 85 H (mustard) Spray Penetration of Jungle Canopy 30 May 45
Box 5  RMI ML 4621

ARM 86
NAV 01 P-1898 Prophylaxis & Treatment of Burns caused by mustard/S-461 ointment
NAV 02 P-1899 as above except using S-461 to prevent burns
NAV 03 P-1953 Testing M-1 Burns with Mod S-461
NAV 04 P-2208 Chamber Tests- Human Subjects H vapor
NAV 05 P-2219 “ “ “ “
NAV 06 P-2239 “ “ “ “
2007 Note: Gap in numbers
NAV 11 P-2464 “ “ “ “ HN Gas
NAV 12 P-2483 “ “ “ “ L vapor
NAV 13 P-2528 Chamber test H vapor on clothing
NAV 14 P-2579 Basic tests with H vapor
NAV 15 P-2590 Basic test w/ H vapor cc-2 Impregnated clothing
NAV 16 P-2597 Same test as NAV 14/15 but with worn CC-2 Impregnated clothing
NAV 17 P-2602 Same as above with Aqueous CC-2 Impregnated systems
NAV 18 P-2603 Chamber tests Human Subjects “Breaks” w/ CC2 Clothing
NAV 19 P-2604 Chamber tests CC2 & Carbon Protective Clothing
2007 Note: There was not NAV 20 listed
NAV 21 P-2688 Chamber Tests/Supplemental Tests of CC 2 Clothing
NAV 22 P-2701 Chamber Tests of New Carbon Clothing
NAV 23 P-2729 Chamber Tests Study of Clothing Design
NAV 24 P-2734 Chamber with HN Vapor
NAV 25 P-2760 Chamber Tests Patch Tests w/ H Vapor
2007 Note: Another gap in numbers
NAV 32 P-Authorization Letters-Navy WWII Testing Programs
NAV 33 Four Navy TMDR’s Cover Pages
NAV 07 P-2322 Evaluation of Activated Carbon in Protective Clothing April – Oct 1943
NAV 08 P-2343 Tropical Wearing Trials of Protective Clothing
NAV 09 P-2364 Forearm lesions Mustard Gas, Lewisite, and Nitrogen Mustards
NAV 10 P-2406 Wearing Trials of Protective Clothing Camp LeJeune, NC
NAV 20 P-2682 Wearing Trial Protective Clothing at Camp LeJeune, NC
NAV 26 NRL Lt to BUSHIPS-Tests of Carbon Clothing Against Vesicants
NAV 27 OSRD (Rockefeller Institute) Vesiculation in Mustard Gas, H, lesions of Human skin by BAL
NAV 28 through 31 were identical to NAV 27
TOX 01 University of Chicago Toxicity
TOX 02 Mechanism of Anti-Poisoning
TOX 03  S-461 Cream M-4 Ointment
TOX 04  Durk or Dark? Program
TOX 05  Toxicity of Chemical Agents
TOX 06  Test of Protective Ointments

Chemical Weapons Exposure Study  Records Stored From DMDC by Box and Barcode
Restored 9/2007 from Xerox Handwritten Notes to Type

Box 5  RMI ML 4621 continued

TOX 07 through TOX 13  Toxicity of Chemical Warfare Agents
TOX 14  Inhaled Lubricating Oil in Monkeys
TOX 15  Tests on Human Skin

Box #6  RMI ML 42622

Tox 16  OSRD4638 Test for Decon of Mustard Great Lakes
Tox 17  OSRD 1988- Mode of the Droder
Tox 19  Joint Chemical Spray project Dugway Proving Ground
Tox 20  Chemical Warfare Agents and Related Problems
Tox 21  Rockefeller, Cornell, and Ohio State
Tox 22  Massachusetts General Hospital, WWII Conscientious Objectors
Tox 23  Great Lakes Testing Program

Box#7 RMI ML 42628

ADM 1-14
HEA 1-7
EXP 1-3

Box#8 RMI ML 42629

EXP 4 - 18

Box#9 RMI ML 42630

EXP 19 - 33

Box# 10  RMI ML 42631

Exp 34 – 53

Box#11  RMI ML 42632

Exp 54 – 68  and  NRL 1 – 4
Chemical Weapons Exposure Study  Records Stored From DMDC by Box and Barcode
Restored 9/2007 from Xerox Handwritten Notes to Type

Box# RMI ML 42633

NRL 5 25

Box#13 RMI ML 42634

NRL# 26
ARM 01 – ARM 84
 COMPANY NAME  D.O.D. (Defense Manpower)  CONTRACT NUMBER  2290

RECORDS MANAGEMENT, INC.
EX CARD
(DATA ENTRY FORM)

BOX NUMBER:(16)

BOX SUBJECT TITLE:(46)  Chemical Warfare #1

FROM:  TO  DATES

RETENTION DATE  _/_/

RECORDS MANAGEMENT, INC.
INDEX CARD
(DATA ENTRY FORM)

BOX NUMBER:(16)

BOX SUBJECT TITLE:(46)  Chemical Warfare #2

FROM:  TO  DATES

RETENTION DATE  _/_/

RECORDS MANAGEMENT, INC.
INDEX CARD
(DATA ENTRY FORM)

BOX NUMBER:(16)

BOX SUBJECT TITLE:(46)  Chemical Warfare #3

FROM:  TO  DATES

RETENTION DATE  _/_/

*NOTE: CONTENTS DESCRIPTION WILL BE BILLED AT AN ADDITIONAL RATE, IF LISTING FILE BY FILE.
RECORDS MANAGEMENT, INC.
DEX CARD
DATA ENTRY FORM)

BOX NUMBER:(16)

BOX SUBJECT TITLE:(46) chemical Warfare #4

FROM: ____________________ TO ____________________ DATES

RECORDS MANAGEMENT, INC.
INDEX CARD
(DATA ENTRY FORM)

BOX NUMBER:(16)

BOX SUBJECT TITLE:(46) chemical Warfare #5

FROM: ____________________ TO ____________________ DATES

RECORDS MANAGEMENT, INC.
INDEX CARD
(DATA ENTRY FORM)

BOX NUMBER:(16)

BOX SUBJECT TITLE:(46) chemical Warfare #6

FROM: ____________________ TO ____________________ DATES

*NOTE: CONTENTS DESCRIPTION WILL BE BILLED AT AN ADDITIONAL RATE, IF LISTING FILE BY FILE.
COMPANY NAME  D.O.D. (Defense Manpower)  CONTRACT NUMBER  2290

RECORDS MANAGEMENT, INC.
INDEX CARD
(DATA ENTRY FORM)

RMI ML42628

BOX NUMBER: (16)

BOX SUBJECT TITLE: (46)  Chemical Warfare #7

FROM:  ___________________________ TO  ___________________________ DATES

RECORDS MANAGEMENT, INC.
INDEX CARD
(DATA ENTRY FORM)

RMI ML42629

BOX NUMBER: (16)

BOX SUBJECT TITLE: (46)  Chemical Warfare #8

FROM:  ___________________________ TO  ___________________________ DATES

RECORDS MANAGEMENT, INC.
INDEX CARD
(DATA ENTRY FORM)

RMI ML42630

BOX NUMBER: (16)

BOX SUBJECT TITLE: (46)  Chemical Warfare #9

FROM:  ___________________________ TO  ___________________________ DATES

RECORDS MANAGEMENT, INC.
INDEX CARD
(DATA ENTRY FORM)

*R NOTE: CONTENTS DESCRIPTION WILL BE BILLED AT AN ADDITIONAL RATE, IF LISTING FILE BY FILE.
RECORDS MANAGEMENT, INC.
INDEX CARD
(DATA ENTRY FORM)

BOX NUMBER: (16)

BOX SUBJECT TITLE: (46) Chemical Warfare #10

FROM: ___________ TO ___________ DATES

RETENTION DATE __/__/___

RECORDS MANAGEMENT, INC.
INDEX CARD
(DATA ENTRY FORM)

BOX NUMBER: (16)

BOX SUBJECT TITLE: (46) Chemical Warfare #11

FROM: ___________ TO ___________ DATES

RETENTION DATE __/__/___

RECORDS MANAGEMENT, INC.
INDEX CARD
(DATA ENTRY FORM)

BOX NUMBER: (16)

BOX SUBJECT TITLE: (46) Chemical Warfare #12

FROM: ___________ TO ___________ DATES

RETENTION DATE __/__/___

*NOTE: CONTENTS DESCRIPTION WILL BE BILLED AT AN ADDITIONAL RATE, IF LISTING FILE BY FILE.
COMPANY NAME
D.O.D. (Defense Manpower)
CONTRACT NUMBER 2290

RECORDS MANAGEMENT, INC.
DEX CARD
(DATA ENTRY FORM)

BOX NUMBER: (16)

BOX SUBJECT TITLE: (46) Chemical Warfare #13

FROM: __________________ TO __________________ DATES

RETENTION DATE __ / __ / __

RECORDS MANAGEMENT, INC.
INDEX CARD
(DATA ENTRY FORM)

BOX NUMBER: (16)

BOX SUBJECT TITLE: ______

FROM: __________________ TO __________________ DATES

RETENTION DATE __ / __ / __

RECORDS MANAGEMENT, INC.
INDEX CARD
(DATA ENTRY FORM)

BOX NUMBER: (16)

BOX SUBJECT TITLE: ______

FROM: __________________ TO __________________ DATES

RETENTION DATE __ / __ / __

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<td><strong>138,528</strong></td>
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MEMORANDUM FOR DEPUTY ASSISTANT SECRETARY OF DEFENSE,
INFORMATION MANAGEMENT, OASD(C3I)

SUBJECT: Request for CLEM Central Fund Resource Transfer to Defense Electronic Supply
Center (DESC) in Support of the Department of Defense (DoD)/Department of
Veterans' Affairs (VA) Information Sharing Project

CONTROL NUMBER: 94FP

PART A TASK DESCRIPTION FOR CORPORATE INFORMATION MANAGEMENT
SUPPORT

1. TASK TITLE AND PRIORITY:
   a. Title: DoD/VA Information Sharing
   b. Priority: Very High
   c. Mission Area #9 - Human Resources Management

2. OBJECTIVE: The objective of this task will be to continue the development of a database
   containing information on the location, chemicals tested, and dates of chemical weapons research
   programs. This objective will be met by refining and expanding a database already developed
   by the Chemical Warfare/Chemical and Biological Defense Information Analysis Center (CBIAC).

3. TASK AUTHORITY REFERENCE:
   a. Mission Area #9-Personnel
   b. Budget Line Item: 4.10 (Human Resource Management)

4. STATEMENT OF WORK:
   a. Background: The Deputy Secretary of Defense has directed the Military Departments
to obtain information relevant to possible human exposures resulting from testing, transporting
or storing chemical weapons agents. The USD(P&R) has convened a task force and is
monitoring the status of this project. The information is to be included in DoD initiatives for
enhancing information sharing programs with the Department of Veterans Affairs. The
OUSD(P&R) is working jointly with the VA in establishing appropriate information requirements and information access.


d. Project Oversight: The Director of Information Resource Management, OUSD(P&R) will oversee this project and review for approval the resulting products in compliance with DoD Information Systems Management and C3I directives. The OASD(C3I) Functional Information Manager (FIM) will be provided sufficient, timely information on progress of this task to include: regular status of schedule and accomplishments; utilization of funds; accomplishments; and identification of benefits accrued to the Department by this investment. The resulting Final Report will be provided to the FIM. The OASD(C3I) FIM Point of Contact (POC) for this task is Robert Cooper, phone (703) 604-1568.

e. Security Statement: Current assessment is that work will require access to classified information up to U.S. Secret and generation of classified material up to U.S. Secret. U.S. Citizenship is required of personnel working on this task.

5. DELIVERABLES: See list of deliverables on attached Statement of Work.

6. SCHEDULE: The program is ongoing and completion date will be established at a maximum of six (6) months after the effective date of this modification.

7. ESTIMATE OF RESOURCES: $100,000

8. OASD(C3I) POINT OF CONTACT:
   a. POC: Robert Cooper
   b. Organization: OASD(C3I) FIM, Personnel
   c. Address: Suite 910, Crystal Gateway #2
                  1225 Jefferson Davis Highway
                  Arlington, VA 22202
   d. Telephone#: 703-604-1568
   e. FAX#: 703-604-1598

9. FUNCTIONAL POINT OF CONTACT:
   a. Name: Norma St. Claire
   b. Organization: OUSD(P&R)
   c. Address: Suite 1212
                  4015 Wilson Boulevard
                  Arlington, VA 22203
d. Telephone#  703-696-8710
e. FAX#  703-696-8703

PART B: FUNDING INFORMATION REQUIRED WHEN USING CIM CORPORATE FUNDS

10. CIM CENTRAL FUNDS-BUDGET LINE ITEMS

Budget Line 4.10-Human Resources Management

11. TYPE OF ACTION

Transfer of funds to Defense Electronic Supply Center

12. INFORMATION ON FUND RELEASE

Organization: Defense Electronics Supply Center
Address: ATTN: DESC-PSC
1507 Wilmington Pike
Dayton, Ohio 45444-5180

Financial POC: Ms. Cheryl Montoney
Telephone #: 513-296-6671
Fax #: 513-296-5344

13. CONTRACT INFORMATION

Contract/Vendor Name: Battelle Corporation
Contract Number: DLA 900-86-2045
Address: 2113 Emmonton Park Road, Suite 200
Edgewood, Maryland 21040

Government COTR: Mr. Scott Savory
Organization: Defense Electronics Supply Center
Address: ATTN: DESC-PSC
1507 Wilmington Pike
Dayton, Ohio 45444-5180

Financial POC: Ms. Cheryl Montoney
Telephone #: 513-296-6671
FAX#: 513-296-5344
14. COORDINATION

Signature: Norma J. Claire 4/28/94
Director, Information Resources Management
OUSD(P&R)(R&R)

15. APPROVED:

Signature: ______________________ ______________________
Deane Erwin Date
FIM, OASD (C3I)

Signature: ______________________ ______________________
Cynthia Kendall Date
DASD(IS), OASD(C3I)

Attachment:
As Stated
STATEMENT OF WORK

1.0 **Title**: DoD/VA Information Sharing/Chemical Weapons Exposure Site Database

2.0 **Background**: 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." As a result of the findings of the report, Congressional inquiries, and requests from the Department of Veterans' Affairs, the Deputy Secretary of Defense signed a memo (March 9, 1993) to the Secretaries of the Military Departments and heads of Defense Agencies directing the Military Departments to initiate procedures to locate, declassify, and provide OUSD (P&R) with information relevant to possible human exposures resulting from testing, production, transportation or storage of chemical weapons agents (i.e., names of volunteers, test sites, agents tested, etc.) The contractor has been tasked to develop a database on chemical weapons research programs consisting of sites of chemical testing programs using human subjects, information on the chemicals tested, dates of tests, and kinds of tests conducted (field, chamber, patch).

Under the initial effort, the contractor gathered information from available databases and began collecting information from the Edgewood Technical Library and the Historian's Office. Additional effort is required to continue collection and analysis activities at Edgewood, Dugway Proving Ground, and other locations as appropriate.

3.0 **Objective**: The purpose of this task is to extend the effort to collect and extract additional information from key repositories of information pertaining to the use of volunteers and/or live agents with possible human exposures. The lessons learned during the data collection process will permit the formulation of future procedures resulting from business process improvements that will facilitate the real time collection of data to enhance personnel support programs. Such procedures will feature appropriate records management practices and audit trails to preclude the necessity for this type collection effort in the future.

4.0 **Specific Tasks**: The effort shall include the following two sub-tasks:

4.1 **On-site Collection and Analysis of Site Information**

The contractor shall continue to collect information pertaining to sites and events where human exposure to chemical or biological agents may have occurred with an emphasis on activities before 1955. This information exists in several formats and in a number of collections with varying degrees of organization. Collection shall continue at the Edgewood Technical Library, Dugway Technical Library, and the Chemical School Library as a minimum with the possibility of future sites being added as new information is uncovered. Pertinent data shall be extracted for database entry using input sheets.
already developed. References, including names of personnel tested or exposed, shall be provided to OUSD (P&R) as they are identified.

4.2 Database Updates and Organization

The contractor shall finalize the format of the database in coordination with OUSD (P&R) and revise the database accordingly. Additional electronic databases will be incorporated in the database and hard copy updates will be prepared and submitted to OUSD (P&R) as required. A standard database format (e.g. ASCII delimited fields) will be produced for inclusion in existing database structures or software currently accessible by OUSD (P&R).

5.0 Reporting Requirements: The contractor will provide the following reports and other deliverables:

5.1 Monthly Status Reports:

Monthly progress reports will be submitted detailing the contract technical and cost performance.

5.2 Final Technical Report

5.2.1 A draft final report will be prepared to summarize the collection effort and include a full definition of the database (e.g., tables and fields, relationships between tables, etc.). The final report will include information that will be used to develop recommendations on actions to be taken to effect business process improvements that will preclude future need for this type collection effort resulting in better support and response to our service members and veterans.

5.2.2 An electronic copy of the database and hard copy will be provided as requested by OUSD (P&R). This database will enable DoD to assist Department of Veterans' Affairs and Department of Labor in making determinations on disability compensation claims in a timely and accurate manner.

6.0 Qualification Requirements: Contractor staff selected to work on this task will have experience with: database design; information collection and coding; chemical defense historical programs, equipment, and doctrine.

7.0 Place and Period of Performance:

7.1 Location:

Work shall be performed primarily at the contractor's Edgewood, Maryland facility and the Chemical Biological Information Analysis Center (CBIAC), Aberdeen Proving
Ground, Maryland. Access to additional U.S. Government facilities will be required to collect additional information for the database.

7.2 Travel Requirements:

Travel to Dugway Proving Ground, UT, and Ft McClellan, AL, is required in addition to local travel to CBDCOM (Edgewood, MD) and Washington DC.

7.3 Duration

Work for this task shall be completed within six (6) months after the effective date of modification.

8.0 Restrictions: There is no known conflict of interest associated with this task.

9.0 Security Clearance: The contractor will require access to and may generate classified material up to SECRET/NOFORN and NATO/SECRET. The contractor will store and handle all material in accordance with U.S. Government Facilities approvals and regulations.

10.0 Government Furnished Equipment (GFE): If required, the government will also provide access to the facilities where the database resides.
Thanks. I guess copies of all of the things you give them should be included in the notebook you’re building too.

-----Original Message-----
From: Hamed, Marty, CTR USA OSD P&R IM BAH
Sent: Tuesday, September 11, 2007 12:33 PM
To: St. Claire, Norma J CIV USA OSD P&R IM
Subject: GAO Chemical Weapons

Memo for your records. I gave the GAO team the following documents from your files:

List of site visits made by P&R in 1993-94
Briefing for staff and members of House Veterans Affairs July 93
Letter from VA to Secretary Aspin January 93
Letter from President Clinton to Congressman Brower (House Veterans Affairs Compensation Subcommittee) February 93 Copy of DEPSECDEF Perry Memo March 93
Memo to OASD(FM&P)Director IRM from OASD (HA) subject: Chemical Weapons Exposure Testing Program of Work Study Group (signed CAPT John Jemionek, MSC, USN April 93

They have requested a copy of the contract or statement of work we gave Battelle for database that was finalized in 1994. I will look for it as I go through the files.
Date: Tuesday, August 28, 2007 7:19 PM
From: mehamed@charter.net
To: Norma.StClaire@osd.pentagon.mil, Thomas E Baril Jr <Baril@gao.gov>
Cc: Brian D Pegram <PegramB@GAO.GOV>
Subject: Re: Chemical Weapons

I am available all day on the September 11. Just let me know what time is good for everyone. Thanks, Marty Hamed

---- Thomas E Baril Jr <Baril@gao.gov> wrote:

Marty,

Good afternoon.

First, thank you for following up with Ms. St. Claire's email and providing us the information that you have provided to date. We would like to meet with you to get your insights into DOD's research during the 1990s on this issue. While Brian Pegram is located in Washington, D.C., I work out of our Dallas, Texas, office. I plan on being in D.C. the week of 10 September. Are you and Ms. St. Claire available to meet with us the morning of 11 September?

Ms. St. Claire, could we review the classified reports to which you previously referenced after our discussion on that date, please? Also, since the scanned copy of the 1993 Battelle report (i.e., the report on the long paper) is hard to read, could one of your staff make a hard copy of it and mail it to me at:

GAO
Attn: Tommy Baril
1999 Bryan Street, Suite 2200
Dallas, TX 75201

Thank you, both.

Tommy

>>> <mehamed@charter.net> 8/21/2007 3:13 PM >>>

Mr. Baril and Mr. Pegram:

In reference to Ms. St. Claire's email to me below. I am working for her to pull together some of the past work completed by OUSD (P&R) concerning the locations of chemical weapons testing, and the current location of the records concerning these tests. She has directed me to make myself available to meet with you at her office to discuss some of your issues and try to answer any questions you may have.

I also have located a soft copy of a report on records locations concerning chemical weapons testing from the 1940's up through the 1970's that was a product of a study done by DoD in the 90's. I believe this to be the final draft of the DoD/VA Exposure Records Locator Project. I may be able to locate a final copy. I would be glad to meet with you at your convenience to discuss the contents of the report and more specific information on the actual test sites. Also, since some of the organizations listed in the report have changed names or may no longer exist in the form stated in the report, I can help you with that.

I will need a couple day's notice to set up a place at Ms. St. Claire's office for a meeting. If you would like to meet please reply to this email with a copy to Ms. St. Claire.

Thank you, Marty (Martha) Hamed

---- "St. Claire wrote:

I have Tommy Baril and Brian Pegram in my office right now. They're with the GAO. They're looking for info on chemical weapons and
Where did Fred go when he left? I know to DMDC. Was he working for Mary Dixon at that time? Just about every name on their list has gone now (except me, of course) and possibly Mary if she was the one in charge of that office. Do you know where Fred is? I know you kept in touch for a while.

Let me know. I copied them on this e-mail in case you think of something for them.

Norma
Marty,

Good afternoon.

First, thank you for following up with Ms. St. Claire’s email and providing us the information that you have provided to date. We would like to meet with you to get your insights into DOD’s research during the 1990s on this issue. While Brian Pegram is located in Washington, D.C., I work out of our Dallas, Texas, office. I plan on being in D.C. the week of 10 September. Are you and Ms. St. Claire available to meet with us the morning of 11 September?

Ms. St. Claire, could we review the classified reports to which you previously referenced after our discussion on that date, please? Also, since the scanned copy of the 1993 Battelle report (i.e., the report on the long paper) is hard to read, could one of your staff make a hard copy of it and mail it to me at:

GAO
attn: Tommy Baril
1999 Bryan Street, Suite 2200
Dallas, TX 75201

Thank you, both.

Tommy

--- St. Claire wrote:

I have Tommy Baril and Brian Pegram in my office right now. They’re with the GAO. They’re looking for info on chemical weapons and biological weapons testing (yes, really). Remember the report we had on all the different locations and what types of tests were conducted? Did Fred take that with him when he left? Do we still have a copy somewhere in the office?

Where did Fred go when he left? I know to DMDC. Was he working for Mary Dixon at that time? Just about every name on their list has gone now (except me, of course) and possibly Mary if she was the one in charge of that office. Do you know where Fred is? I know you kept in touch for a while.
Let me know. I copied them on this e-mail in case you think of something for them.

Norma
(202) 215-7686

Attn: Brian Plegram
Cost Data/CW

From: IRM OSD PtR
DoD

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**Option 3, **Page 1 | 24 October 1994

Note: Cuts reflect USD/Policy redistritution (-22.10%) and C9 reductions (-8.4%) for millennium.
Military Personnel Information Management
Project Description
Records Management

Background

The Assistant Secretary of Defense (Force Management and Personnel) has approved a corporate information management (IM) initiative in the functional area of personnel records management. This effort is part of a larger corporate IM program that encompasses all the military personnel functions. A process model describing the functional area of military personnel has been developed. A data model which identifies military personnel entities has also been developed. An essential task within the activity model is the management of the personnel record which captures all information on an individual describing their military experience and related events (e.g. dependent information). The availability, or non-availability of this information can have an important impact on both the service member and on the management of the armed forces.

The ability to locate and access this information is a significant concern not only when determining the real time status of forces but when performing retrospective analyses critical to the member and the nation. Critical studies have included: the Agent Orange investigations which attempted to identify those personnel who had been exposed to defoliants in Vietnam; Desert Shield and Desert Storm analyses to identify personnel exposed to the smoke and natural biological perils encountered in that theater; and a review of records to identify individuals exposed to nuclear radiation. Recently, attention has been focused on the need to identify personnel exposed to certain chemical agents during and after World War II. The difficulty encountered in our ability to identify individuals who were exposed to hazardous substances attracted the attention of Congress and the American people.

Records are developed, maintained, and archived by the Military Departments. Procedures are not adequate to support requirements for retrospective identification of relevant personnel and retrieval of information critical for review and analysis. A thorough review of functional processes required to satisfy the requirements for tracking individuals retrospectively would identify functional process improvements in both tracking individuals and information that is essential for the efficient and effective management of military records in the future.

The effort will encompass a review of records management data, processes, and systems in use and planned by the Military Departments.
Validation of Functional Processes

The contractor will facilitate an evaluation process that includes establishing corporate functional requirements for identifying requirements to retrieve information from military records and obtaining the information in a manner that supports appropriate analyses. Using corporate IM processes, the contractor will also facilitate the development of a "As Is Baseline" that can be used to develop short term actions and proposed alternatives for improvements as well a Functional Economic Analysis with long term implications. The current effort regarding chemical agents will serve as a case study for requirements and provide a baseline for benchmarking alternatives in the public and private sectors.

The Deputy Secretary of Defense directed the Assistant Secretary of Defense (Force Management and Personnel) to oversee and monitor the Department's efforts to identify individuals exposed to chemical weapons agents. The goal of the project is to provide information to the Department of Veterans' Affairs as soon as possible. The ability to bring additional analytical effort to the study will not only result in a more complete and accurate response to the requirement for information, but also will provide lessons learned that will have an impact on functional process improvements for the management of personnel records. One major concern is the identification of requirements for interfaces with the Department of Veterans' Affairs.

Validation of Technical Solutions

Each Service has systems (automated and non-automated) which support records management. Candidate technical solutions, identified during the functional analysis, will be documented and evaluated to ensure that IM technical guidelines for software and hardware are met as well as functional requirements. An analysis of the technical solutions will consider the feasibility of (a) standard system(s), whether an operational system exists to meet the functional requirements, and migration systems required to meet functional requirements. A technical management plan will be prepared for recommended alternative(s).

Plan of Action

OASD(FM&P) will provide guidance to the contractor through the definition of protocols and plans for the analysis and the case study retrieval effort. The contractor will support performance of the defined tasks, analysis of the processes, and development of a baseline for functional process improvement.

The contractor will also identify functional processes in the private and public sector that can be used for benchmarking potential improvements. The deliverables are essentially of two
kinds: products that support the project, and related analyses of efforts required to meet the project objectives.

The contractor will:

1. Develop a detailed work plan for supporting the project and a schedule for identifying and documenting current business practices.

2. Support OASD (FM&P) in the identification and review of source materials for the case study. This will include site visits to locations where relevant data are stored and documentation of information at each site.

3. Conduct intensive reviews of military records and other archival and record sources for identifying the populations potentially exposed to toxic agents. Participate in the retrieval and analyses of these records and establish a database that meets the criteria established by FM&P.

4. Conduct a parallel analysis of current records management functional practices in the Components, using the IDEF0 modelling techniques. Include key inputs, outputs, mechanisms and constraints; resources consumed by current business practices (baseline costs) and interfaces/interactions with other organizations. Resource consumption information will support the application of activity based costing tools.

5. Develop high-level process and data models.

6. Identify functional process-re-engineering alternatives. Identify opportunities for improvement with special emphasis on potential for joint use.

7. Identify applications in the private and public sectors which can be used as benchmarks for consideration when developing and proposing functional process improvements.

8. Facilitate a joint work group to consider improvement opportunities with emphasis on capabilities having the potential for joint use. Select business process improvements for full costing and benefits computations. Group improvements into alternatives for the Functional Economic Analysis.

9. Prepare Functional Economic Analyses (FEAs) for the proposed alternatives, computing net present value of alternative cost benefit streams, including risk analysis. Prepare a preliminary analysis of data management requirements to accompany the FEA(s).

10. Prepare an analysis of technical requirements and suitability for candidate technical solutions considered or recommended by the FEA(s).
11. Support OASD(FM&P) in preparing periodic briefings and presentations to DoD officials, Points-of-Contact, and others as required. Prepare documentation for CIM reviews.

**Proposed Task Completion Schedule**

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<td>Intensive analysis of Military records systems and identification of the required records</td>
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<td>Develop a high level process model and data model and reports</td>
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<td>Benchmark private and public sector records management systems</td>
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<td>start+270 to start+360</td>
<td>FEA, with Analysis of Data Management Requirements and Analysis of Technical Requirements and Suitability</td>
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**Contractor Deliverables**

- Monthly Progress Reports
- Detailed task plan
- Analyses of Military Service Records Systems
- Identification of Records Meeting Selection Criteria
- Functional Process Improvement Report -
  - Node Tree
  - TDEFO Activity Analysis of current business practices
  - High Level Entity Relationship models
- Glossary
- Preliminary Activity Based Costing (ABC) Models
- Potential Business Process improvements
- Summary, including Work Group Recommendations
- Benchmarking Study Report
- Management Reports and Presentations
- Work Group Report - Opportunities for Functional Process Improvements
- Functional Economic Analyses
- Analysis of Data Management Requirements
- Analysis of Technical Requirements and Suitability
TASK ORDER DESCRIPTION
MILITARY PERSONNEL CORPORATE INFORMATION MANAGEMENT (IM)

1. TASK TITLE AND PRIORITY:
   a. Title: Military Personnel Records Management (Task Statement 012, Delivery Order 0007)
   b. Priority: Very High
   c. Mission Area #9 - Human Resources Management

2. OBJECTIVE: Utilizing functional experts from the Services and OSD, identify functional process improvements that will have an impact on the management of personnel records by analyzing existing practices and repositories for these records. By assisting in the identification, retrieval, and analysis of records for the Chemical Weapons Research Program, compile and document current business practices and identify functional requirements.

3. STATEMENT OF WORK:

   A. SCOPE: This task order will include a review of the records management data, processes, and systems in use and planned by the Military Departments. It will support activities of the Chemical Weapons Exposure Study Task Force (CWEST) and follow-on joint working groups conducting analyses necessary to develop improved functional processes.

   B. METHOD: See "Plan of Action" of attached Project Description.

   C. PROJECT OVERSIGHT: The Director of Information Resources Management, OASD(FM&P) will oversee this project and approve all products. The Director of Defense Information Functional Information Manager (FIM) for Personnel will be provided sufficient, timely information on progress on this task to include regular status of schedule and accomplishments; utilization of funds; identification of benefits accrued to the Department by this investment; functional economic analyses; hard and soft copies of process and data models for inclusion in the DoD Data and Process Model Repository. The Defense Information Systems Agency will review and validate any resulting process and data models; ensure compliance with technical requirements; and confirm consistency with technical migration and other technical implementation plans.

   D. SECURITY STATEMENT: Access to records and facilities at the TOP SECRET level will be required by a limited number of personnel assigned to the CWEST case study.

4. DELIVERABLES: See list of deliverables and timeline of attached Project Description.

5. SCHEDULE: 15 June 1993 - 10 June 1994
6. ESTIMATE OF RESOURCES:

A. APPROPRIATION: Operations and Maintenance - $1,000,000

B. DISA STAFF YEARS: Not applicable to this task.

7. OASD(C3I) POINT OF CONTACT:

Name: Linda Taylor Kjonnerod
Organization: ODASD(IM), OASD(C3I)
Address: FIM, Personnel
           Suite 910, Crystal Gateway #2
           1225 Jefferson Davis Highway
           Arlington, VA 22202
Telephone#: 703-746-7902
FAX#: 703-746-7396

8. FUNCTIONAL POINT OF CONTACT:

Name: Norma St. Claire
Organization: OASD(FM&P)
Address: Suite 1212
           4015 Wilson Boulevard
           Arlington, VA 22203
Telephone#: 703-696-8710
FAX#: 703-696-8793

PART B: FUNDING INFORMATION REQUIRED WHEN USING CIM CORPORATE FUNDS

9. CIM CENTRAL FUNDS-BUDGET LINE ITEMS

   Budget Line 4.10-Human Resources Management

10. TYPE OF ACTION

    1262 to DSS-W

11. INFORMATION ON FUND RELEASE

   Organization: Defense Medical Support Activity
   Address: Skyline Plaza 6, Suite 502
            5109 Leesburg Pike
            Falls Church, VA 22041
   Financial POC: Ms. Trudy Morris
   Telephone #: 703-756-8720
   FAX#: 703-756-8706
12. CONTRACT INFORMATION
Contract/Vendor name: Systems Research and Applications Corporation (SRA)
Contract Number: MDA 903-91-D-0061
Address: 2000 15th Street
North Arlington, VA 22201
Government COTR: Mr. Randall Koran
Organization: Defense Medical Support Activity
Address: Skyline Plaza 6, Suite 502
5109 Leesburg Pike
Falls Church, VA 22041
Financial POC: Ms. Trudy Morris
Telephone #: 703-756-8720
FAX#: 703-756-8706

13. COORDINATION:

Norma J. St. Claire
DIR. Infor Res Mgmt
OASD (FM&P)

Date:

14. APPROVED:

SIGNATURE

Mary H. Smith
FIM for Finance,
Personnel, and Health
OASD (C3I)

Date:
ADDENDUM MAY 2008
GAO REPORT DATED FEBRUARY 2008
CHEM/BIO DEFENSE DoD and VA Need to Improve Efforts to Identify and Notify Individuals Potentially Exposed during Chem/Bio Tests

TAB C15
February 2008

CHEMICAL AND BIOLOGICAL DEFENSE

DOD and VA Need to Improve Efforts to Identify and Notify Individuals Potentially Exposed during Chemical and Biological Tests
What GAO Found

Since 2003, DOD has stopped actively searching for individuals who were potentially exposed to chemical or biological substances during Project 112 tests, but did not provide a sound and documented basis for that decision. In 2003, DOD reported it had identified 5,842 servicemembers and estimated 350 civilians as having been potentially exposed during Project 112, and indicated that DOD would cease actively searching for additional individuals. However, in 2004, GAO reported that DOD did not exhaust all possible sources of information and recommended that DOD determine the feasibility of identifying additional individuals. In response to GAO's recommendation, DOD determined continuing an active search for individuals had reached the point of diminishing returns, and reaffirmed its decision to cease active searches. This decision was not supported by an objective analysis of the potential costs and benefits of continuing the effort, nor could DOD provide any documented criteria from which it made its determination. Since June 2003, however, non-DOD sources—including the Institute of Medicine—have identified approximately 600 additional names of individuals who were potentially exposed during Project 112. Until DOD provides a more objective analysis of the costs and benefits of actively searching for Project 112 participants, DOD's efforts may continue to be questioned.

DOD has taken action to identify individuals who were potentially exposed during tests outside of Project 112, but GAO identified four shortcomings in DOD's current effort. First, DOD's effort lacks clear and consistent objectives, scope of work, and information needs that would set the parameters for its effort. Second, DOD has not provided adequate oversight to guide this effort. Third, DOD has not fully leveraged information obtained from previous research efforts that identified exposed individuals. Fourth, DOD's effort lacks transparency since it has not kept Congress and veterans service organizations fully informed of the progress and results of its effort. Until DOD addresses these limitations, Congress, veterans, and the American public cannot be assured that DOD's current effort is reasonable and effective.

DOD and VA have had limited success in notifying individuals potentially exposed during tests both within and outside Project 112. DOD has a process to share the names of identified servicemembers with VA; however, DOD has delayed regular updates to VA because of a number of factors, such as competing priorities. Furthermore, although VA has a process for notifying potentially exposed veterans, it was not using certain available resources to obtain contact information to notify veterans or to help determine whether they were deceased. Moreover, DOD had not taken any action to notify identified civilians, focusing instead on veterans since the primary impetus for the research has been requests from VA. DOD has refrained from taking action on notifying civilians in part because it lacks specific guidance that defines the requirements to notify civilians. Until these issues are addressed, some identified veterans and civilians will remain unaware of their potential exposure.
Results in Brief
Background
DOD's Decision to Stop Actively Searching for Project 112 Individuals Was Not Based on a Sound and Documented Cost-Benefit Analysis
DOD's Effort to Identify Individuals Potentially Exposed during Non-Project 112 Tests Has Several Shortcomings
DOD and VA Have Had Limited Success in Notifying Potentially Exposed Individuals
Conclusions
Matters for Congressional Consideration
Recommendations for Executive Action
Agencies' Comments and Our Evaluation

Appendix I
Scope and Methodology

Appendix II
Comments from the Department of Defense

Appendix III
Comments from the Department of Veterans Affairs

Appendix IV
GAO Contact and Staff Acknowledgments

Related GAO Products

Tables

Table 1: Number of Servicemembers Identified as Having Been Potentially Exposed during Project 112
Table 2: Number of Non-Project 112 Servicemembers Identified by DOD as of December 2007
Table 3: Veterans Who VA Has Notified of Their Potential Exposure as of December 2007
Table 4: Number of Civilians Potentially Exposed as of December 2007

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<tr>
<td>VA</td>
<td>Department of Veterans Affairs</td>
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<tr>
<td>OUSD (AT&amp;L)</td>
<td>Office of the Undersecretary of Defense for Acquisition, Technology, and Logistics</td>
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<td>OUSD (P&amp;R)</td>
<td>Office of the Under Secretary of Defense for Personnel and Readiness</td>
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<td>OASD (HA)</td>
<td>Office of the Assistant Secretary of Defense for Health Affairs</td>
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February 28, 2008

The Honorable Ike Skelton
Chairman
Committee on Armed Services
House of Representatives

The Honorable Vic Snyder
Chairman
Subcommittee on Oversight and Investigations
Committee on Armed Services
House of Representatives

The Honorable Mike Thompson
House of Representatives

As we have previously reported, since World War II, tens of thousands of military personnel and civilians have been involved in classified human experimentation and were potentially exposed to chemical and biological substances through tests conducted or sponsored by the Department of Defense (DOD). Some of these tests and experiments involved the intentional exposure of people to hazardous substances such as blister and nerve agents, biological agents, lysergic acid diethylamide (LSD), and phencyclidine (PCP). In some cases, healthy adults, psychiatric patients, and prison inmates were used in these tests and experiments. According to a 1994 staff report to the Senate Committee on Veterans Affairs, in some instances, servicemembers who consented to serve as human subjects

1 In this report the term "substance" is synonymous with the term "agent." Both terms are used to mean chemical and biological agents, simulants (a substitute for a more toxic agent), tracers, vaccines, and medical and "non-harmful" substances.

found themselves participating in experiments quite different from those described at the time they volunteered. These tests and experiments were conducted to support weapon development programs, identify methods to protect the health of military personnel against a variety of diseases and combat conditions, and analyze U.S. defense vulnerabilities. From 1962 through 1974, DOD conducted a series of classified ship-based and land-based chemical and biological warfare tests involving military and civilian personnel as well as, in some cases, foreign personnel observers—both military and civilian. These tests were called Project 112 because in 1962 it was the 112th project of 150 delineated by the Secretary of Defense involving the classified testing of chemical and biological agents.

Precise information on the number of tests, experiments, and participants is not available, and the exact numbers will never be known. However, as a result of questions raised by members of Congress and veterans since 1993, DOD has undertaken three major initiatives to identify individuals potentially exposed to chemical or biological substances during tests it has sponsored or conducted. First, from 1993 to 1997, the former Office of the Assistant Secretary of Defense for Force Manpower and Personnel within the Office of the Under Secretary of Defense (OUSD) for Personnel and Readiness (P&R) participated in a working group with the military services and the Department of Veterans Affairs (VA) in response to a January 1993 Institute of Medicine report on the exposure of individuals to mustard agents and lewisite. The working group identified approximately 6,400 servicemembers and civilians who were exposed to mustard agents and other chemical substances.

Second, in August 2000, the acting Secretary of Veterans Affairs wrote a letter to the Secretary of Defense requesting assistance in obtaining information about a series of then-classified chemical and biological tests under DOD's Project 112 program. In response to this request and subsequent congressional direction in the Bob Stump National Defense

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8 Institute of Medicine, Veterans at Risk: The Health Effects of Mustard Gas and Lewisite.

9 Mustard agents and lewisite are chemical warfare agents known as vesicants because of their ability to form vesicles, or blisters, on exposed skin.
Authorization Act for Fiscal Year 2003,6 the Office of the Assistant Secretary of Defense (OASD) for Health Affairs (HA) within OUSD (P&R) conducted an internal DOD investigation into Project 112. In a resulting report issued in 2003, DOD identified 5,842 servicemembers and estimated that 350 civilians had been potentially exposed during Project 112 tests.7 We subsequently evaluated DOD’s efforts, and in May 2004, we reported that DOD appeared to have accurately identified all major chemical and biological tests associated with Project 112, but that there likely were servicemembers and civilian personnel potentially exposed to substances who had not been identified for various reasons.8

Third, and in further response to congressional direction in the Defense Authorization Act for FY 2003, the Office of the Special Assistant for Chemical and Biological Defense and Chemical Demilitarization Programs (hereafter referred to as the chemical and biological defense office) within the OUSD for Acquisition, Technology, and Logistics (AT&L) issued a task order to a contractor in September 2004 to identify servicemembers and civilian personnel who might have been exposed to chemical and biological substances outside of Project 112 tests.9 The research being done as a result of this task order is ongoing as of December 2007.

For this review, you asked us to examine DOD’s current effort to identify and notify individuals who were potentially exposed during chemical and biological tests conducted or sponsored by DOD, including tests conducted as a part of DOD’s Project 112 program and tests conducted outside of Project 112. Accordingly, this report (1) assesses DOD’s efforts

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7 A team from the Office of the Deputy Assistant Secretary of Defense for Force Health Protection & Readiness within OASD (HA) led the investigation.
9 GAO-04-410.

As defined in the Federal Acquisition Regulation, a “task order” is issued against an indefinite delivery services contract, also referred to as an umbrella contract, which does not procure or specify a firm quantity of services (other than a minimum or maximum quantity). In this case the umbrella contract is for operations of the DOD Chemical, Biological, Radiological and Nuclear Defense Information Analysis Center. This umbrella contract is being administered by a contracting officer’s representative with the Air Combat Command.
since 2003 to identify individuals who were potentially exposed during chemical or biological tests conducted during Project 112, (2) evaluates DOD's current effort to identify individuals who were potentially exposed during chemical or biological tests conducted outside of Project 112, and (3) determines the extent to which DOD and VA have taken action to notify individuals who might have been exposed during chemical and biological tests.

To evaluate DOD's efforts to identify all individuals who were potentially exposed to chemical or biological substances during Project 112 tests and tests outside of Project 112, we interviewed and obtained documentation from cognizant DOD, Institute of Medicine, and contractor officials. To determine how potentially exposed individuals were identified, we visited record repository sites where contractors were conducting research and observed their research and documentation process. To determine the extent to which DOD and VA have taken action to notify servicemembers who might have been exposed during chemical and biological tests, we met with DOD officials to discuss their efforts to provide names of identified servicemembers to VA and with VA officials to describe VA's notification process. We evaluated the reliability of DOD's and VA's databases containing the names of individuals potentially exposed during chemical and biological tests and found that there were potential problems with the quality and reliability of the information. Although we determined that the information was sufficiently reliable for the purposes of our review, this report discusses weaknesses with DOD's information, and our recommendation to address them. Consequently, the number of individuals whom we report as having been identified and notified is based on information from DOD's and VA's databases and is approximate. We also met with representatives from a veterans service organization to gain their perspectives on DOD and VA efforts to identify and notify veterans potentially exposed to chemical and biological substances during DOD tests. Because DOD identified civilians who might have been exposed to chemical or biological substances, we also met with DOD and Department of Labor officials to ascertain their roles and responsibilities in notifying such civilians. Additional information on our scope and methodology appears in appendix I. We conducted this performance audit from June 2007 to February 2008 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.
DOD stopped actively searching for individuals who were potentially exposed to chemical or biological substances during Project 112 tests in 2003, but has yet to provide a sound and documented basis for its decision. In 2003, DOD reported it had identified 5,842 servicemembers and estimated 350 civilians as having been potentially exposed during Project 112, and indicated that DOD would cease actively searching for additional individuals, but that it would investigate any new information that might be presented and share any additional or changed information with VA and the public. In 2004, after reviewing DOD’s efforts, we reported that DOD did not exhaust all possible sources of information during its investigation of Project 112, and we recommended that DOD determine the feasibility of identifying additional individuals. Sound management principles require that such a determination be based on an objective analysis of the related costs and benefits. However, in response to our recommendation, DOD determined continuing an active search for individuals had reached the point of diminishing returns, and reaffirmed its decision to cease active searches. DOD officials could not provide us with a supporting analysis based on objective data. Nor could they provide any documented criteria which they used to make their determination, since OASD (HA) was not required to provide any support or basis for the decision. However, since June 2003, non-DOD sources have identified approximately 600 additional names of servicemembers and civilians who were potentially exposed as a result of Project 112. For example, in 2007, the Institute of Medicine identified 394 individuals not previously identified by DOD while researching the long-term health effects of participants in the shipboard hazard and defense tests, which were a subset of Project 112 tests. In light of the increasing number of individuals who have been identified since DOD ceased actively searching, until DOD makes a sound and documented decision about the costs and benefits of actively searching for Project 112 participants, DOD’s efforts may continue to be questioned. We are recommending that DOD perform and document a sound, methodologically defensible analysis of the costs and benefits of searching for individuals who may have been exposed to chemical or biological substances during Project 112 tests and share this analysis with Congress.

DOD has taken actions to identify individuals who were potentially exposed during chemical or biological tests outside of Project 112, but we identified four shortcomings in DOD’s current effort. First, DOD’s effort lacks clear and consistent objectives, scope of work, and information...
needs that would set the parameters for this effort. For example, DOD believes it should focus its efforts on individuals who were potentially exposed during chemical or biological tests as directed by the Defense Authorization Act for FY 2003, but the VA would like to have information on individuals who have been potentially exposed to chemical or biological substances during testing, transportation, and storage since VA is responsible for adjudicating all claims by servicemembers, regardless of how they were exposed. We found inconsistent objectives provided by DOD to the contractor and determined they were the result of various executive, congressional, and DOD directions establishing different expectations. Second, until June 2007, OUSD (AT&L)'s chemical and biological defense office had not assigned an official to oversee the contractor's effort, nor had the officials from that office visited any repositories where the contractor had proposed or completed work, resulting in little substantive oversight of the contractor. Numerous factors affect the office's ability to provide oversight, including a lack of consistent leadership, a shortage of personnel, and a lack of defined roles and responsibilities. Third, OUSD (AT&L)'s chemical and biological defense office did not fully leverage all available prior knowledge and research of DOD and non-DOD entities to identify and use information they developed on individuals potentially exposed during DOD's chemical and biological tests. For example, in the current effort, OUSD (AT&L)'s chemical and biological defense office had not contacted or coordinated with former members of the OUSD (P&R) task force, or the non-DOD scientists who developed data from another study on servicemembers who were potentially exposed. Such coordination could have helped DOD identify and prioritize site visits and ensure that the contractor was not duplicating efforts. Fourth, DOD had not worked with veterans and veterans service organizations to identify DOD projects or tests outside Project 112 that may have exposed members of the armed forces to chemical or biological substances, as required by the Defense Authorization Act for FY 2003, and has not kept Congress and veterans service organizations fully informed about its efforts. Until DOD addresses these shortcomings, DOD leadership and Congress have little assurance of the reasonableness and effectiveness of DOD's current effort. We are recommending that DOD take a number of specific steps to enhance these efforts.

DOD and VA have had limited success in notifying individuals potentially exposed during chemical or biological tests, both within and outside of Project 112. While DOD has a process and has shared the names of identified servicemembers with VA, we identified three shortcomings. First, the transmission of information between DOD and VA has been
inconsistent because, according to DOD officials, the exchange of information does not follow a specific schedule, there are competing priorities for resources, and DOD has experienced database management issues. Second, although VA has a process for sending notification letters to veterans who have been identified as having been potentially exposed, VA has not used certain available resources to obtain contact information. To date, VA has sent notification letters to 48 percent of the names that DOD has provided to them and that they may be able to contact. VA officials noted that while the total number of notification letters sent is 48 percent of the number of names that DOD has provided to them and that they may be able to contact, it represents all of the individuals for whom they were able to obtain contact information. A number of factors VA cannot control have impeded its ability to notify veterans, such as missing social security numbers. However, we found that VA was not using certain available resources to obtain contact information to notify servicemembers who could be identified and notified, or to help determine whether they were deceased. For example, VA officials told us that they were using credit bureau databases as a source for contact information, and they had not regularly coordinated with the Internal Revenue Service to use their databases and had not coordinated directly with the Social Security Administration to obtain contact information from veterans receiving social security benefits or to identify deceased veterans using the agency’s death index. Third, while we previously recommended that DOD address the appropriateness of and responsibility for reporting new information related to civilians who were identified and DOD concurred with our recommendation, DOD has not taken any action to notify approximately 1,900 civilians who were potentially exposed during chemical or biological tests. DOD officials told us they have primarily focused on servicemembers since the primary impetus for the research has been requests for information from VA. In addition, DOD has not notified these civilians in part because it lacks specific guidance that defines the requirements, roles, responsibilities, and mechanisms to notify civilians or transmit civilian exposure information to the appropriate agency for notification. Specifically, while the Defense Authorization Act for FY 2003 required DOD to identify its tests or projects that may have exposed members of the armed forces to chemical or biological substances, it did not specifically address civilian personnel who may have been affected by these tests. Furthermore, there does not appear to be a requirement for DOD or other federal agencies, such as the Department of

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12 GAO-04-410.
Labor, to notify civilians of their potential exposure. Until DOD and VA address these shortcomings, some veterans and civilians will remain unaware of their potential exposure. To ensure that civilians who were potentially exposed to chemical or biological substances as a result of tests conducted or sponsored by DOD are aware of their circumstances, we are suggesting that Congress consider requiring the Secretary of Defense, in consultation with the Secretary of Labor, to develop specific guidance that ensures that civilians who were potentially exposed to chemical or biological substances as a result of tests conducted or sponsored by DOD are aware of their circumstances. We are also recommending that DOD and VA take steps to improve their efforts to share, obtain, and use available information and to more effectively notify servicemembers who may have been exposed to chemical or biological substances during DOD tests.

We provided DOD, VA, and the Department of Labor with a draft copy of this report for comment. DOD generally agreed with five recommendations, but disagreed with the recommendation to conduct and document a cost-benefit analysis associated with continuing the search for additional Project 112 participants, and to provide Congress with the results of this analysis. The department noted that it has made a full accounting of its Project 112 efforts to date and has no credible leads to continue this research. However, because the department has not adequately addressed our May 2004 recommendation to determine the feasibility of addressing unresolved issues associated with Project 112 and a number of non-DOD sources have identified additional names of individuals potentially exposed during Project 112 since DOD's 2003 report to Congress, we are suggesting Congress consider requiring the Secretary of Defense to conduct and document an analysis that includes a full accounting of information known, and the related costs, benefits, and challenges associated with continuing the search for additional Project 112 participants, and to provide Congress with the results of this analysis. VA agreed with one recommendation and partially agreed with another recommendation that pertained to their activities, and the Department of Labor did not provide us with any comments. The departments' comments and our evaluation of them are discussed on pages 30-32. DOD and VA also provided technical comments, which we incorporated as appropriate. DOD's and VA's comments are reprinted in appendices II and III, respectively.
Background

On January 6, 1993, the Institute of Medicine published a report that discussed secret U.S. chemical weapons programs during World War II. The report found that an estimated 60,000 military personnel participated as human experimental subjects in tests of exposure to mustard agents and lewisite and unknown numbers of additional servicemembers may have been exposed to these substances through their participation in the production, transportation, and/or storage of these chemical substances.

On February 18, 1993, we issued a report that found VA lacked information about individuals who were exposed during secret DOD chemical tests. After Members of Congress, the President of the United States, and the Secretary of Defense exchanged a series of letters about this issue in 1993, the Deputy Secretary of Defense issued an agencywide memo that released all individuals from any nondisclosure restrictions that might have been placed on them, tasked the secretaries of the military departments to undertake efforts to declassify and provide to VA as soon as possible information about individuals who were potentially exposed, and directed OUSD (P&R) to establish a task force to monitor the status of DOD's efforts. As a result, OUSD (P&R), the military services, and VA developed the Chemical Weapons Exposure Study Task Force to identify DOD personnel exposed to chemical substances during testing, training, transport, production, and storage. By conducting site visits and other research efforts, the task force identified approximately 6,400 servicemembers and civilians who were potentially exposed to mustard, lewisite, and other chemical substances. The office created a database with information about these individuals (hereafter referred to as OUSD (P&R) database) and, according to OUSD (P&R), sent certificates of commendation to more than 700 individuals for whom it could find contact information. In addition to its own research, OUSD (P&R), on behalf of the task force, issued a task order for a contractor to analyze, extract, and develop a database of information on all volunteers and/or other subjects potentially exposed to live chemical or biological substances. The contractor developed a database and issued a series of reports that identified the locations of human exposures to chemical substances, including those resulting from tests and a variety of other

13 Institute of Medicine, Veterans at Risk: The Health Effects of Mustard Gas and Lewisite.

14 GAO/NSIAD-93-89.
activities such as transportation, production, storage, and disposal. Congress continued to look into this issue during 1994 through a series of hearings and a staff report that was prepared for the U.S. Senate's Committee on Veteran Affairs.

The issue of servicemembers being used as human subjects during DOD's chemical and biological tests received high-level attention again in 2000, when the acting Secretary of Veterans Affairs wrote a letter to the Secretary of Defense requesting assistance in obtaining information about a series of then-classified chemical and biological tests under DOD's Project 112 program. OASD (HA) officials consequently initiated some actions to identify potentially exposed individuals. Subsequently, DOD, VA, and Congress exchanged a series of correspondence about the need to identify individuals who were potentially exposed during these tests. Eventually, the Defense Authorization Act for FY 2003 required DOD to submit to Congress and the Secretary of Veterans Affairs a comprehensive plan for the review, declassification, and submittal to VA of all DOD records and information on Project 112 that are relevant to the provision of benefits by the Secretary of Veterans Affairs to members of the armed forces who participated in that project. During this effort, DOD identified 5,842 servicemembers and estimated that 350 civilians had been potentially exposed during Project 112 tests, and this information was entered into a Project 112 database. The act further required the Comptroller General to evaluate the plan and its implementation.

The Defense Authorization Act for FY 2003 also required DOD to work with veterans and veterans service organizations to identify DOD projects or tests outside of Project 112 that may have exposed members of the armed forces to chemical or biological substances. In June 2004, we reported that DOD had not yet begun its investigation to identify such projects or tests and recommended that the Secretary of Defense direct the appropriate office(s) to finalize and implement a plan for identifying DOD projects and tests conducted outside of Project 112 that might have exposed servicemembers to chemical or biological substances and ensure

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that the plan addresses the scope, reporting requirements, milestones, and responsibilities for those involved in completing this effort. According to an OASD (HA) official, OASD (HA) made an informal agreement with OUSD (AT&L) to undertake this effort since OASD (HA) did not have the resources to conduct an investigation itself or to fund a contractor to do the research. In September 2004, OUSD (AT&L)’s chemical and biological defense office issued a task order to fulfill this provision of the legislation. The research being done as a result of this task order is ongoing as of December 2007.

In June 2003, after having identified several thousand servicemembers and hundreds of civilians as having been potentially exposed to chemical or biological substances during Project 112, DOD stopped actively searching for additional individuals. According to a knowledgeable DOD official, this decision was made without a sound and documented cost-benefit analysis. The Defense Authorization Act for FY 2003 required DOD to review records and information necessary to identify members of the armed forces who were or may have been exposed to chemical or biological substances as a result of Project 112. Subsequently, in June 2003, DOD issued a report to Congress that stated that 5,842 servicemembers and an estimated 350 civilians might have been exposed during Project 112 tests. The report also indicated that DOD had ceased its active search for individuals potentially exposed during Project 112 tests and that it would investigate any new information that may be presented as well as share any additional or changed information with VA and the public.

In 2004, we reported that DOD performed a reasonable investigation of servicemembers who were potentially exposed to the substances used during Project 112 tests. However, we found that DOD had not exhausted all possibilities for identifying additional servicemembers and civilian personnel who had been potentially exposed. Therefore, we recommended that DOD determine the feasibility of addressing these unresolved issues.

In response to our recommendation, DOD determined continuing an active search for individuals had reached the point of diminishing returns, and reaffirmed its decision to cease active searches. This decision was not supported by any objective analysis of the potential costs and benefits of continuing the effort. Instead, this decision was made by officials in OASD.

\[17\] GAO-04-410.
had a working knowledge of Project 112 tests and the contents of chemical and biological test record repositories. These officials concluded that the record repositories that had been searched contained the majority of Project 112 documents; therefore, they believed that the bulk of exposures related to Project 112 tests had already been identified. Furthermore, the officials decided that the application of resources necessary to continue searching for Project 112 exposures would result in a diminishing return on their investment. The Office of Management and Budget has stated that a good cost-benefit analysis should include a statement of the assumptions, the rationale behind them, and a review of their strengths and weaknesses. This could include a full accounting of information known, related costs, benefits, and challenges of continuing to search for additional Project 112 participants. Moreover, our prior work has shown that there are elements integral to a sound cost-benefit analysis. For example, the analysis should include a thorough evaluation of the social benefits and costs of investments, identify objectives to ensure a clear understanding of the desired outcome, and include a list of the relevant impacts to ensure that all aspects are considered. DOD could not provide us with a quantitative analysis based on objective data or any documented criteria because OASD (HA) was not required to provide any support or basis for the decision.

Since DOD's June 2003 report to Congress and its decision to cease actively searching for additional exposures, additional individuals who may have been exposed as a result of Project 112 tests have been identified through various non-DOD sources, as shown in table 1. For example, the Institute of Medicine conducted a study on the long-term health effects of participation in the shipboard hazard and defense tests that were conducted as a subset of Project 112. This study identified 394 individuals who had been potentially exposed and who were previously unknown to DOD. According to DOD and Institute of Medicine officials, the additional names were discovered when the Institute of Medicine applied a more inclusive methodology in its research. In addition, our previous work in 2004 reported that DOD did not exhaust all possible

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10 Institute of Medicine, Long-Term Health Effects of Participation in Project SHAD (Shipboard Hazard and Defense) (Washington, D.C.: 2007).
sources of information during its investigation of Project 112 and our own research for that report resulted in the identification of 39 additional potentially exposed servicemembers. For example, DOD had limited success in identifying exposures during land-based tests because it was unable to find documentation, and it did not specifically search for individual civilian personnel in its investigation because it considered them to be outside of its scope. Furthermore, DOD officials have told us that veterans who participated in Project 112 tests have contacted DOD on their own initiative in search of information and documentation related to their exposures, which has resulted in 165 additional veterans being identified as having been potentially exposed during these tests.

**Table 1: Number of Servicemembers Identified as Having Been Potentially Exposed during Project 112**

<table>
<thead>
<tr>
<th>Source</th>
<th>Number of Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of Project 112 names identified as of December 2007</td>
<td>6,440</td>
</tr>
<tr>
<td>DOD's 2003 Report to Congress</td>
<td>5,842</td>
</tr>
<tr>
<td>Number of names identified since DOD's 2003 report</td>
<td>598</td>
</tr>
<tr>
<td>Institute of Medicine research (394 names)</td>
<td></td>
</tr>
<tr>
<td>Veterans' inquiries (165 names)</td>
<td></td>
</tr>
<tr>
<td>GAO research (39 names)</td>
<td></td>
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</tbody>
</table>

Source: GAO analysis of DOD data.

Note: The number of individuals that we report as identified is based on information from DOD's and VA's databases and is approximate. Cases reported in this table may reflect duplicates. Naming nomenclature (suffixes, nicknames, abbreviations, etc.) makes it difficult to eliminate all potential duplicate names. When in doubt, DOD treats cases as separate individuals.

DOD's current effort to identify individuals who may have been exposed to chemical or biological substances during activities outside of Project 112, discussed in the following section of this report, has also resulted in the discovery of information related to Project 112 tests. Specifically, the DOD contractor has found evidence that individuals who DOD already knew were potentially exposed to substances during at least one known Project 112 test were also potentially exposed during other Project 112 tests.

In light of the increasing number of individuals who have been identified since DOD ceased actively searching, until DOD makes a sound and

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21 GAO-04-410. Our research for the 2004 report resulted in the identification of 167 additional potentially exposed individuals, including 39 servicemembers and 128 civilians.
DOD’s Effort to Identify Individuals Potentially Exposed during Non-Project 112 Tests Has Several Shortcomings

Although DOD has taken action to identify individuals who were potentially exposed during chemical or biological tests outside of Project 112, we identified several shortcomings in the current effort. Specifically, we found that DOD’s approach was hampered by (1) a lack of clear and consistent objectives, scope of work, and information needs; (2) management and oversight weaknesses; (3) a limited use of the work of other entities that previously identified exposed individuals; and (4) a lack of transparency in DOD’s efforts.

In response to the Defense Authorization Act for FY 2003 and our May 2004 recommendation that DOD finalize and implement a plan to identify individuals who were potentially exposed during tests conducted outside of Project 112, DOD issued a task order in September 2004. The task order identified four sets of tasks that the contractor was to undertake to accomplish the task order’s objectives within 3 years—perform literature searches, conduct and review on-site data collections, data mine existing databases, and augment a database maintained by the contractor. The contractor has issued monthly reports on its work to OUSD (AT&L)’s chemical and biological defense office, which indicate that the contractor has taken action on each of these tasks. OUSD (AT&L)’s chemical and biological defense office and the contractor have agreed that the on-site reviews will be conducted at a total of 18 sites that were identified and prioritized based on established criteria, such as relevance and number of documents expected to be present. As of October 2007, the contractor has completed on-site data collection at 5 of these 18 sites, and as of December 2007 was collecting data at 3 additional sites.

During its site visits, the contractor’s staff searches a variety of documents for information that pertains to human exposure to chemical or biological substances. The documents that are identified as having relevant

22 The current effort has identified an array of substances to which individuals have been potentially exposed, which include medicinal substances (e.g., Benadryl), chemical or biological agents (e.g., LSD), biological simulants (e.g., bacillus globigii), vaccines (e.g., rubella virus vaccine), and "non-harmful" substances (e.g., caffeine).
DOD’s current effort to identify individuals potentially exposed to chemical or biological substances lacks clear and consistent objectives, scope of work, and information needs, which affects DOD’s ability to know whether it has accomplished the project’s goals. First, the objectives of DOD’s current effort are inconsistent. The Defense Authorization Act for FY 2003, which was the genesis for DOD’s current effort, directed the Secretary of Defense to identify DOD projects or tests outside of Project 112 that may have exposed members of the armed forces to chemical or biological substances. However, the focus of the current effort has expanded to include other exposures, including those resulting from immunizations, transportation, storage, and occupational accidents. This
We identified a difference of opinion between DOD and VA regarding the overall focus of the contractor's research efforts. Officials in OUSD (AT&L)'s chemical and biological defense office stated that they believe the contractor should focus only on identifying participants in DOD tests since the Defense Authorization Act for FY 2003 was the genesis of this task order, and they believe that the primary interest is in individuals who were not aware of their exposures or are unable to report their exposures due to the classified nature of the tests. They also believe that individuals accidentally exposed at a work location might be protected under occupational health regulations and statutes. However, VA officials stated that they would prefer that DOD provide information on all exposures, including those not associated with DOD tests, since VA is responsible for adjudicating all claims by servicemembers, regardless of how they were exposed. The contractor conducting the search has included all types of exposures in its research, which according to DOD and contractor officials is based on VA's stated preferences.

Second, the scope of DOD's current effort is unclear. Specifically, while the Defense Authorization Act for FY 2003 directed DOD to identify only members of the armed forces, the task order's 2004 statement of work and the June 2007 concept of operations plan state that the objective of the project is to collect information on all servicemembers and civilian personnel who might have been exposed from 1946 to present. However, DOD's current effort has not included an active search of civilian personnel. Instead, at the direction of DOD, the contractor is collecting information on civilians who may have been exposed to chemical or biological substances when it comes across those names while searching for servicemembers. DOD officials stated that they focused their efforts on servicemembers because VA has actively requested information about servicemembers from DOD for years and the department has not received any inquiries about the civilians. At the time of our review, the contractor had collected information on approximately 700 civilian personnel who were potentially exposed to chemical or biological substances.

Third, the amount and type of information that the contractor needs to collect for this effort has been expanded from the original task order requirement. The task order specifies that the information to be collected should identify potential human exposure events, the names of test
programs, chemical and biological substances involved, and the names of
volunteers or participants. However, DOD has expanded the information
that the contractor should collect, which may be lengthening the time for
the contractor to complete its work. For example, in February 2007,
officials from one of the repository sites provided the contractor a CD with
names and exposure information for 2,300 individuals who were exposed
to a series of biological tests at Fort Detrick, Maryland, known as
Operation Whitecoat. However, as of October 2007, the contractor had not
provided DOD with these names because it was adding information, such
as the test objective and summary, and exposure and treatment
information. Since most of these 2,300 individuals had been previously
aware of their exposures due to Fort Detrick's independent outreach
efforts, a DOD official who has worked with these individuals has stated
that it is unclear how much additional information the contractor needs to
collect about this group. While OASD (HA) officials have said that the
additional information has been helpful for their needs, they and VA
officials have also acknowledged that the identity of the chemical or
biological substance to which an individual was potentially exposed is the
most pertinent information. 2

Without consistent guidance about the objectives, scope of work, and
information necessary to meet DOD's goals and objectives, DOD's current
effort might not produce the desired results. After discussing this issue
with DOD officials, in December 2007 officials in OUSD (AT&L)'s chemical
and biological defense office stated that they plan to revise the task order's
statement of work, concept of operations plan, and a DOD implementation
plan to clarify the scope of work and the focus of the research to
servicemembers—the original focus as identified in the Defense

### DOD's Current Effort Has Lacked Adequate Oversight

Until recently, DOD's current effort has lacked adequate oversight of the
contractor activities and results. We have previously reported that
providing effective oversight is essential and, at times, DOD's oversight
was wanting, as it did not always task personnel with oversight duties or

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2 The identity of the substance to which an individual was potentially exposed is the most
pertinent information because any potential benefits that the veteran could receive would
be based on the veteran's ability to link a current ailment to that particular substance,
regardless of the details about the amount of the individual's exposure.
establish clear lines of accountability. While OUSD (AT&L)’s chemical and biological defense office established three different points of contact throughout the life of the task order who participated in meetings when the work started in 2004 and assisted the contractor undertaking the effort in accessing repository sites when requested, these points of contact were not performing active oversight activities nor were they designated as the project manager for this effort. During our review, officials in OUSD (AT&L)’s chemical and biological defense office realized that their predecessors had not selected a project manager and selected one of the office’s civilian employees to oversee the effort.

We also found that DOD had not visited any of the repository sites where the contractor had proposed or completed its research to ensure that the work was effectively and efficiently meeting the task order’s objectives. We visited the three repository sites where the contractor was conducting its work during our review. At one location, a knowledgeable DOD official expressed concerns to us that the contractor’s presence and research in one of the site’s libraries might not be needed. However, since officials in OUSD (AT&L)’s chemical and biological defense office had not visited the site or met with site officials, they were unaware of these concerns and therefore were unable to decide whether the contractor should be conducting work at that particular site or whether the research funds and time should be spent at a site that they believe might provide more relevant information.

In addition, until June 2007, OUSD (AT&L)’s chemical and biological defense office had not regularly evaluated the effectiveness or efficiency of the contractor’s work. For example, at the time of our review, officials in OUSD (AT&L)’s chemical and biological office told us that they did not know the extent to which each of the task order’s four tasks was meeting its objective to identify servicemembers and civilians who were potentially exposed to chemical or biological substances during testing and other activities. Therefore, DOD was not in a position to determine whether the task order needed to be modified to focus DOD’s resources and the

contractor's research efforts to those tasks that will best meet its objectives.

Further, while the contractor had implemented its own quality assurance/quality control process that was approved by OUSD (AT&L)’s chemical and biological defense office, the office had not taken any action to independently assess the accuracy and characterization of the information that the contractor was providing to the OASD (HA), which maintains DOD’s databases of potentially exposed individuals. As a result, officials in OUSD (AT&L)’s chemical and biological defense office, who are responsible for overseeing the contractor’s efforts, have limited knowledge about the accuracy and characterization of the information that was being collected.

Review and assessment of the contractor-provided data by the project manager are important because we identified potential problems with the accuracy of that information. For example, our work indicated that there are discrepancies between the number of individuals reported by the contractor in its monthly reports to OUSD (AT&L)’s chemical and biological office and the number of individuals that exist in OASD (HA)’s database that could not be adequately explained. In addition, at the time of our review, the characterization in the contractor’s monthly reports provided to OUSD (AT&L)’s chemical and biological defense office that all of these individuals were potentially exposed during chemical or biological tests gave the wrong impression to the project manager. For example, while the contractor has characterized the individuals it has identified as having been involved in DOD’s chemical and biological “tests”, an unknown number of these exposures resulted from immunizations, transportation, occupational, and storage accidents. This number also includes individuals who might have been associated with the tests but who were not exposed to any substances, such as those who participated in physical exercises to test the durability of chemical and biological suits or who could have been part of a test control group. OASD (HA) officials were able to identify at least 1,800 names in the database that were not exposed to any substances, which leaves about 7,100 names in the database that have been potentially exposed to chemical or
biological substances, as shown in table 2.\(^{25}\) DOD and contractor officials stated that they have included these names in the database so that they could appropriately respond to these individuals' concerns if they contact DOD or VA. Specifically, according to DOD, including these names in the database enables the department to refute any claims by individuals who participated in tests where they were not exposed to any chemical or biological substances.

**Table 2: Number of Non-Project 112 Servicemembers Identified by DOD as of December 2007**

| Number of names in OUSD (AT&L) task order database | 8,979 |
| Number of names in OUSD (AT&L) task order database that have been identified as having been potentially exposed to a chemical or biological substance | 7,120 |
| Number of names in OUSD (AT&L) task order database that have not been exposed to any chemical or biological substances | 1,859 |
| Number of names awaiting entry into database | 844 |
| **Total** | **9,823** |

Source: GAO analysis of DOD data.

Note: The number of individuals that we report as identified is based on information from DOD's and VA's databases and is approximate. Cases reported in this table may reflect duplicates. Naming nomenclature (suffixes, nicknames, abbreviations, etc.) makes it difficult to eliminate all potential duplicate names. When in doubt, DOD treats cases as separate individuals.

We identified a variety of factors affecting the ability of OUSD (AT&L)'s chemical and biological defense office to provide oversight, including a lack of consistent leadership, inadequate internal controls, a shortage of personnel, and a lack of defined roles and responsibilities. For example, the position that was identified as the office's point of contact for the task order is a 1-year position. Consequently, the contractor has had to work with three different individuals during the first 3 years of the task order. The official holding this position during our review requested and was granted a 2-year extension in this position, and thus he has been able to

\(^{25}\) OASD (HA) officials told us that they were unable to precisely identify the number of individuals in the database who were either potentially exposed in a non-test event or not exposed to any chemical or biological substance for multiple reasons, such as the information that they collected did not clearly identify whether the individuals were exposed to any substances. Since DOD assigns an exposure to an individual when the information is not clear, it is possible that some of the people recorded as exposed in the database were in fact not exposed.
DOD Did Not Fully Leverage the Work of Other Entities that Identified Exposed Individuals

In planning, executing, and evaluating DOD's current effort, OUSD (AT&L)'s chemical and biological defense office did not fully leverage the work of other entities that had previously identified exposed individuals. Multiple DOD and non-DOD organizations have conducted a variety of independent efforts since the early 1990s, through which they have identified thousands of individuals who were potentially exposed during chemical or biological tests. These entities possess specific information about the tests—to include the location of test records—and the personnel conducting the work developed institutional knowledge. While OUSD (AT&L)'s chemical and biological defense office leveraged Project 112 information from the OASD (HA), it did not leverage information available from other DOD and non-DOD sources. For example, between 1993 and 1997, the joint DOD-VA task force identified approximately 6,400 individuals who were potentially exposed to sulfur mustard, lewisite, and other chemical substances. OUSD (P&R) led the effort by using some of its own personnel to conduct the research and visit several repository sites in addition to issuing a task order for a contractor—the same contractor DOD is currently using to research and identify tests and exposures—to develop a database containing information on the location, chemicals tested, and dates of the chemical weapons research program. During this period, OUSD (P&R) personnel involved with the research became very knowledgeable about the issues, collected boxes of information, and issued various reports. OUSD (P&R) officials transferred the names of the individuals who were identified to OASD (HA) officials in April 2005. According to OUSD (P&R) officials, however, officials in OUSD (AT&L)'s chemical and biological defense office had not met with any of the personnel with institutional knowledge or examined any of the documents that OUSD (P&R) still maintained. Since OUSD (P&R)'s reports identified locations of exposures, officials in OUSD (AT&L)'s chemical and biological defense office could have used this information as another source to help validate and prioritize the repository sites proposed by the contractor for its current effort, and to eliminate potential redundancy.
Furthermore, as a result of independent research efforts by the Institute of Medicine about the health effects of DOD chemical tests using human subjects, the organization developed a database that contained the names and addresses of more than 4,000 servicemembers who were potentially exposed to chemical substances during a series of tests at Edgewood, Maryland. However, OUSD (AT&L)'s chemical and biological defense office was not aware of this database since the office had not coordinated with the organization. Institute of Medicine officials told us that they believe the names and contact information in this database could help DOD with its efforts since the names were collected from the same locations where the contractor for DOD's current effort is doing its research. Subsequent to our September 2007 meeting with the Institute of Medicine, its officials contacted OASD (HA) to establish the protocols to transfer the names of identified individuals to DOD so that it can determine whether these individuals are already included in any of DOD's databases. Without communicating and coordinating with DOD and non-DOD organizations that have previously conducted similar efforts, DOD's current effort will not be able to take advantage of existing information so that it can focus its resources on the areas where information is missing.

DOD's Current Effort Lacks Transparency

DOD's current effort lacks transparency since it has not worked with veterans, and it has not kept Congress and veterans service organizations fully informed about the status of its efforts. Although DOD officials conducted outreach to veterans during its Project 112 research effort and the Defense Authorization Act for FY 2003 required DOD to work with veterans and veterans service organizations to identify projects and tests outside of Project 112 that may have exposed members of the armed forces to chemical and biological substances, DOD has not included veterans and veterans service organizations during its current effort. DOD also has not kept Congress, veterans, and the public informed on the status of its current effort as it did during its Project 112 investigation. Specifically, in 2002, DOD established a public internet site to provide interested persons with information on what happened during those tests that might have affected the health of those who served. The internet site included a status report on DOD's efforts so that veterans and others could monitor the progress, and it also contained reports, documents, and links to related internet sites. The internet site, which was operated by OASD (HA), has not been updated with information about DOD's current effort to identify individuals outside of Project 112. Representatives from a veterans service organization that has pursued information regarding DOD's use of servicemembers as human subjects told us they were not aware of DOD's current effort and they believe DOD has not been
transparent and forthcoming with the information that it has obtained. These officials stated that the continuous lack of collaboration and transparency has negatively affected the level of trust veterans and the veterans service organization have in DOD regarding its commitment to fully identify and disclose information regarding these tests. The representatives stated that it is imperative for DOD to be as transparent as possible so that Congress, veterans, and the public have reason to believe the cloak of secrecy regarding these tests has been lifted and individuals who were potentially exposed could receive appropriate medical care and benefits. DOD officials acknowledged the importance of keeping veterans informed so that they know that these tests are no longer classified, they are entitled to a medical screening for long-term health effects, and they can assist in DOD's efforts to identify other individuals who might have been exposed. Until DOD is more transparent about its efforts to identify individuals who were potentially exposed during these previously classified tests, Congress, veterans, and the public could have reason to believe that the cloak of secrecy has not been lifted and not realize the reasonableness, effectiveness, success, and challenges of DOD's current effort.

DOD and VA have had limited success in notifying individuals who were potentially exposed to chemical and biological substances during Project 112 tests or testing that occurred outside of Project 112 due to several factors. First, DOD has inconsistently transmitted information about identified servicemembers to VA. Second, VA has not used all available resources to obtain contact information for servicemembers who were identified as having been potentially exposed. Finally, DOD has not taken any actions to notify civilians who have been identified.

DOD Has Inconsistently Transmitted Information to VA

While DOD and VA have a process in place to share the names of servicemembers who are identified as having been potentially exposed to chemical and biological substances, the transmission of information between the two agencies has been inconsistent. To date, DOD has provided information to VA as agreed upon through an informal arrangement. Under the arrangement, DOD generally provides VA with the servicemember's name, as well as any information related to the potential exposure that DOD uncovered during its investigation, such as the chemical or biological substance that was used, the dosage of the chemical or biological substance, and the date of the exposure. As of October 2007, DOD had used this process to transmit to VA approximately 20,700 names of servicemembers who had been potentially exposed to chemical or
The informal arrangement between DOD and VA did not establish a schedule for the exchange of information, so DOD provides newly acquired exposure information to VA in batches of varying size and at inconsistent intervals. When we began our work we found that DOD had not provided VA with any updates after September 2006 even though, as of June 2007, DOD had added approximately 1,800 additional servicemember names to its chemical and biological exposure database. Subsequent to our inquiries, however, DOD provided VA with an update in September 2007. According to DOD officials, regular updates to VA have been delayed because of a number of factors, including competing priorities such as current military operations, lack of personnel, database management issues, and lack of an impetus to take a proactive approach. Although limited personnel and competing priorities might be valid issues, until DOD provides regular updates of identified servicemembers to VA in a timely manner, VA will be unable to notify identified veterans about their potential exposure to chemical or biological substances.

VA Has Not Used Certain Available Resources to Notify Veterans

VA has not used certain available resources to obtain contact information for and to notify veterans who were identified as having been potentially exposed to chemical or biological substances. To notify veterans who were potentially exposed to chemical or biological substances during DOD tests, VA matches the list of potentially exposed veterans it obtains from DOD against its own database of veterans to find either contact information or a Social Security number. If no Social Security number is located, VA matches the available veterans' information to information contained in the National Personnel Records Center. Once a Social Security number is obtained, VA usually uses a private credit bureau and on occasion has used the Internal Revenue Service database to obtain contact information for the veteran. In responding to a draft of this report, VA notes that it uses the credit bureau for a variety of reasons, including its up-to-date data transmissions from the Social Security Administration, expediency in responding, and general accuracy of information. As shown in table 3, as of December 2007, VA had obtained contact information for and sent notification letters to 48 percent of the names that DOD provided.

26 This number includes the total number of servicemembers who were identified as having been potentially exposed during chemical and biological tests conducted or sponsored by DOD, including tests conducted as part of DOD's Project 112 program and tests conducted outside of Project 112.
to them and that they may be able to contact.\textsuperscript{27} VA officials noted that while the total number of notification letters sent is 48 percent of the number of names that DOD has provided to them and that they may be able to contact, it represents all of the individuals for whom they were able to obtain contact information.

\begin{table}[h]
\centering
\caption{Veterans Who VA Has Notified of Their Potential Exposure as of December 2007}
\begin{tabular}{|c|c|c|c|c|}
\hline
Number of names DOD has provided to VA & OUSD (P&R) & Project 112 & OUSD (AT&L) task order & Total \\
\hline
Names with no numeric identifier (e.g., social security number or service number) & 666 & 385 & none & 1,051 \\
\hline
Names of veterans known to be deceased & 2,157 & 733 & 500 & 3,390 \\
\hline
Possible number of veterans to be notified (i.e., veterans who have an identifier and are not documented as deceased) & 3,916 & 5,322 & 7,031 & 16,269 \\
\hline
Number of notification letters mailed by VA & 319* & 4,436 & 2,987 & 7,744 \\
\hline
Percentage of veteran sent notification letters for those known not to be deceased and for which VA has a numeric identifier & 8\% & 83\% & 42\% & 48\% \\
\hline
\end{tabular}
\end{table}

Source: GAO analysis of VA data.

Note: The number of individuals that we report as notified is based on information from DOD’s and VA’s databases and is approximate. Cases reported in this table may reflect duplicates.

\textsuperscript{*} OUSD (P&R) officials told us that they also sent 722 “Certificates of Commendation” to veterans who had been identified and for whom contact information could be obtained. It is unknown whether these certificates were sent to veterans who also received notification letters from VA.

A number of factors beyond VA’s control have impeded its ability to notify veterans of their potential exposure to chemical or biological substances.

\textsuperscript{27} While DOD had provided 20,710 names to VA, the VA office that is responsible for notifying veterans has identified 3,390 of these veterans as deceased and consequently did not send notification letters to them. In addition, VA officials stated that they are unable to obtain contact information for the 1,051 veterans missing a numeric identifier. Of the remaining 16,269 names, some of these individuals could be deceased or impossible to locate due to various factors, such as missing social security numbers.
For example, some records have been lost or destroyed, and existing documentation contains limited information and often does not identify names of participants, while others were not turned in by the scientists who were conducting the research. When the records can be found, they do not necessarily identify the participants, but may instead refer to control numbers that were issued to the participants, which cannot be cross-referenced to other documents for identification. For those records that do include identification of participants, the information may contain only the participants’ initials, nicknames, or only first or last names. Also, since a number of these records do not include the participant’s military service number or social security number, it is difficult to determine the exact identity of these individuals. Further, the contact information that VA is able to obtain may not be accurate. For example, more than 860 notification letters have been returned as undeliverable to VA.

However, VA is not using other available resources to obtain contact information to notify veterans. For example, while VA told us that it was using a company that is able to provide current contact information as a source, it had not coordinated with the Social Security Administration to obtain contact information for veterans receiving social security benefits or to identify deceased veterans using the agency’s death index and had not regularly used the Internal Revenue Service’s information. VA officials acknowledged that they had not directly used the death index and that a memorandum of understanding with the Social Security Administration might facilitate a new way to accomplish this. However, they noted the credit bureau receives weekly updates from the Social Security Administration’s death index. VA officials also acknowledged that it planned to make more frequent use of IRS databases. Until VA implements a more effective process to obtain contact information for veterans, some veterans will remain unaware of their potential exposure or the availability of health exams and the potential for benefits directly related to an exposure.

DOD Has Not Notified Civilians Due in Part to a Lack of Specific Guidance

DOD has not taken any actions to notify civilians who have been identified as having been potentially exposed during Project 112 tests and other chemical and biological tests, due in part to a lack of specific guidance defining the requirements to notify civilians. The Defense Authorization Act for FY 2003 required DOD to identify its tests or projects that may have exposed members of the armed forces to chemical or biological substances, but did not specifically address civilian personnel who may have been affected by these tests. However, in our 2004 report we recommended that DOD address the appropriateness of and responsibility
for reporting new information, such as the identification of additional potentially exposed servicemembers, civilian employees, contractors, and foreign nationals who participated in the tests. In its response to our report, DOD concurred with our recommendation and stated that it would determine the appropriate reporting channels for civilian employees, contractors, and foreign national participants who were identified as being potentially exposed. However, DOD has not taken any action with the approximately 1,900 civilian names that it maintains, as shown in table 4. Instead, DOD has focused its efforts on the identification and notification of servicemembers who were potentially exposed. DOD officials stated that they have focused on identifying and notifying servicemembers since the primary impetus for their efforts to identify and notify individuals who may have been exposed has been requests for information from veterans and VA.

Table 4: Number of Civilians Potentially Exposed as of December 2007

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civilians identified during OUSD (P&amp;R)'s investigation</td>
<td>882</td>
</tr>
<tr>
<td>Civilians identified during OASD (HA) investigation of Project 112</td>
<td>327</td>
</tr>
<tr>
<td>Civilians identified during OUSD (AT&amp;L)'s chemical and biological office task order</td>
<td>715</td>
</tr>
<tr>
<td><strong>Total number of civilians identified as being potentially exposed</strong></td>
<td>1,924</td>
</tr>
</tbody>
</table>

Source: GAO analysis of DOD data.

Note: The number of individuals that we report as identified and notified is based on information from DOD's and VA's databases and is approximate. Cases reported in this table may reflect duplicates. Naming nomenclature (suffixes, nicknames, abbreviations, etc.) makes it difficult to eliminate all potential duplicate names. When in doubt, DOD treats cases as separate individuals.

OASD (HA) has not acted in part because it is unclear whether it is required to notify civilians or transmit civilian exposure information to another agency for notification. During our review, DOD and Department of Labor officials stated that they were unaware of a requirement for them to notify civilians of their potential exposure. However, our April 2005 report about civilian and contractor exposures to chemical substances in Vietnam identified compensation programs that might be available for civilians who were exposed during these chemical and biological tests if they come forward and present evidence that they were potentially exposed.

\[28\] GAO-04-410.
Conclusions

Since World War II, potentially tens of thousands of military personnel and civilians have been exposed to chemical or biological substances during previously classified DOD tests. As this population becomes older, it will become more imperative for DOD and VA to identify and notify these individuals in a timely manner because they might be eligible for health care or other benefits. While DOD has concluded that continuing an active search for individuals potentially exposed during Project 112 has reached a point of diminishing returns, it has not conducted an informed cost-benefit analysis, which could guide DOD in identifying the extent to which it might need to take additional actions. Without conducting a sound and documented cost-benefit analysis that includes a full accounting of information known and the challenges associated with continuing to search for Project 112 participants, DOD will not be in a position to make an informed and transparent decision about whether any of the remaining investigative leads could result in meaningful opportunities to identify additional potentially exposed individuals. Furthermore, until DOD conducts such an analysis, Congress, veterans, and the public may continue to question the completeness and accuracy of DOD’s efforts. Moreover, while DOD has undertaken efforts to identify and notify individuals who were potentially exposed during tests outside of Project 112, the department has not worked with veterans and veterans service organizations during its current effort as required by the Defense Authorization Act for FY 2003, and it has not coordinated its efforts with other DOD and non-DOD organizations. Until DOD and VA undertake more effective and efficient efforts to identify and notify potentially exposed individuals—including consistent guidance about the scope of

work, such as clearly defined goals and objectives and agreement on the type and amount of information that is necessary to collect; effective internal controls and oversight practices; coordination with other entities to leverage existing information; regular updates to VA; and utilization of all available resources—Congress, veterans, and the public may continue to question DOD and VA’s commitment to this effort. Furthermore, in the absence of transparency about these previously classified tests and DOD’s efforts to identify individuals who were potentially exposed, Congress, veterans, and the public could have reason to believe that the cloak of secrecy has not been lifted and may not understand the success and challenges of DOD’s current effort. While DOD and VA have developed a process for notifying servicemembers who were potentially exposed, it is unclear whether DOD or any other agency, such as the Department of Labor, is required to notify potentially exposed civilians who are identified. Therefore, without specific guidance that defines the requirements, roles and responsibilities, and mechanisms to notify civilians who have been potentially exposed to chemical or biological substances, these individuals might continue to be unaware of their circumstances.

We are suggesting the Congress consider the following two matters:

• To provide greater transparency and resolve outstanding questions related to DOD’s decision to cease actively searching for the identification of individuals associated with Project 112, Congress should consider requiring the Secretary of Defense to consult with and address the concerns of VA, veterans, and veterans service organizations; to conduct and document an analysis that includes a full accounting of information known, and the related costs, benefits, and challenges associated with continuing the search for additional Project 112 participants; and to provide Congress with the results of this analysis. Our draft report addressed this recommendation to the Secretary of Defense; however, because DOD disagreed, we elevated this to a matter for congressional consideration.

• To ensure that civilians who were potentially exposed to chemical or biological substances as a result of tests conducted or sponsored by DOD are aware of their circumstances, Congress should consider requiring the Secretary of Defense, in consultation with the Secretary of Labor, to develop specific guidance that defines the requirements, roles and responsibilities, and mechanisms to notify civilians who have been potentially exposed to chemical or biological substances.
Recommendations for Executive Action

To ensure a sound and documented process for DOD's decision regarding the identification of individuals associated with Project 112, we recommend that the Secretary of Defense direct the Office of the Under Secretary of Defense for Personnel and Readiness to conduct and document an analysis that includes a full accounting of information known, and the related costs, benefits, and challenges associated with continuing the search for additional Project 112 participants, and to provide Congress with the results of this analysis. In developing the analysis, DOD should consult with and address the identified concerns of VA, veterans, and veterans service organizations.

To ensure that DOD's current effort to identify individuals who were potentially exposed during chemical and biological tests outside of Project 112 are more efficient, effective, and transparent, and to ensure that its databases contain accurate information, we recommend that the Secretary of Defense direct the Office of Under Secretary of Defense for Acquisition, Technology, and Logistics to take the following four actions:

- in coordination with the Office of the Under Secretary of Defense for Personnel and Readiness and the Secretary of Veterans Affairs, modify the guidance about the scope of work for its current effort, such as the statement of work and concept of operations plan, to clearly define consistent, reasonable, and acceptable goals and objectives, and the type and amount of information that will need to be collected to meet these goals and objectives;
- implement effective internal controls and oversight practices, such as periodic site visits, regular assessments of the contractor’s efforts, and quality assurance reviews of the information provided by the contractor;
- coordinate and communicate with other entities that previously identified exposed individuals to leverage existing information, including institutional knowledge and documents; and
- make its efforts transparent with regular updates to Congress, the public, and veterans service organizations.

To ensure that DOD has taken appropriate action in its efforts to notify servicemembers who were potentially exposed, we recommend that the Secretary of Defense direct the Office of the Under Secretary of Defense for Personnel and Readiness to take appropriate action to address the factors—such as competing priorities and database management weaknesses—affecting DOD’s ability to forward the names of potentially exposed individuals to VA in a timely and effective manner.
To ensure that all veterans who have been identified as having been potentially exposed to chemical or biological substances have been notified, we recommend that the Secretary of Veterans Affairs take steps to increase its use of available resources, such as the Internal Revenue Service, to implement a more efficient and effective process for obtaining contact information for living veterans.

We requested comments from DOD, VA, and the Department of Labor on a draft copy of this report. DOD generally agreed with five recommendations, but disagreed with the first recommendation to conduct and document a cost-benefit analysis associated with continuing the search for additional Project 112 participants, and to provide Congress with the results of this analysis. VA agreed with one recommendation and partially agreed with another recommendation that pertained to its activities. The Department of Labor did not provide us any comments. Because DOD disagreed with the recommendation to conduct and document a cost-benefit analysis associated with continuing the search for additional Project 112 participants and has not adequately addressed our May 2004 recommendation to determine the feasibility of addressing unresolved issues associated with Project 112, we added a Matter for Congress to consider directing the Secretary of Defense to conduct such an analysis. DOD and VA also provided technical comments, which we incorporated as appropriate. DOD's and VA's comments are reprinted in appendices II and III, respectively.

DOD agreed to and has in some cases begun taking action to respond to five of the recommendations. Specifically, DOD stated that it has already coordinated on updating program goals and objectives for the identification of individuals who were potentially exposed during chemical and biological tests outside of Project 112 and is revising the statement of work, implementation plan, and concept of operations to ensure consistent guidance and deliverables. DOD also stated that it has taken steps to increase oversight of the project and has established an implementation plan with OASD (HA) delineating oversight responsibilities. In addition, DOD stated that it will take steps to determine if other organizations are conducting similar work to identify potentially exposed individuals and will coordinate and leverage all available information. The department also stated that it will expand its current efforts to update the public and make efforts more transparent. Finally, DOD and VA are in the process of discussing short-term and long-term improvements necessary for improving the transfer of information to VA in
a timely and effective manner. We believe these are positive steps that, when completed, will address the intent of our recommendations.

DOD did not agree with the first recommendation to conduct and document an analysis that includes a full accounting of information known, and the related costs, benefits, and challenges associated with continuing the search for additional Project 112 participants, and to provide Congress with the results of this analysis. DOD stated that it believes it made a full accounting of its efforts available to Congress in 2003, that it has not received any credible leads that would allow DOD to continue its research, and that it currently knows of no other investigative leads that would meaningfully supplement what it believes to be a total picture of Project 112. However, as discussed in our May 2004 report, we identified a number of credible leads that could possibly result in additional Project 112 information. In addition, as discussed in this report, almost 600 additional individuals who were potentially exposed during Project 112 (more than a 10 percent increase) have been identified by non-DOD sources since DOD’s 2003 report to Congress and its decision to cease actively searching for additional exposures. In light of the increasing number of individuals who have been identified since DOD provided its report to Congress in 2003 and ceased its active search for additional individuals, until the department provides a more substantive analysis that supports its decision to cease active searches for additional individuals potentially exposed during Project 112 tests, Congress and veterans may continue to question the completeness and level of commitment to this effort. Because DOD has disagreed with our recommendation and has not adequately addressed our May 2004 recommendation to determine the feasibility of addressing unresolved issues associated with Project 112, we have added a Matter for Congress to consider directing the Secretary of Defense to conduct such an analysis.

In response to our recommendations, VA agreed to work with DOD to modify the guidance about the scope of work for its current effort to clearly define consistent, reasonable, and acceptable goals and objectives; and the types and amount of information that will need to be collected to meet these goals and objectives. VA also agreed to contact the Internal Revenue Service to determine if a more timely response can be obtained from them to assist VA in notifying individuals potentially exposed to chemical or biological substances. We believe these steps are consistent with the intent of our recommendations. However, VA disagreed with a part of our recommendation that it needs to pursue information from the Social Security Administration since the credit bureau that VA uses to obtain contact information already receives the same information from the
Social Security Administration. Accordingly, we adjusted our recommendation to the Secretary of Veterans Affairs so that it did not refer to the Social Security Administration as another source of information.

We are sending copies of this report to other interested congressional committees, the Secretary of Defense, the Secretary of Veterans Affairs, and the Secretary of Labor. We will also make copies available to others upon request. In addition, the report will be available at no charge on the GAO Web site at http://www.gao.gov.

If you have any questions about this report, please contact me at (202) 512-5431 or dagostinod@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made contributions to this report are listed in appendix IV.

Davi M. D'Agostino
Director, Defense Capabilities and Management
To assess the Department of Defense's (DOD) efforts since 2003 to identify servicemembers and civilians who may have been exposed to chemical or biological substances used during tests conducted under Project 112, we reviewed and analyzed documents pertaining to Project 112, including DOD’s 2003 Report to Congress: Disclosure of Information on Project 112 to the Department of Veterans Affairs. We interviewed officials at the Office of the Secretary of Defense, Washington, D.C., including the Under Secretary of Defense for Acquisition, Technology, and Logistics, and the Under Secretary for Personnel and Readiness. We also interviewed officials at the Office of the Assistant Secretary of Defense for Health Affairs who were responsible for conducting DOD's investigation of Project 112 tests and have been designated as the single point of contact for providing information related to tests and potential exposures during Project 112. We interviewed officials at the Institute of Medicine and reviewed their 2007 report on the long-term health effects of participation in the shipboard hazard and defense tests of Project 112. In addition, we reviewed and analyzed our prior reports as well as reports of other organizations to provide a historical and contextual framework for evaluating DOD’s efforts.

To evaluate DOD’s current effort to identify servicemember and civilian exposures that occurred during activities outside of Project 112 tests, we reviewed and analyzed reports, briefings, and documents and interviewed officials at the Office of the Secretary of Defense, Washington, D.C., including the Under Secretary of Defense for Acquisition, Technology, and Logistics and the Under Secretary of Defense for Personnel and Readiness. We also interviewed officials at the Office of the Assistant Secretary of Defense for Health Affairs, who have been designated as the single point of contact for providing information related to tests and potential exposures outside of Project 112. In addition, we interviewed officials at the U.S. Army Medical Research Institute of Infectious Diseases and the U.S. Army Medical Research and Materiel Command, Fort Detrick, Maryland; the Department of Veterans Affairs, Washington, D.C.; the Institute of Medicine, Washington, D.C.; the Vietnam Veterans of America, Silver Spring, Maryland; and DOD’s contractor currently conducting research to identify potential exposures that occurred outside of Project 112. We also evaluated DOD’s methodology for identifying servicemembers and civilians who may have been exposed to chemical or biological substances.

1 Institute of Medicine, Long-Term Health Effects of Participation in Project SHAD (Shipboard Hazard and Defense) (Washington, D.C.: 2007).
biological substances by observing the process the contractor uses to conduct research at repositories containing documents related to chemical and biological exposures from tests and other activities, such as the transportation and storage of chemical and biological substances. We interviewed officials and observed storage facilities at the three chemical or biological substance exposure record repositories where the contractor was currently conducting its work: Edgewood Chemical and Biological Center Technical Library, Aberdeen Proving Grounds, Maryland; U.S. Army Research, Development, and Engineering Command Historical Office, Aberdeen Proving Grounds, Maryland; and U.S. Army Medical Research Institute of Infectious Diseases Technical Library, Fort Detrick, Maryland. In addition, we interviewed officials and observed the records storage area at the U.S. Army Medical Research Institute of Infectious Diseases Medical Records Office, Fort Detrick, Maryland, where information about Operation Whitecoat is maintained. We also reviewed DOD’s outreach efforts and the extent to which DOD coordinated with other agencies that might have useful information, including the Department of Veterans Affairs (VA), the Department of Labor, the Institute of Medicine, and the Vietnam Veterans of America.

To evaluate VA’s process to notify servicemembers whom DOD has determined may have been exposed to a chemical or biological substance, we interviewed VA officials with the Veteran’s Benefit Administration, Veteran’s Health Administration, and Office of Planning and Policy, and gathered data concerning their success in making notifications. In particular, we documented the number of servicemembers whose names had been provided to VA by DOD, the extent to which notification letters were sent, the extent to which veterans were deceased, and the number of cases where sufficient documentation was not available to obtain contact information to make notifications.

We assessed the reliability of DOD’s and VA’s data by interviewing agency officials knowledgeable about the data and by reviewing existing information about the data and the systems used to maintain and produce them. Although we found that there were potential problems with the quality and reliability of the information, we determined that the data were sufficient for the purposes of this report.

We conducted this performance audit from June 2007 to February 2008 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence
obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.
Appendix II: Comments from the Department of Defense

This is the Department of Defense (DoD) response to the Government Accounting Office (GAO) draft report, "CHEMICAL AND BIOLOGICAL DEFENSE: DoD and VA Need to Improve Efforts to Identify and Notify Individuals Potentially Exposed during Chemical and Biological Tests," dated December 21, 2007 (GAO Code 351052/ GAO-08-366).

The DoD comments to GAO recommendations are contained in enclosure 1. The DoD concurred with four recommendations, concurred with comment on one recommendation, and non-concurred with recommendation 1 (pertaining to GAO's recommendation for full cost-benefit analysis associated with continuing the search for additional Project 112 participants). In support of our non-concurrence to recommendation 1, the Office of the Assistant Secretary of Defense for Health Affairs (OASD(HA)) made a full accounting of its efforts to Congress in August 2003 stating the DoD had ceased the active stage of its Project 112 investigation, but would pursue any new leads that became available as evidenced in the OASD(HA) information sheet, at enclosure 2. Finally, our technical comments to the draft report are provided at enclosure 3.

Should you have any questions, please phone or email the point of contact, COE, David Jarrett, 703-697-5116, david.jarrett@osd.mil.

Sincerely,

[Signature]

Arthur T. Hopkins
Principal Deputy

Enclosures:
As stated
DEPARTMENT OF DEFENSE COMMENTS TO THE RECOMMENDATIONS

RECOMMENDATION 1: The GAO recommends that the Secretary of Defense direct the Office of the Under Secretary of Defense for Personnel and Readiness to conduct and document an analysis that includes a full accounting of information known, and the related costs, benefits, and challenges associated with continuing the search for additional Project 112 participants, and to provide Congress with the results of this analysis. In developing the analysis, DoD should consult with and address the identified concerns of the Department of Veterans Affairs (VA), veterans, and veteran service organizations.

DOD RESPONSE: Nonconcur. DoD believes it made a full accounting of its efforts available to Congress in 2003 (see enclosure 2 detailing DoD's Project 112 efforts). At that time, DoD informed Congress that it had ceased the active stage of the investigation, but would pursue any new leads that became available. DoD does not believe that the cessation of the effort lends itself to a cost benefit analysis. To date, DoD has received no credible leads that would allow DoD to continue its research. Thus, DoD sees no advantage to conducting a cost-benefit analysis four years after informing Congress of its plans.

DoD does not believe that any degree of replicating searching of records archives for a program terminated long ago would result in a more complete documentation of all aspects of the program. DoD believes the evidence found to date produces an accurate, total picture of Project 112/SHAD (Shipboard Hazard and Defense). DoD currently knows of no other investigative leads that would meaningfully supplement that picture.

Most of the new names added to the Project 112 database came from reexamining existing data already in DoD possession, not from finding new documentation. Additionally, veterans continue to provide the Office of the Assistant Secretary of Defense (Health Affairs) (OASD/HA) with temporary duty orders, letters of commendation, etc., (records that are not permanently archived by the military) that document their and fellow veterans participation in Project 112. In these cases, DoD uses this information to give these veterans credit for participating in Project 112.

RECOMMENDATION 2: The GAO recommends that the Secretary of Defense direct the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics to conduct and document in coordination with the Office of the Under Secretary of Defense for Personnel and Readiness and the Secretary of Veterans Affairs, modify the guidance about the scope of work for its current
effort, such as the statement of work and concept of operations plan, to clearly define consistent, reasonable, and acceptable goals and objectives, and the type and amount of information that will need to be collected to meet those goals and objectives.

**DOD RESPONSE:** Concur. Office of the Assistant Secretary of Defense (Health Affairs) (OASD(HA)) and Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics (OUSD(AT&L)) personnel have already coordinated on updating program goals and objectives for the identification of individuals who were potentially exposed during chemical and biological tests outside of Project 112. The statement of work, implementation plan, and concept of operations are under revision to ensure consistent guidance and deliverables.

**RECOMMENDATION 3:** The GAO recommends that the Secretary of Defense direct the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics implement effective internal controls and oversight practices, such as periodic site visits, regular assessments of the contractor's efforts, and quality assurance reviews of the information provided by the contractor.

**DOD RESPONSE:** Concur. As part of the revised statement of work, a quarterly analysis/search will be conducted to determine if other organizations are conducting similar work. The Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics (OUSD(AT&L)) will coordinate and leverage all available information including institutional knowledge and documents.

**RECOMMENDATION 4:** The GAO recommends that the Secretary of Defense direct the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics to coordinate and communicate with other entities that previously identified exposed individuals to leverage existing information, including institutional knowledge and documents.

**DOD RESPONSE:** Concur. As part of the revised statement of work, a quarterly analysis/search will be conducted to determine if other organizations are conducting similar work. The Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics (OUSD(AT&L)) will coordinate and leverage all available information including institutional knowledge and documents.

**RECOMMENDATION 5:** The GAO recommends that the Secretary of Defense direct the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics to make its efforts transparent with regular updates to Congress, the public, and veterans' service organizations.

**DOD RESPONSE:** Concur with comment. The draft report mentions using the existing DoD website to update veterans on the current search efforts for non-Project 112 exposed personnel. The Office of the Assistant Secretary of Defense (Health Affairs) (OASD(HA)) intends to add information on its current efforts to the Office of Force Health Protection & Readiness (FHPR) website (http://fhp.osd.mil) to update the public and make efforts more transparent. Similarly,
OASD(HA) will update Veterans' Service Organizations (VSO) on these efforts during regularly scheduled meetings with VSO representatives.

**RECOMMENDATION 6:** The GAO recommends that the Secretary of Defense direct the Office of the Under Secretary of Defense for Personnel and Readiness to take appropriate action to address the factors—such as competing priorities and database management weaknesses—affecting DoD’s ability to forward the names of potentially exposed individuals to the Secretary of Veterans Affairs in a timely and effective manner.

**DOD RESPONSE:** Concur. Office of the Assistant Secretary of Defense (Health Affairs) (OASD(HA)) personnel and the Department of Veterans Affairs (VA) have discussed short-term and long-term improvements necessary for improving the transfer of information to the VA in a timely and effective manner. OASD(HA) and VA are in the process of formalizing data transfer agreements.
THE SECRETARY OF VETERANS AFFAIRS  
WASHINGTON  
January 29, 2008

Ms. Davi M. D'Agostino  
Director, Defense Capabilities and Management  
U. S. Government Accountability Office  
441 G Street, NW  
Washington, DC 20548

Dear Ms. D'Agostino:

The Department of Veterans Affairs (VA) has reviewed the Government Accountability Office’s (GAO) draft report, CHEMICAL AND BIOLOGICAL DEFENSE: DOD and VA Need to Improve Efforts to Identify and Notify Individuals Potentially Exposed during Chemical and Biological Tests (GAO-08-366). VA agrees with GAO’s conclusions and concurs in part with GAO’s recommendations that are addressed to VA.

The Department of Defense and VA need to improve efforts to identify and notify individuals potentially exposed during chemical and biological tests. The enclosure specifically addresses GAO’s recommendation and provides additional discussion and comments to the draft report. VA appreciates the opportunity to comment on your draft report.

Sincerely yours,

James B. Peake, M.D.

Enclosure
Appendix III: Comments from the Department of Veterans Affairs

Department of Veterans Affairs (VA) Comments to Government Accountability Office (GAO) Draft Report
CHEMICAL AND BIOLOGICAL DEFENSE: DOD and VA Need to Improve Efforts to Identify and Notify Individuals Potentially Exposed during Chemical and Biological Tests (GAO-08-366)

To ensure that all veterans who have been identified as having been potentially exposed to chemical or biological substances have been notified, GAO recommends that the Secretary of Veterans Affairs take the following action:

- Increase its use of available resources, such as the Social Security Administration (SSA) and Internal Revenue Service (IRS), to implement a more efficient and effective process for obtaining contact information for living veterans.

Concur in part – VA will contact IRS to determine if a more timely response can be obtained from them. We do not agree that additional inquiry capability with SSA will yield additional information since ChoicePoint already uses the same data from SSA that we would be requesting.

In coordination with the Office of the Under Secretary of Defense for Personnel and Readiness and the Secretary of Veterans Affairs, modify the guidance about the scope of work for its current effort, such as the statement of work and concept of operations plan, to clearly define consistent, reasonable, and acceptable goals and objectives, and the type and amount of information that will need to be collected to meet these goals and objectives.

Concur – VA looks forward to working with DoD on this recommendation.
Appendix IV: GAO Contact and Staff

Acknowledgments

GAO Contact
Davi M. D’Agostino, (202) 512-5431 or dagostinod@gao.gov

In addition to the contact named above, Robert L. Repasky (Assistant Director), Tommy Baril, Renee S. Brown, Brian D. Pegram, Steven Putansu, Terry L. Richardson, and Karen Thornton made key contributions to this report.
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