



*REPORT TO THE  
GOVERNMENT ACTIVITIES  
SUBCOMMITTEE  
COMMITTEE ON  
GOVERNMENT OPERATIONS  
HOUSE OF REPRESENTATIVES*

Fire Damage At The  
Military Personnel Records Center  
St. Louis, Missouri, And  
Fire Protection At Other  
GSA Records Centers

B-125617

General Services Administration

*BY THE COMPTROLLER GENERAL  
OF THE UNITED STATES*

OCT. 3, 1974

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COMPTROLLER GENERAL OF THE UNITED STATES  
WASHINGTON, D.C. 20548

B-125617

The Honorable Jack Brooks  
Chairman, Government Activities Subcommittee  
Committee on Government Operations  
House of Representatives

Dear Mr. Chairman:

In response to your request of August 24, 1973, we are reporting on the fire at the Military Personnel Records Center in St. Louis, Missouri, and the status of fire protection at other General Services Administration records centers.

At your request, we have not obtained formal comments from the General Services Administration on this report. However, after we finished our work, we discussed our findings with Administration representatives. They provided us with additional information which we incorporated into the report, as appropriate,

We do not plan to distribute this report further unless you agree or publicly announce its contents. In this connection, we want to invite your attention to the fact that this report contains recommendations to the Administrator of General Services. As you know, section 236 of the Legislative Reorganization Act of 1970 requires the head of a Federal agency to submit a written statement on actions he has taken on our recommendations to the House and Senate Committees on Government Operations not later than 60 days after the date of the report, and the House and Senate Committees on Appropriations with the agency's first request for

appropriations made more than 60 days after the date of the report. When we obtain your agreement to release the report, we will make it available to the Administrator and the four committees for the purpose of setting in motion the requirements of section 236.

Sincerely yours,

A handwritten signature in black ink, reading "James B. Stewart". The signature is written in a cursive style with a large, prominent initial "J".

Comptroller General  
of the United States

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ABBREVIAT

FBI	Federal Bureau of Investigation
GAO	General Accounting Office
GSA	General Services Administration
NARS	National Archives and Records Service
PBS	Public Buildings Service

GLOSSARY

Fire resistance	The ability of a material to sufficiently withstand the destructive effects of a fire to carry designed load and/or heat. Fire resistance is expressed in terms of time.
Noncombustible	Refers to any construction, such as unprotected steel, that contains no burnable material but may be structurally damaged by fire.

COMPTROLLER GENERAL'S REPORT TO  
THE GOVERNMENT ACTIVITIES  
SUBCOMMITTEE  
COMMITTEE ON GOVERNMENT OPERATIONS  
HOUSE OF REPRESENTATIVES

FIRE DAMAGE AT THE  
MILITARY PERSONNEL RECORDS CENTER,  
ST. LOUIS, MISSOURI, AND  
FIRE PROTECTION AT  
OTHER GSA RECORDS CENTERS  
GENERAL SERVICES ADMINISTRATION  
B-125617

D I G E S T

WHY THE REVIEW WAS MADE

On July 12, 1973, a major fire destroyed millions of records at the Military Personnel Records Center in St. Louis, Mo. Subsequently, the Chairman of the Subcommittee asked GAO to examine

- fire protection measures at the time of the fire,
- the amount of damage to the building and records and to what extent destroyed records can be reconstructed,
- fire protection capabilities of other records centers operated by the General Services Administration (GSA),
- GSA proposals to increase fire protection at the St. Louis and other records storage facilities and the related cost, and
- legal responsibilities of Federal and local governmental bodies to provide fire protection and assume the cost of extinguishing the blaze. (See app. II, p. 28.)

FINDINGS AND CONCLUSIONS

Fire at the Military Personnel  
Records Center

The damage caused by the fire was severe. About 22.1 million jackets (files containing certain documents relating to a person's military service) were damaged, and an estimated 5.3 million jackets were salvaged. Building repairs and restoration of records will cost an estimated \$13.7 million.

Also, a recurring annual increase in cost of reference services is expected; the increase for fiscal year 1975 is estimated to be \$1.6 million. (See pp. 3 to 9.)

At the time of the fire, now thought to have been caused by careless smoking, the Center had inadequate fire protection. A sprinkler system covered only a small part of the building, and fire partitions separating storage areas were on only two of the six floors.

Smoke detectors were installed only in the air circulation system, which did not service records storage areas. Four guards were on duty, but they were not scheduled to make their rounds until later in the evening. (See p. 9.)

The July 12 fire is one of 15 fires reported at the Center between May 1972 and June 1974. The other fires did not seriously damage the building or the records. (See pp. 10 and 11.)

GSA plans to maintain tight security and intensive surveillance at the Center until planned fire protection measures, including a sprinkler system, have been installed. (See pp. 11.)

Most GSA records centers are not fully protected

The National Archives and Records Service, GSA, has established certain standards, known as the Federal Archives and Records Center Facility Standards, for its records centers.

The standards cover construction, water supply, and internal fire protection devices, such as sprinklers and alarm systems. One of the objectives is to reduce the risk of fire damage. (See pp. 12 to 16.)

After visiting the 18 records centers to decide to what extent they complied with the standards, GAO grouped the centers into three broad categories:

- Those generally complying with the standards and subject to minimal risk of serious fire damage.
- Those partially complying with the standards and subject to greater risk of serious fire damage.
- Those generally not complying with the standards and subject to serious risk of fire damage.

In accordance with the above classifications, GAO found that:

--Three centers generally comply with the standards, namely, the new Federal Archives and Records Centers in San Bruno, Calif., and Chicago, Ill., and the National Archives in Washington, D.C.

--Ten centers partially comply with the standards, namely, the Civilian Personnel Records Center, St. Louis, Mo.; the Washington National Records Center, Suitland, Md.; and the Federal Archives and Records Centers in Los Angeles, Calif.; Denver, Colo.; Waltham, Mass.; Kansas City, Mo.; Bayonne, N.J.; Philadelphia, Pa.; and Seattle, Wash.; and the Federal Records Center in Dayton, Ohio.

--Five centers and the annex to the Waltham Federal Archives and Records Center do not comply with the more critical standards, namely, the Military Personnel Records Center in St. Louis, Mo.; the Vital Records Section in Neosho, Mo.; the Federal Records Centers in East Point, Ga., and Mechanicsburg, Pa.; and the Federal Archives and Records Center in Forth Worth, Tex. (See pp. 16 to 18.)

Problems in costing and funding fire protection needs

For the records centers to comply with the standards, many improvements will be required; GSA has identified 33 improvement projects valued at \$3.1 million.

During GAO's inspection of the centers, more than 100 additional deviations from the standards were identified. GSA estimates that 13 projects to correct some of these deviations would cost \$1.5 million.

For management purposes, GSA maintains a computerized inventory of repair and improvement projects, including those for fire protection, known as the repair and improvement computer-oriented system.

Since the St. Louis fire, GSA has required each of its 10 regional offices to submit a priority list of fire safety projects. Plans are to commit at least 10 percent of the funds received for repair and improvement to these projects each year. Priority will be given to buildings where lifesafety is the primary consideration. (See pp. 20 and 21.)

If GSA adopts these plans, they will be one step toward correcting the fire protection deficiencies. Because of tight funds, however, and the high priority placed on lifesafety, many firesafety projects in records centers will continue to go unfunded. (See p. 21.)

Reimbursement to  
local fire departments  
not required under current law

Approximately 40 fire departments helped extinguish the fire at the Center. Total costs were about \$25,300, which includes labor charges of \$15,600 for 6,384 man-hours spent by 319 firemen and \$9,700 for supplies and lost and damaged equipment.

Since the mid-1940s and most recently in connection with the St. Louis fire, GAO has been asked to rule on the

legality of Government reimbursements to local fire departments.

In past decisions, GAO has uniformly held that appropriated funds may not be charged for firefighting services provided on Federal property within the territorial areas of a local fire department. Such a charge would, in effect, be a payment in lieu of taxes, which would contravene the Government's sovereign immunity from taxation. Therefore, the fire departments have not been, and legally cannot be, reimbursed for their service. (See pp. 22 and 23.)

RECOMMENDATIONS OR SUGGESTIONS

In connection with fire protection at the records centers, the Administrator of General Services should

- review all plans for alterations, additions, and construction to insure compliance with the standards;
- have required maintenance done and otherwise insure that existing systems will operate properly when needed (see p. 19);
- establish a plan to accomplish projects needed to protect the Government's investment in records centers so that the risk of loss is reduced to a level acceptable to GSA. This plan should include providing repair and improvement funds directly to records center projects (see p. 21).



## CHAPTER 1

### INTRODUCTION

As a result of a major fire at the Military Personnel Records Center in St. Louis, Missouri, the Chairman of the Subcommittee asked us to examine

- fire protection measures in use at the time of the fire,
- the amount of damage to the building and records and the extent to which destroyed records can be reconstructed,
- fire protection capabilities of other records centers operated by the General Services Administration (GSA),
- GSA proposals to increase fire protection at this and other records storage facilities and the related costs of such increased protection, and
- legal responsibilities of Federal and local governmental bodies to provide fire protection and assume the cost of extinguishing the blaze.

GSA administers Federal records centers which store and service noncurrent and historically valuable records. Non-current records are those not active enough to be kept in high-cost office space and are retained for a limited time. Historically valuable records receive special handling and are permanently stored in temperature- and humidity-controlled areas known as archives.

GSA operates 18 records centers which have about 4.8 million square feet of space. (App. I lists these centers and their location.) Records are received from civilian and military sources and are then categorized into over 400 groups by agency or agency component. As of June 30, 1973, the centers contained 13 million cubic feet of records (9 percent archival and 91 percent noncurrent material).

Management of Federal records centers is the joint responsibility of two GSA components: the National Archives and Records Service (NARS) and the Public Buildings Service

(PBS). NARS, under the direction of the Archivist of the United States, administers the centers. PBS operates, maintains, and protects the centers' buildings and related real and personal property.

BA OF ST LOUIS CENTER

The Military Personnel Records Center was designed and constructed by the Department of the Army for records storage. The 1,596,332-square-foot, six-story, reinforced concrete structure was occupied in 1956. At that time, most records were stored in metal file cabinets which provided greater fire protection than the steel shelving now used. Sprinkler systems and firewalls were not installed in the Center because the Army wanted to maintain operational flexibility. Also, many archivists at that time feared potential water damage from sprinkler malfunctions.

GSA assumed control of the building in 1960. At the time of the fire, about 60 percent of the building was for records storage and the rest for offices that used the records. The Center contained 1.6 million cubic feet of military personnel and medical records.

## CHAPTER 2

### FIRE AT THE CENTER

On July 12, 1973, a major fire, now thought to have been caused by careless smoking, occurred at the Center, destroying the records of millions of servicemen. The fire burned 4 days and caused damage worth at least \$13.7 million. The Center had experienced a series of small fires before July, but a sprinkler system had not been installed because funds were used for purposes which GSA considered to have higher priority.

The fire was first detected and reported to a Federal Protective Service officer at the Center by an unidentified passerby at 12:11 a.m., Thursday, July 12, 1973. The alarm was telephoned to the North Central County Fire Alarm System, Inc., at 12:16 a.m., and the Community Fire Protection District of St. Louis County arrived on the scene at 12:20 a.m. A small team was sent to the sixth floor, but the rapidly spreading fire drove the team back and forced the firemen to fight the fire from the outside of the building.

The fire departments encircled the building with various types of aerial equipment and fought the fire from the building's perimeter. From this position it was possible to control only the fire near the perimeter, while the core burned itself out. By continuing to control the perimeter and later advancing onto the sixth floor, the firefighters were eventually able to bring the fire under control on the second day. The facility was returned to Government supervision on Monday, July 16, 1973.

Because of the firemen's efforts, according to GSA, fire damage was generally limited to the sixth floor, and no serious injuries occurred. The entire sixth floor, including roof, utilities, and equipment, was destroyed and has been removed. Although damage occurred to some windows, fixtures, and equipment beneath the sixth floor, the basic building framing and structure survived without major damage.

## COST OF FIRE DAMAGES

GSA estimates fire damages will cost at least \$13.7 million. The initial cost to repair the damage is estimated at \$11.1 million in fiscal year 1974, consisting of \$7.1 million for building repairs and \$4 million for additional salary costs, records recovery contracts, equipment, and other expenses. GSA is asking for \$1 million in fiscal year 1975 to continue reconstructing the records. In addition, a recurring annual increase in the cost of reference services (providing documents and information to agencies and veterans) is expected as a result of the fire. This cost for fiscal year 1975 is estimated at \$1.6 million.

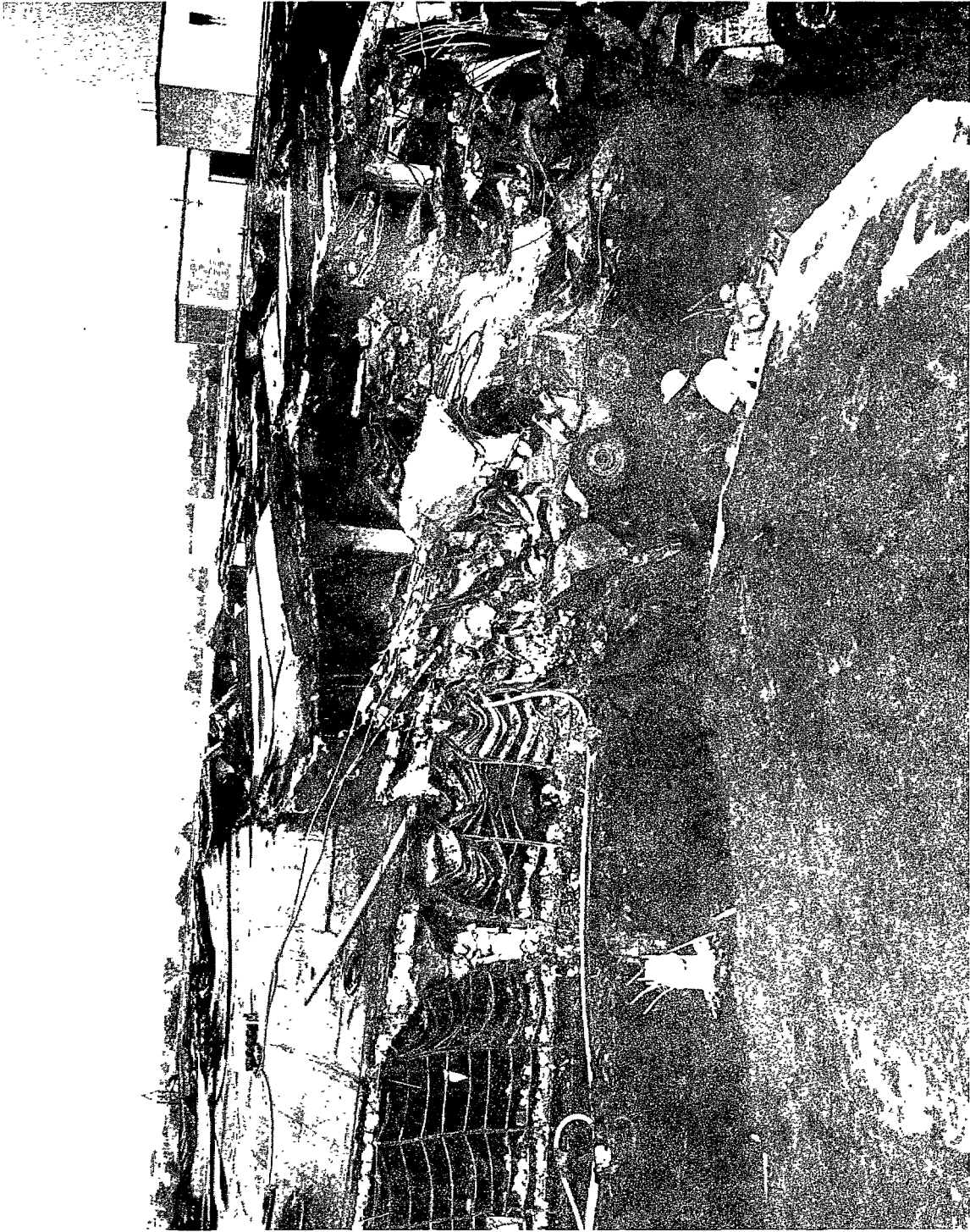
### Building repairs

GSA requested about \$7,116,000 to restore the building.

Demolish sixth floor and roof	\$3,106,500
Repair elevators	157,900
Replace escalators	250,000
Add new roof and parapet	315,700
Rebuild penthouses	260,000
Replace damaged floor covering	259,800
Obtain consultant service	15,000
Lease space, move, and clean up	550,000
Replace damaged ceilings	129,900
Repair lighting	234,500
Replace damaged doors	45,100
Repair electrical system	234,500
Repair mechanical system	694,500
Replace damaged windows	90,200
Design and supervise	<u>772,400</u>
Total	<u><u>\$7,116,000</u></u>

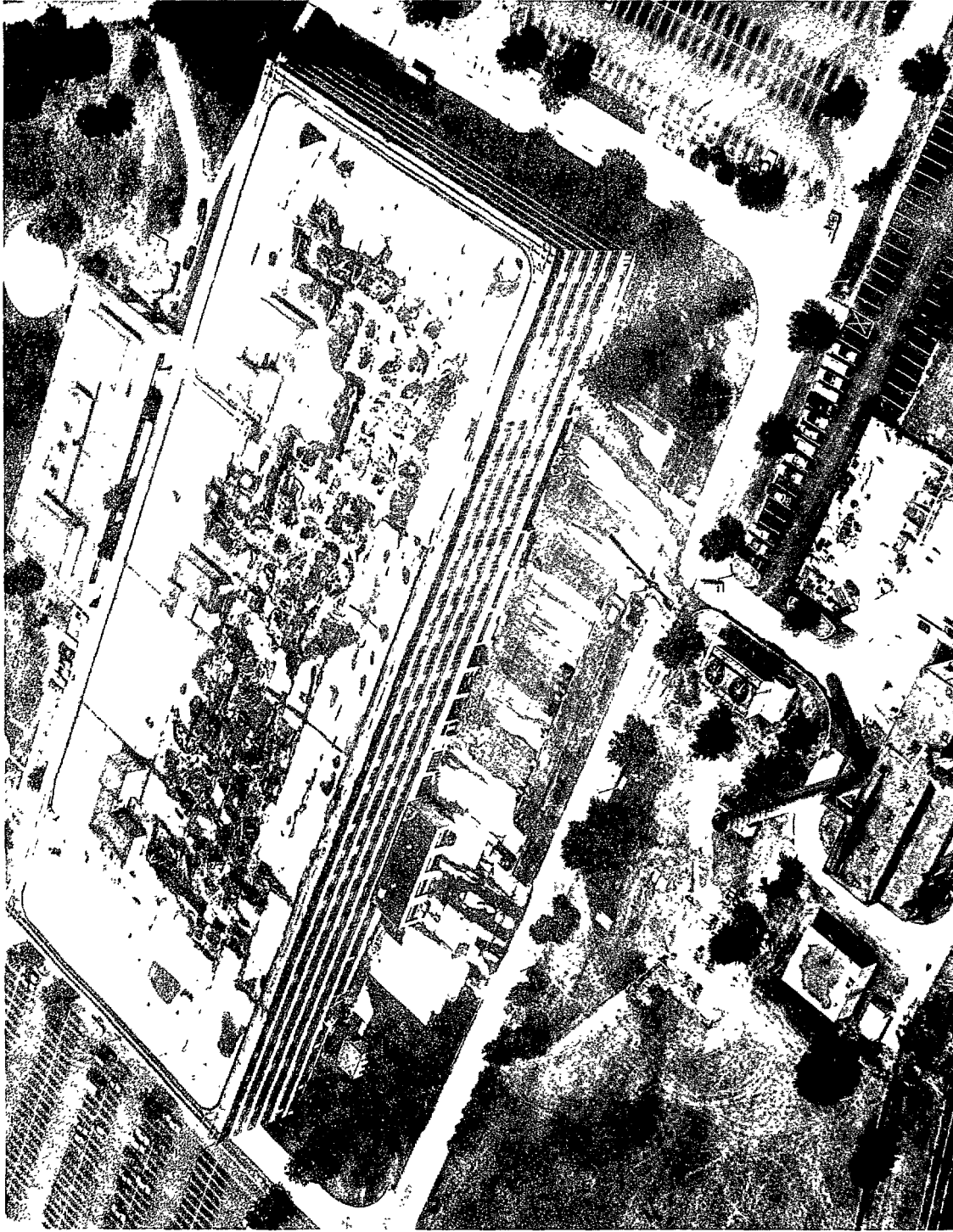
GSA also requested funds to pay for fire department services (see ch. 5) and \$724,000 for installing fire curtains and smoke detectors. GSA considers fire curtains and smoke detectors to be improvements to the facility rather than direct costs resulting from the fire.

Agency officials stated that as of June 1974, \$6,650,000 had been made available for some of this work and for installing a sprinkler system, which is estimated to cost \$1 million.



CLOSEUP VIEW OF SIXTH FLOOR DAMAGE IN THE CENTER.

GSD photograph



AERIAL VIEW OF FIRE DAMAGE ON ROOF OF THE CENTER

GSA photograph

Cost of records damage

Records damage costs are estimated at \$3,986,000 for fiscal year 1974.

Salaries and related expenses	\$2,005,500
Travel and transportation	39,000
Keypunch rental	29,000
Microfilm copying	700,000
Records reconstruction	703,000
Contract labor	57,500
Office equipment restoration	11,500
Supplies	236,500
Steel shelving	170,000
Equipment rentals	<u>34,000</u>
Total	<u>\$3,986,000</u>

RESTORATION OF DAMAGED AND DESTROYED RECORDS

Records located on the sixth floor before the fire and those that were salvaged are:

<u>Period covered</u>	Total number of jackets (note a)	Estimated jackets salvaged as of <u>April 1974</u>
Department of the Army:		
World War I personnel 1	11-1-12 to 9-7-39	5,143,850
World War II personnel	9-8-39 to 12-31-46	8,977,550
Post World War II personnel	1-1-47 to 12-31-59	5,941,041

<sup>a</sup>Files that are a serviceman's master personnel record and contain such information as enlistment or induction records, transfer or reassignment orders, promotion papers, financial records, medical records, and separation documents.

	<u>Period covered</u>	Total number of <b>jackets</b> ( <u>note a</u> )	Estimated jackets salvaged as of <u>April 1974</u>
Recently dis- charged personnel	1-1-73 to 7-12-73	316,000	314,400
Department of the Air Force:			
Alpha segment personnel (I-Z)	9-25-47 to 12-31-63	<u>1,700,000</u>	<u>442,490</u>
Total		<u>22,078,810</u>	<u>4,000,931</u>

<sup>a</sup>Files that are a serviceman's master personnel record and contain such information as enlistment or induction records, transfer or reassignment orders, promotion papers, financial records, medical records, and separation documents.

As of April 1974, GSA estimated, an additional 1.3 million jackets had been salvaged but had not been categorized as to the branch of service. These water-damaged records have been returned to a usable condition through a freeze-drying vacuum process at McDonnell Aircraft Company facilities in St. Louis and at a National Aeronautics and Space Administration facility in Sandusky, Ohio. The record-drying process began at McDonnell Aircraft Company in July 1973 and was completed in December 1973. The Sandusky operation began in November 1973 and was completed in February 1974.



NARS plans to reconstruct only those jackets for which requests or inquiries are received. Even then, plans are not to reconstruct every record in the jacket because:

1. The cost of reconstructing a jacket would be from \$500 to \$1,000.
2. Most of the inquiries can be answered by using only a few documents from a jacket.
3. Many records stored at the Center have a low usage rate.

There are a number of sources for reconstructing lost records: microfilms of Army and Air Force unit reports, the Veterans Administration (the best source), the Selective Service, State offices, and former servicemen.

#### FIRE PROTECTION MEASURES IN USE AT THE TIME OF THE FIRE

No fire partitions separated the storage areas on the first, second, third, and sixth floors. Many storage areas at the Center exceeded GSA's recommended 40,000-square-foot maximum, with the sixth floor having a storage area of about 205,000 square feet.

Before GSA assumed control of the building, about 65 percent of the first floor and 35 percent of the second floor were equipped with a sprinkler system. The other four floors, except for the areas around the escalator lobbies, were not equipped. Automatic sprinkler protection for the rest of the building was first proposed by GSA region 6 in the fiscal year 1963 and approved by the Congress in fiscal year 1964 for installation in fiscal year 1965. However, GSA did not fund the project. GSA region 6 continued to request funds for the system, but the limited funds available were used for projects which GSA Headquarters and region 6 considered to have higher priority.

Smoke detectors were installed in the air circulation system, which serviced only office areas. The system did not have an exhaust capability for removing smoke in an emergency.

Before the fire, five Federal Protective Service officers were on duty from 4 p.m. to midnight. During the midnight to 8 a.m. shift, four officers were on duty. Between 10:45 p.m. and midnight there were no interior patrols on any of the six floors. A Federal Protective Service official told us that interior patrolmen on the midnight shift would not have made their rounds on the second through sixth floors until some time after 12:30 a.m.

The Federal Bureau of Investigation (FBI) and a special GSA ad hoc committee have investigated events related to the fire. The FBI presented its facts to the Federal grand jury in the eastern district of Missouri. Information was presented dealing with destruction of Government property and possible arson. The grand jury did not return any indictments. The cause of the fire is now thought to have been careless smoking.

#### HISTORY OF FIRES AT THE CENTER

From May 1972 until the major fire in July 1973, 10 fires were reported at the Center. Of these, seven were in rest-rooms and one each occurred in a custodial closet, trash container, and on the grass outside the building. Six of the fires were suspected arson. The resident FBI agent investigated each fire.

After a number of these incidents, the region 6 PBS Commissioner's office asked GSA Headquarters to survey the Center and recommend actions needed to increase fire safety. In October 1972, a study made in response to this request resulted in several recommendations by Headquarters, Accident and Fire Prevention Division, including one to provide automatic sprinkler protection throughout the Center. In January 1973, the building was inspected each day at closing time, a contract was let to connect the fire alarm system directly to the fire department, additional ashtrays were installed in smoking areas, and employee awareness of smoking restrictions was emphasized.

In a memorandum dated February 21, 1973, the Assistant Commissioner for Building Management stated:

"We are instructing Region 6 \* \* \* to institute a Repair and Improvement project for the installation of automatic sprinklers for the protection of this valuable facility. However, because of the backlog of R&I projects, it will be some time before this project can be funded. There are many R&I projects involving substantial life safety deficiencies which carry a higher priority than this project, which has no appreciable life safety connotations.

"We shall advise you when the funding situation permits the scheduling of this work."

Since the major fire, four other minor fires have been reported at the Center. One was a trashcan fire, and the other three were started by sparks from a carborundum saw, a gas leak, and a fluorescent light.

In summary, from May 1972 to June 1974 this Center reported 14 minor fires and 1 major fire. According to GSA records only 6 fires were reported for the other 17 centers over the last 3 years.

Agency officials informed us that security has been increased since the major fire by limiting building access to authorized personnel, by providing a full-time fire protection and safety inspector, and by fire inspection personnel conducting patrols of the building. Plans are to maintain tight security and intense surveillance until the sprinkler system and other fire protection measures are in place.

### CONCLUSIONS

During the past 2 years the Center has posed a special problem to GSA because of the number of fires of suspicious origin. Although problems have been recognized, responsive action, such as installation of a sprinkler system, has not been taken. We agree with GSA's plans to maintain tight security and intense surveillance at the Center until planned fire protection measures have been installed.

### CHAPTER 3

#### GSA RECORDS CENTERS:

##### ARE THEY ADEQUATELY PROTECTED?

NARS has established certain standards, known as the Federal Archives and Records Center Facility Standards, for its records centers. Some of these standards cover fire protection, and one of their objectives is to reduce the risk of fire damage. These standards parallel the specifications published by the National Fire Protection Association, which is a voluntary, nonprofit organization formed to improve fire protection and prevention methods.

The standards were issued in 1973. However, as early as 1959 NARS issued standards for records centers which contained many requirements similar to those in the current standards.

We inspected all GSA records centers to determine to what extent they complied with the standards. Most of the 18 centers are warehouse-type buildings with high ceilings and contain primarily noncurrent records stored on open shelving.

Of the 18 centers, 10 were originally built for other than records storage purposes. The remaining eight were constructed for NARS as records centers. Of the 18 centers, 9 were built before 1950, 3 during the 1950s, 4 during the 1960s, and 2 since 1970. GSA owns 16 of the buildings; it leases the Bayonne, New Jersey, space from the Department of Defense and the Vital Records Section storage area in Neosho, Missouri, from a commercial source.

In June 1974 GSA advised us that the Los Angeles Federal Archives and Records Center would be moved to the Rockwell International building at Laguna Niguel in Orange County, California. Since part of this building will be used as a records center, additional fire protection will be necessary. The estimated cost is about \$300,000, which includes the cost of installing smoke detectors and fire partitions and changing the existing sprinkler system. We did not inspect the Laguna Niguel site because GSA had not finalized its plans at the time of our review.

## FIRE PROTECTION STANDARDS

### Construction

Records center construction was assessed in terms of size limits; fire resistance of walls, roof, and columns; the ability of air circulation systems to evacuate smoke; and the separation of heating systems and transformers from records storage areas.

NARS standards do not limit total building size but require that individual records storage areas not exceed 40,000 square feet. As evidenced by the St. Louis fire, fighting and containing fire in a large area having a heavy fuel load is difficult.

The standards also prescribe that (1) interior walls separating records storage areas be structurally sound, 4-hour fire-resistant firewalls, (2) openings in firewalls be protected by two fire doors rated fire resistant for 3 hours, (3) no ducts are to pass through walls separating storage areas, and ducts between records storage areas and corridors or office areas are to be protected with automatic closing fire barriers. Inadequate doors and unprotected ducts lower the effectiveness of firewalls.

Standards require that roofs be noncombustible and columns be rated fire resistant for 2 hours so they can support the sprinkler system. Standards also require that furnaces and boilers be separated from records areas by a 4-hour fire-resistant firewall and that no open flame equipment be used in any records area. No transformers are permitted within the records storage area. Air circulation systems are to be convertible to outside air for emergency smoke removal to make firefighting easier. Only the Chicago Records Center fully met these standards.

### New construction

NARS' 1973 standards are not being fully incorporated into new construction. Building plans for extending the Denver Federal Archives and Records Center contained numerous deficiencies which were pointed out to regional officials. Action is being taken to correct some of them; others will go

uncorrected. The question of smoke detectors is awaiting planning on a nationwide basis. In a recently constructed addition to the East Point Center near Atlanta, Georgia, exposed steel columns with no fire resistance rating were used instead of 2-hour fire-resistant columns.

### Water supply

An adequate and dependable water supply is vital to fire protection of records centers because they contain a large amount of combustible material and are considered by GSA to be high-risk fire hazards.

The standards require that, if the sprinklers and fire hydrants use the same source of water supply, the system should provide 1,600 gallons a minute at a pressure of 65 pounds per square inch, 2,800 gallons at 30 pounds, and 3,000 gallons at 20 pounds. The system should be capable of delivering the maximum capacity requirement for at least 3 hours. Dependability frequently requires a two-source system--the standards call for two sources of water or a dependable alternative, such as two connections from different points in the public water system. A single-feed main from the public water system is not a dependable source. As shown in appendix I, 11 records centers did not meet these requirements.

The standards **also** require that fire hydrants be located within 250 feet of each access to a records center. All hydrants should be at least 50 feet away from the building and should be adjacent to a roadway usable by firetrucks.

The Vital Records Section in Neosho is seriously deficient in this area. This installation is in an abandoned limestone mine shaft and contains records considered vital to the continued operation of the Federal Government in the event of a disaster. However, it has no fire hydrants or interior hose connections which the fire department could use. In addition, the water supply does not meet waterflow and source requirements.

Although the Washington National Records Center in Suitland, Maryland, meets the standards for fire hydrants, it could have a fire protection problem. A fire department

Philadelphia Center exceeds the 40,000 square-foot limit on records storage areas.

The Center in Bayonne is not in compliance only because planned modifications, including installation of fire doors and smoke detectors, have not yet been made.

The Center in Suitland has a water supply deficiency and is not fully covered with a smoke detection system. However, it is a relatively new building with no major construction deficiencies.

The Waltham Center has a water supply deficiency and some construction deficiencies. However, it is equipped with a smoke detection system, which, although not spaced in accordance with the standards, affords some added capability for early detection of fire.

#### Noncompliance

Five centers and the annex to the Waltham Federal Archives and Records Center do not comply with the more critical standards. These are the Military Personnel Records Center in St. Louis; the Vital Records Section in Neosho; the Federal Records Centers in East Point, Georgia, and Mechanicsburg, Pennsylvania; and the Federal Archives and Records Center in Fort Worth, Texas.

The Military Personnel Records Center is not fully covered by sprinklers, has storage areas exceeding 40,000 square feet, and has the highest rate of fire incidents of all centers. Plans are to install fire curtains, a sprinkler system, and other needed improvements. The sprinkler system is expected to take about 2 years to complete. When the improvements have been completed, the Center generally should comply with the standards.

The Vital Records Section in Neosho has a seriously deficient water supply, lacks fire hydrants and water connections for fire departments to use, and does not have smoke detectors.

The East Point, Fort Worth, and Mechanicsburg Centers and the Waltham Annex do not meet water supply requirements.

These centers have various construction deficiencies, and none are equipped with smoke detectors. The East Point Center also has open-flame gas heating units in records storage areas.

- - - -

In February 1974, GSA established the Advisory Committee for Protection of Archives and Records Centers to (1) review the present state of the art concerning protection of records in archives and records centers, including structural design, methods of records storage, records media, protective personnel, fire protection systems, and fire-fighting, (2) determine what gaps exist in the data base of knowledge and plan the action needed to fill these gaps, (3) review present firesafety objectives for protecting records, especially those of GSA, (4) determine appropriate levels of protection, and (5) propose revisions and alternatives to present standards and practices to the Administrator of General Services. The Committee is required to complete its work in 1 year.

#### CONCLUSIONS

GSA's records centers vary in their ability to minimize fire damage. Three centers generally complied with NARS' standards, 10 centers partially complied with the standards, and 5 centers and a center annex did not comply with the more critical standards.

Some deficiencies exist because buildings now used as records centers were originally constructed for other purposes. To have records centers comply with the standards, many improvements are needed. (See ch. 4.)

There were deficiencies in recent and planned additions to the centers which indicate that applicable NARS Standards were not fully applied. Also, several centers had fire protection systems on which preventive maintenance was not being done, although required.



official stated that, because of the Center's size and layout, as much as 1,400 feet of hose might have to be laid to reach a fire at the most distant point from a hydrant. A hose this long means a large reduction in the water pressure at the nozzle. For this reason, additional connections inside the building are needed to insure enough water pressure to effectively fight a major fire.

### Internal fire protection devices

The standards require that records centers use automated systems, including sprinkler, alarm, and smoke detection systems, to detect and extinguish fire. All space within the general records storage area is to be sprinkler protected. Specific criteria about output and coverage of sprinkler systems are in the standards.

The standards require various alarm systems. Records centers should be equipped with general fire alarm systems, which report alarms to a central station within or outside the centers, or with a means of automatically notifying the municipal fire station.

NARS standards also require that all records storage areas be provided with an early-warning fire detection system (smoke detector). Detectors are to cover 1,000 square feet at the most. Smoke detectors, if properly placed, provide the earliest warning of a fire and could lead to its discovery before sprinklers activate, which would minimize fire and water damage.

Sprinkler systems will have an alarm system which includes a waterflow alarm to be transmitted over the manual fire alarm system. Tamper supervision is to be provided on all water control valves which affect fire protection systems. Without this feature, the water supply to the sprinkler system could be cut off without warning, making the sprinkler system inoperative. Most centers generally met the sprinkler system alarm requirements, except the requirement for tamper supervision.

Preventive maintenance on fire protection and related devices was not done in some centers. If preventive maintenance is neglected over a long period of time, vital fire

protection devices might fail when needed. **GSA** officials informed us that lack of manpower at the National Archives and the Washington National Records Center was causing deficiencies in this area.

#### SUMMARY OF CENTERS' COMPLIANCE WITH THE STANDARDS

In evaluating whether the records centers complied with the standards, we considered that an adequate water supply and a sprinkler system were the most important factors for controlling fire damage. However, we did not consider a deficient water supply as serious if the building had certain compensating protection, such as fire-resistant construction and smoke detectors. A detailed listing of fire protection standards is included as appendix I.

#### General compliance

Fire protection measures at the National Archives in Washington, D.C., and the new Federal Archives and Records Centers in San Bruno, California, and Chicago generally complied with the standards. The San Bruno Center had a water **supply** deficiency--the waterflow rate was 2,500 gallons a minute at 20 pounds pressure rather than the required 3,000 gallons a minute; however, the building has no major construction deficiencies and has a smoke detection system.

#### Partial compliance

Fire protection measures at 10 centers partially comply with the standards. These centers are the Civilian Personnel Records Center, St. Louis; the Washington National Records Center, Suitland; the Federal Archives and Records Centers in Los Angeles; Denver: Waltham, Massachusetts; Kansas City, Missouri; Bayonne, New Jersey; Philadelphia; and Seattle; and the Federal Records Center in Dayton, Ohio.

The records centers in Dayton, Denver, Kansas City, Los Angeles, Philadelphia, St. Louis, and Seattle have many construction deficiencies and lack smoke detectors. In addition, the St. Louis and Denver Centers lack a second or alternative source of water supply, the Dayton Center has open-flame gas heaters in the records storage area, and the

## **RECOMMENDATIONS**

The Administrator of General Services should:

- Review all plans for alterations, additions, and new construction to insure compliance with the standards,
- Have required maintenance done and otherwise insure that existing systems will operate properly when needed.

## CHAPTER 4

### COSTS OF INCREASED FIRE PROTECTION AT RECORDS CENTERS

For the records centers to comply with the standards, many improvements are needed. GSA has identified 33 improvement projects valued at \$3.1 million. During our inspection of the centers, we identified more than 100 additional deviations from the standards, and GSA estimates that 13 projects which would correct some of these deficiencies would cost \$1.5 million. Cost estimates are not available for the rest of these projects,

### FIRE PROTECTION PROJECTS IDENTIFIED BY GSA

For management purposes GSA maintains an inventory of needed repair and improvement projects, including those related to fire protection, known as the repair and improvement computer oriented system. GSA identifies these projects by having building managers and regional personnel in the Accident and Fire Prevention Branch and the Repair and Improvement Branch make inspections. The regions set project priorities and the year they want project construction to start. GSA Headquarters reviews all priorities and allocates funds to the regions on the basis of their share of the backlog, which amounted to \$1.1 billion at the beginning of fiscal year 1974. GSA's 1974 appropriation for repair and improvement projects was \$62 million.

Since the St. Louis fire, GSA has had each region submit a list of firesafety projects by priority. Plans are to commit at least 10 percent of the funds budgeted for repair and improvement to these projects. Priority will be given to buildings where lifesafety is the primary consideration.

Before the St. Louis fire, not all needed fire protection projects had been identified by GSA because of a shortage of adequately trained manpower. After the fire, GSA Headquarters sent a questionnaire to its regions to assess records centers' compliance with Federal Archives and Records Center Facility Standards. By October 1973 all regions had responded to the questionnaire and had revealed many deficiencies. As of March 1974, when our fieldwork was

completed, most of these deficiencies had not been corrected; furthermore, the cost of correcting them may be so high that correction is not feasible.

### CONCLUSIONS

Since the fire, GSA and our office have identified many fire protection deficiencies in record centers. If GSA commits at least 10 percent of repair and improvement funds to fire protection purposes, it could help correct the fire protection deficiencies. This 10-percent funding, however, is intended for deficiencies in all GSA buildings, not just records centers. And, since high priorities are appropriately placed on lifesafety projects, little or no money may be available for fire protection projects in the records centers, where lifesafety considerations are not as important as those in densely populated office buildings.

Steps should be taken, however, to protect the Government's investment in records centers to the extent feasible.

### RECOMMENDATIONS

The Administrator of General Services should establish a plan to accomplish projects needed to protect the Government's investment in records centers so that the risk of loss is reduced to a level acceptable to GSA. This plan should include providing repair and improvement funds directly to records center projects.

## CHAPTER 5

### REIMBURSEMENTS TO LOCAL FIRE DEPARTMENTS

The Community Fire Protection District of St. Louis County was responsible for fighting the fire at the Center because the Center is in its jurisdiction. The district and the Center had no formal written agreement for fire protection services, but there was an informal understanding that the services would be provided. The district has many mutual aid agreements with other fire departments in case it needs help in fighting a fire.

About 40 fire departments were involved in extinguishing the fire. GSA's original estimate of firefighting costs was \$86,000; however, the total cost developed by the fire department was about \$25,300. This included labor charges of \$15,600 for 6,384 man-hours spent by 319 firemen and \$9,700 in charges for supplies and lost and damaged equipment. The fire departments have not been reimbursed for this service.

#### GOVERNMENT LIABILITY FOR REIMBURSING IREF COSTS

Since the mid-1940s we have issued a number of decisions on the legality of the Government's reimbursing local fire departments for their services. We have uniformly held that appropriated funds may not be charged for firefighting services provided on Federal property within the territorial areas of a local fire department. Our most recent decision concerned the St. Louis fire.

In September 1973, GSA asked us to inquire into the legality of reimbursing all or part of the costs of the fire companies who fought the fire at the Center.

In 53 Comptroller General 410 dated December 6, 1973, we concluded the U.S. Government has no authority to make any payment to the Community Fire Protection District for firefighting services rendered nor to contract with the district for future services. Furthermore, the United States has no legal basis to authorize payment to any of the fire districts or departments responding to the fire.

The basis for this decision is that, when a municipality, fire district, or county has a statutory duty to fight fires on property within its limits without cost to the owners of the property, such duty extends to protecting U.S. property. A charge to appropriated funds for firefighting services to which the United States is legally entitled would, in effect, be a payment in lieu of taxes which would contravene the Government's sovereign immunity from taxation.

FIRE DEPARTMENT SERVICE  
TO OTHER RECORDS CENTER

On the basis of interviews with officials of fire departments serving records centers, reimbursement is generally not expected from the Federal Government for services rendered. However, should a major fire occur at any of the other centers their opinions could change. St. Louis County Community Fire Protection District officials informed us that, since they have not been compensated for their services, they are considering removing the Center from their fire protection service. However, these officials expressed the view that such action would probably require state legislative approval.

Although reimbursement for services is not allowed when a legal obligation exists to provide those services, reciprocal or mutual aid agreements and outside aid agreements are permitted under certain circumstances. We found two such instances.

The Dayton Center contracted with a nearby municipality to provide service because GSA considered the local fire departments legally responsible for providing service to be inadequate. The contract provides for an annual fee and charges for labor and equipment in case of fire.

The Vital Records Section in Neosho is not located in a fire district. The fire department officials in a nearby town have stated the department would respond on an as-available basis at a minimum charge.

CONCLUSIONS

The U.S. Government is not legally required to pay for firefighting costs except under certain circumstances. Should the Congress want to reimburse the St. Louis fire departments for their efforts at the Military Personnel

Records Center, specific legislation would have to be passed. Several congressmen have introduced bills (H.R. 11989 and 11990, dated Dec. 17, 1973) which contain a proposal to reimburse fire departments for the cost of fighting a fire, less a pro rata share of any payments in lieu of taxes for fire protection services.



## CHAPTER 6

### SCOPE OF REVIEW

We inspected the fire damage at the Military Personnel Records Center and studied reports prepared by GSA and the FBI on events surrounding the fire. We interviewed officials of PBS, NARS, GSA, the FBI, the Community Fire Protection District of St. Louis County and other fire departments.

We also reviewed fire protection capabilities of all GSA records centers, inspected center facilities, and examined many reports and documents, including GSA reports on fire incidents, building plans and specifications, inspection reports prepared by GSA and local fire departments, engineering studies, test reports, preventive maintenance records, building emergency plans, and proposals to increase center fire protection.

**SUMMARY OF INDICATED DEVIATIONS FROM  
FIRE PROTECTION STANDARDS AT LOCATIONS EXAMINED**

**TYPE OF STANDARD**

LOCATION OF RECORDS CENTER OR OTHER FACILITY	CONSTRUCTION								WATER SUPPLY					INTERNAL FIRE PROTECTION DEVICES					
	SIZE LIMITS	WALLS	DOORS AND VENTS	FURNACES	ROOF	COLUMNS	TRANSFORMERS	AIR HANDLERS	NEW CONSTRUCTION	WATER FLOW RATE	WATER SOURCE	FIRE HYDRANTS	INTERIOR HOSE CONNECTIONS	OTHER	SPRINKLER SYSTEM	SPRINKLER ALARM SYSTEM	GENERAL FIRE ALARM SYSTEM	SMOKE DETECTION SYSTEM & COVERAGE	ADEQUATE PREVENTIVE MAINTENANCE <sup>o</sup>
CALIFORNIA LOS ANGELES SAN BRUNO			•	•	•	•	•							•				•	
COLORADO DENVER		•				•		•		•					•	•		•	
GEORGIA EAST POINT		•	•	•	•	•	•	•	•	•								•	
ILLINOIS CHICAGO																		•	
MARYLAND WASHINGTON NATIONAL RECORDS CENTER, SUITLAND			•							•	•		•					•	•
MASSACHUSETTS WALTHAM RECORDS CENTER WALTHAM ANNEX, BOSTON			•			•	•			•	•			•		•	•	•	
MISSOURI KANSAS CITY VITAL RECORDS SECTION, <sup>b</sup> NEOSHO			•			•	•			•	•	•	•	•	•	•	•	•	•
MILITARY PERSONNEL RECORDS CENTER, ST. LOUIS <sup>c</sup>	•	•	•				•							•		•	•	•	•
CIVILIAN PERSONNEL RECORDS CENTER, ST. LOUIS <sup>c</sup>					•	•	•			•				•				•	
NEW JERSEY BAYONNE			•											•	•			•	
OHIO DAYTON			•	•		•	•							•			•	•	•
PENNSYLVANIA MECHANICSBURG PHILADELPHIA	•	•	•		•		•	•		•				•	•			•	
TEXAS FORT WORTH			•				•	•		•				•	•	•	•	•	
WASHINGTON SEATTLE		•	•	•	•	•	•							•	•	•	•	•	
WASHINGTON, D.C. NATIONAL ARCHIVES			•																•

NOTE: STANDARDS SHOULD NOT BE CONSIDERED INDIVIDUALLY. SEE CH. 3 FOR DISCUSSION OF THE STANDARDS AND OF INDIVIDUAL CENTERS WITH SERIOUS DEVIATIONS.

<sup>o</sup> ADEQUATE PREVENTIVE MAINTENANCE IS NOT A STANDARD BUT IS IMPORTANT TO INSURE THE PROPER FUNCTIONING OF INTERNAL FIRE PROTECTION DEVICES.

<sup>b</sup> ADMINISTRATIVELY UNDER THE KANSAS CITY FEDERAL ARCHIVES AND RECORDS CENTER.

<sup>c</sup> ADMINISTRATIVELY ONE ENTITY—THE NATIONAL PERSONNEL RECORDS CENTER.

W. C. WYCK, CHAIRMAN  
 T. E. JONES, ALA.  
 C. CULVER, IOWA  
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223-3252

NINETY-THIRD CONGRESS

# Congress of the United States

## House of Representatives

GOVERNMENT ACTIVITIES SUBCOMMITTEE

OF THE

COMMITTEE ON GOVERNMENT OPERATIONS

RAYBURN HOUSE OFFICE BUILDING, ROOM B-350-B

WASHINGTON, O. C. 20515

August 24, 1973

The Honorable Elmer B. Staats  
 Comptroller General of the United States  
 Washington, D. C. 20548

Dear Elmer:

In behalf of the Government Activities Subcommittee, I would appreciate the GAO's conducting an investigation into the four-day fire that occurred recently at the Military Personnel Records Center, Overland, Missouri, which resulted in severe property damage and destruction of records. In addition to my own interest in the matter, Congressman James Symington, in whose District the Overland Records Center is located, has asked me as Chairman of the Subcommittee to look into this issue.

The building, as you undoubtedly know, is a major records center operated by the GSA. Millions of irreplaceable, nonduplicated records are stored in the building. Yet, even the most minimum form of fire protection appears to be lacking. The building is only partially sprinklered, equipped with no smoke or heat detectors, and the records stored in tightly packed cardboard boxes or non-fireproof cabinets.

It is estimated that the cost of restoring the building and the records could exceed \$13 million. Many of the records may be totally irreplaceable, creating a tremendous burden on former military personnel when applying for veterans and social security benefits. In order that such a catastrophe can be avoided in the future, it is important that the facts concerning the fire be fully developed and that a review of fire prevention measures at other records centers and archives storage facilities administered by GSA be made. The Subcommittee would also appreciate any recommendations the GAO might have that would improve the safety of the records centers.

Among the facts that I would like to have GAO gather are the following:

1. Description of fire protection measures in use at the time, including sprinkler systems, warning devices, fireproof cabinets, security yards, etc.
2. Extent of damage to building and records, and extent to which destroyed records have been duplicated or can be reconstructed:

APPENDIX II

3 - The Honorable Elmer B. Staats

August 24, 1973

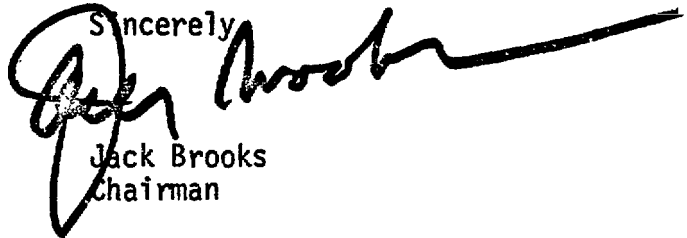
3. Proposals **by GSA**, along with estimated cost, to increase fire protection in this and other records storage facilities.

4. Discussion of the fire protection capabilities of other GSA-operated records storage facilities.

5. The respective legal responsibilities of the Federal Government and the local governmental bodies in providing fire protection and in assuming the cost of extinguishing the blaze.

In addition to the above, I would appreciate any further information or recommendations concerning this matter which you believe relevant.

Sincerely

A handwritten signature in black ink, appearing to read "Jack Brooks", with a long horizontal flourish extending to the right.

Jack Brooks  
Chairman