Information World

Preserving the past at Archives

by Anne A. Armstrong

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WASHINGTON, D.C. — For 150 years, the papers of the U.S. government were stored in basements, attics and crowded storerooms. They were subjected to heat, humidity, rats, fire and bureaucrats. Cries for some central agency to take over and preserve the records of the nation's history began as early as the time of the Continental Congress. Despite the pleas, nothing was done until 1934 when Franklin Roosevelt signed the law creating the National Archives.

Teams of archivists set out to unearth and bring back to the building on Pennsylvania Avenue the scattered records and photographs of the past. They began the struggle—which still goes on today—to select, preserve and store the most important documents of the nation's heritage and to make that material easily accessible to public use and inspection.

How is the Archives faring in its struggle with the paper monster? In contrast to the haphazard selection and storage process which predated the National Archives and Records Service (NARS), a complex system of records management now begins at the department level. Some 15 records centers around the country utilize computers to help control the holdings in records centers, monitor storage space and prepare statistical reports.

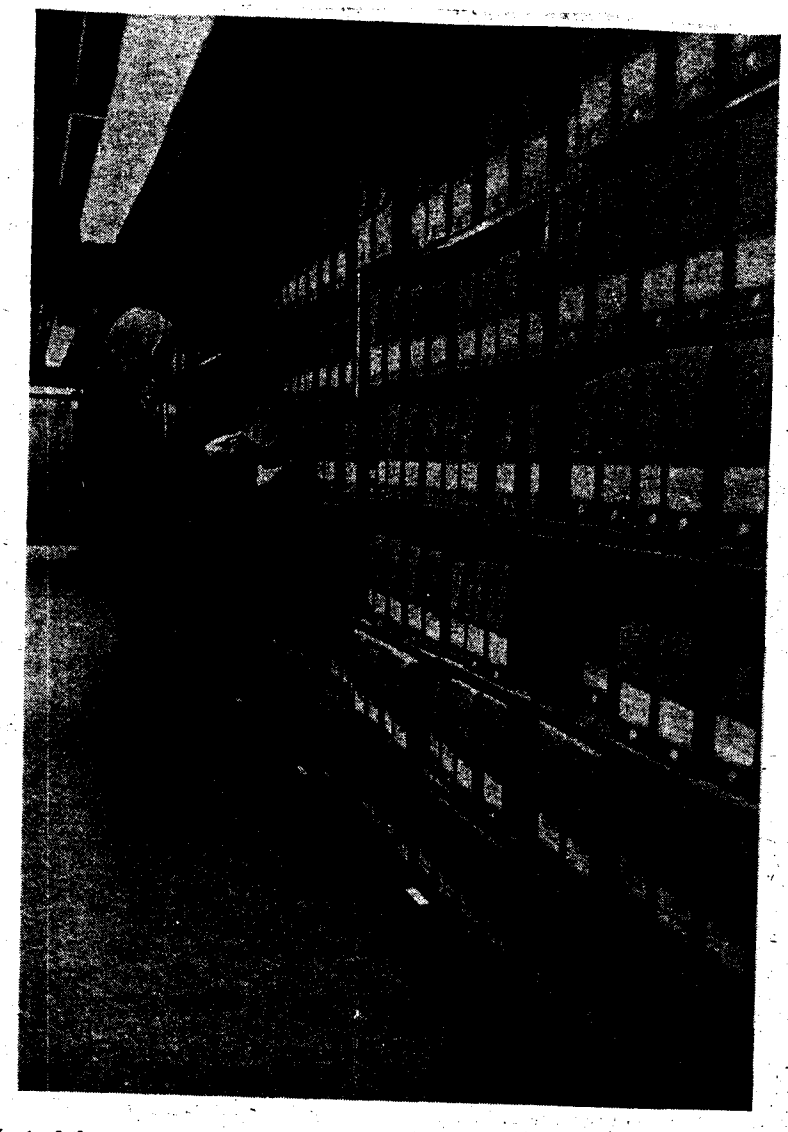
The records centers accept, evaluate, store and dispose of government paperwork. To appreciate what they keep (two to three percent of the yearly output), one must understand what they throw away. Last year more than 280 million pages were disposed of.

The Archives does not keep modern payroll records, property or procurement records, maintenance or accounting information. It does keep the records which show the federal government working—treaties, decision papers, regulations and some Cabinet correspondence, to name a few. It also keeps the records of people dealing with the government—records of courts, land grants, the census, and immigration and military information.

Most of the textual material is original. Only heavily used or unusually valuable documents are microfilmed—a fact which might surprise many people in this increasingly mechanized world.

Good reason: financial

"There's a good reason for this policy," noted Benjamin Ruhe, the Archives' public information officer. "It's financial. Microfilming the bulk of the three billion paper documents held by the National Archives would cost about $400 million. This is simply an impossible cost. What we at the Archives and others in the textual field are seeking is a technological breakthrough which will cut the cost of microfilming so sharply that much



Most of the Archives' three billion documents are originals which are stored in pasteboard boxes. Only heavily used or extremely valuable material is microfilmed.

more of it can be done. What's needed is a system that permits high volume and good quality along with low cost."

Until such a system is developed, however, the originals must be preserved as well as merely stored. Many pre-federal records are in better condition than records 20 or 40 years old because the older papers are better quality and less prone to acid damage than the wood pulp used today. In what amounts to false economy, the government saves money by buying cheap paper and then pays dearly to have selected pieces preserved. Archivists have asked for years that Presidential, Cabinet level and other such correspondence be written on an acid-free or "permanent paper."

"Paper ages and deteriorates for a number of reasons. Acid in the wood pulp used to make the paper can cause it to break down, as can any number of trace minerals, such as copper, which act as a catalyst for oxidation—another process which destroys paper," said Dr. Chaundru Shahani, head of the document preservation branch.

The usual first step in preserving paper is to remove the acid by soaking the sheet in a chemical bath for 20 minutes and then drying it. Then, if necessary, the sheet is laminated or encapsulated to protect it further during handling. It is a laborious process requiring individual attention to each document.

The document preservation lab at the Archives, where more than 20 people are actively involved in preservation, has developed some bulk deacidification techniques which reduce handling and bring the cost of treatment down to 25 cents a sheet. Using current techniques, that minimum preservation would cost more than $750 million and more than 50 percent of the holdings require more than simple deacidification.

The elements and the enormity of the task have made the preservation efforts too late for some documents. The ink on the Declaration of Independence has faded and is difficult to read. Inks react to the ultraviolet rays in sunlight and florescent fixtures and the Declaration, which was not transferred to the Archives until 1952, was carted around the country to political gatherings in its early years and later displayed in open sunlight for more than 30 years.

Paper documents are only part of the problem. The Archives holds 4.8 million still pictures; 104,000 films; 107,000 sound records; 1,007 video tapes; 750 machine-readable items; 1.5 million maps and charts; 122,000 architectural plans; 9.7 million aerial photos and 1,300 artifacts from the Air Force's study of UFO's. Each category requires special techniques and individual attention to preserve the bit of history contained within.

Conserving movie film

The most pressing preservation problem currently is the conversion to safety film of millions of feet of old nitrate movie film. Nitrate film becomes so unstable as it ages that it burns very easily. Some researchers claim it will ignite spontaneously.

Two fires at the Archives' film vaults in Suitland, Md., have destroyed more than 12.5 million feet of news film. The earlier fire in 1977 destroyed 800,000 feet of "March of Times" footage. Although investigations have been held into both fires, the exact causes are elusive and may never be known.

An accelerated program to copy the surviving movie film and the remaining nitrate nagatives for aerial photographs is underway, but one estimate states that $3.7 million would be needed to complete the task within two years and a lack of adequate funding has been hampering progress.

Money and storage, the Archives' biggest problems, have been the source of most recent criticism. The Archives has been chastised for using a former department store, now in disrepair, for document storage and for administrative practices concerning budgets—specifically the uses of federal appropriations versus those of a trust fund. The House Subcommittee on Government Information and Individual Rights has scheduled hearings on the subject for late September.

Although there was no announced connection, Archivist of the United States James B. Rhoads announced in August that he would take advantage of an early retirement option extended to officials in several agencies.

Faced with what it has described as a "paper mountain," the Archives is searching for ways to hold its own until technology offers hope of beating the problem.

The situation seems to lend itself to analogies. Solon J. Buck, archivist of the United States from 1941 to 1948, likened this proliferation of records to "keeping an elephant for a pet, its bulk cannot be ignored, its upkeep is terrific, and, although it can be utilized, uncontrolled it is potentially a menace."

In the years since, the metaphor has grown—the elephant has become a mountain and shows no sign of mousehood soon.