

New-Type Storage for Records

By J. H. DENNY*

Leahy and Company

EVERY day there are created in the United States, by business and government, thousands of file drawers of records. I should guess that the management, or in too many instances the mismanagement, of these records costs several hundred million dollars a year. Part of this money is spent in the operation of records centers for the storage and the service of records that must be retained for varying periods of time but need not be immediately available in office space and office filing equipment. These centers are operated by governments, by individual companies serving their own needs, and by commercial organizations serving a multiplicity of clients—business, governments, associations, institutions, and what have you.

Commercial records centers succeed only if they save money for their clients. This means that they have to do an equal or better job at lower cost than the client himself could do. In such a situation the pressure is on the commercial records center operator to find means for cutting costs. If he does not constantly improve his service and adjust his internal operations to keep costs down he will fall by the wayside.

I was asked to give you some information on “new-type storage for records.” The subject was not proposed by me, but by your program committee. Since I was invited to speak about it I am assuming that you want to hear something about records storage at its present stage of development in our company. My discussion is in no way a sales pitch—quite the contrary. From the standpoint of profits, probably I would serve best my own interest by being less candid with you.

There are many cost factors in a records center operation. They include space, transportation, storage equipment, supplies, postage, light, heat, personnel, and advertising—yes, even government- and company-operated centers should advertise if they want to obtain maximum benefits for their clients, either actual or potential. I in-

*The author is vice president of Leahy & Co., management consultants, 350 Fifth Ave., New York 1, N. Y. This paper was read on Oct. 6, 1960, at the 24th annual meeting of the Society of American Archivists, in Boston. It was a part of a session on records management practices and information retrieval over which Everett O. All-dredge presided.

tend to dwell on only three of these cost factors—space, storage equipment, and personnel.

First, I want to dispose quickly of personnel costs. Payroll is a major item of expense—often the largest single item—in a records center. Especially is this true in the smaller centers, say those managing less than 20,000 cubic feet of records. We feel that one records center employee per 20,000 feet of records is plenty. This is our experience. And this is about all I need to say about personnel cost. I can treat it briefly because the improvements we have made in our storage system have not been accomplished at the expense of our ratio of personnel to cubic foot stored. This last statement is fact, but it is contrary to the first reaction of persons seeing our new-type storage system for the first time.

This new system is built around two factors—equipment and space. We still use steel shelving and the corrugated records storage box with the magic 10"x12"x15". This container stored on steel shelving is the basis of our system.

I'm sure that all of you have heard discussed the ratio of cubic feet of records stored to the square feet of storage space used. This ratio is still used, often erroneously, as a measure of a records center's efficiency. When centers were in their infancy a ratio of two cubic feet of records stored to each square foot of floor space used was normal. Through improvements in storage techniques and more selective choice of storage space, this ratio changed from 2 : 1, to 3 : 1, to 3½ : 1, and to 4 : 1. I believe you will find today that 4 : 1 is considered an excellent ratio in many company and government records centers.

We achieved a ratio of better than 4 : 1 some years ago in ordinary warehouse space. We did this by storing cartons two boxes high on each shelf and three boxes deep from each aisle. In the process we became convinced that the next improvement in our storage system would have to come elsewhere, not in further shelf utilization and percentage of available floor space utilization. To store higher or deeper on a shelf would increase our personnel cost out of proportion to any gain.

Of course, we knew that the ratio of cubic to square foot could be improved through use of space with higher and higher ceilings. But space with ceilings higher than 12 to 13 feet proved hard to come by—and always at a premium price. Thus, although the ratio improved, the cost per cubic foot of records housed remained about the same. Since higher ceilings in themselves did not lower our unit cost for storage, other approaches were needed.

Continuing study and research led us at about the same time to

several conclusions, which, when put to an actual test, resulted in our present storage system. To summarize our findings:

1. New storage space in which we could obtain a ratio of 12:1 could be erected for less than one-half again the cost of ordinary warehouse space—where we could obtain a ratio of only 4:1. This new space provided for a clear ceiling height of 26 feet and could be erected in size increments to suit our purpose *without any inside columns*.

2. In space like this the customary light-weight steel shelving cannot be used. We discovered the gains available through the building of special-purpose space, and we found steel shelving that let us make full use of these tremendous ceiling heights. This shelving, which we now use exclusively, has a load-bearing capacity for 24- and 25-box-high storage.

3. We learned how to service records stored 25 boxes high. Reference, refiling, interfiling, destruction—all had to be done. Certainly one cannot work at this height on a ladder. Our solution was to hang catwalks at the 8-foot and 16-foot levels. This was not a novel idea—libraries have done the same in stack areas for many years.

These three approaches to records center operations—special-purpose space, new-type steel shelving, and adaptation of library stack arrangements to overcome the problem of height—are in some measure our contribution to improved recordkeeping.

There have been some lesser problems to overcome. How does one get light to the lowest box in a records center such as I have described? One way would be to put artificial light under each catwalk level. Another solution would be portable lighting. We do the trick by combining a generous use of skylights over the aisles with catwalking deliberately chosen to permit maximum bleed-through of natural light. On normal winter days we get 8 to 10 foot-candles at the floor level.

Another problem was materials handling. Using a catwalked storage system, how could we efficiently accession and dispose of holdings? Our solution was to use a permanently installed industrial-type lift. Our catwalks are so constructed that we can roll our handtrucks and skids over them. Thus we perform the materials-handling function as efficiently as when we were a one-level operation, if not more efficiently.

This, then, is my story on “new-type storage for records.” Perhaps I can bring it into clearer focus by relating the cost of this new-type storage to the cost of something familiar to all of us—the ordinary cardboard transfer file. This new-type storage can be obtained at a cost *less* per cubic foot of records stored than the cost per cubic foot to purchase a cardboard transfer file. Although we believe this to be a good way to solve the records storage problem

at this time, we hope—for obvious reasons—to have a hand in the development of an even better system.

I understand the question was raised this morning of who should finance research in the field of records management. The answer is to me very obvious and quite blunt. Those who stand to gain should finance research. And to this end we are spending a fair percentage of our gross income to develop a better method of storing records. The first product of our current research contract with architectural consultants was delivered recently to our office. It is a system of interlocking boxes that, if it proves feasible, will eliminate the use of steel shelving in records centers. I hope it will prove effective—if so, we shall be happy to come back to tell you how and why it works.

Early VVestern Nevvspapers

These Far-Western papers are written or compiled under difficulties almost overwhelming. Mr. Frederick J. Stanton, at Denver, told me that often he had been forced to “set up” and print as well as “edit” the paper which he owns. Type is not always to be found. In its early days, the *California Alta* once appeared with a paragraph which ran: “I have no VV in my type, as there is none in the Spanish alphabet. I have sent to the Sandvich Islands for this letter; in the meantime vve must use tvvo Vs.”

—Charles Wentworth Dilke, *Greater Britain; a Record of Travel in English-Speaking Countries During 1866 and 1867*, p. 115 (London, 1869).

Never Again

In my own studies of the Presidency, I found that Millard Fillmore’s papers were almost completely destroyed by his son and that many of Abraham Lincoln’s papers were burned by his son. James Monroe’s papers were destroyed when his office in Fredericksburg burned. Such destruction should never again be permitted. The truth behind a President’s actions can be found only in his official papers, and every Presidential paper is official.

Because of the scarcity of source material concerning President Fillmore, [this book] will be a valuable addition to the papers stored in this Library of mine, which I am trying to make a center for the study of the Presidency.

—Harry S. Truman in a “blurb” on the jacket of Robert J. Rayback, *Millard Fillmore; Biography of a President* (Buffalo, 1959).