

The Boeing Archival Program

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The Boeing Co.

I AM particularly pleased to be able to follow Professor Hidy on this program because we have been following him at Boeing all along. Following him in the sense, at least, of attempting to maintain an awareness of the fact that archives are for the purposes of history. We recognize that the expansion of commerce and the development of industry have been significantly linked with social and political change. The extent to which this relationship may be demonstrated will be reflected in the actual records saved during this historical process. The business archive thus serves this documentary or evidential function.

The particular organization of which I am a part at Boeing is composed of three people: the Administrator of Historical Services, the secretary-librarian, and myself, the Corporate Historian. The administrator's specialty is the promotion and graphic presentation of the company's history and mine is that of problem analysis and codification. Our particular personal goal is the creation of a community aircraft museum to include a display of the company's products and history. To this end it is essential that a complete line of authenticating records be retained.

At this date our Historical Services organization consists of four principal elements or programs: archives, historical exhibits, historical library, and product identification. Our scope of activities thus ranges from the structuring of an archive to the assignment of a unique model number to each major product of the company. I shall discuss only the archival portion of our program, since that is our interest and topic today.

THE BOEING POSITION

Why

There are both external and internal reasons for developing business archives. From an external view, we might want to leave those records that will tell our story. From a company viewpoint, we must define some good economic reasons for developing an archive. In an engineering-manufacturing concern this is not really very difficult to do. The greatest demand upon our historical record

The author, Corporate Historian for The Boeing Co., Seattle, read this paper at the session on "Business Archives: Why, What, How?" on Oct. 7, 1964, at the 28th annual meeting of the Society of American Archivists, in Austin, Tex.

is for product data. There seem to be three general uses, or purposes, for such data in the company: defensive, from a legal standpoint; offensive, for backup in contract proposals; and exploitation for general history presentations.

What

Each person wants specific direction on what should be placed in the archives. Thus, to meet this demand, outside influence should play a strong initial role in the establishment of guidelines. This can come in the form of publications and direct contact with people. Local counterparts, when one is fortunate enough to have them, and attendance at meetings such as this can solidify the studied influence of theories and examples presented in available publications.

How

From all reference material that we have accumulated, four references have particularly shaped our thinking and direction. These are: T. R. Schellenberg's *Modern Archives* (Chicago, 1956); James E. Barrett's "Acquisition in Industrial Archives," published in the *American Archivist* (24: 333-336; July 1961); Arthur Barcan's "Records Management and the 'Paperwork Age,'" published in the *Business History Review* (29: 218-226; Sept. 1955); and Richard C. Berner's "The Management of Manuscript Collections," published in the *Library Journal* (88: 1615-1616; Apr. 15, 1963). Now my point is this. We were made aware of the differences that exist among the disciplines of archivists, librarians, records managers, and manuscript people virtually from the outset of our program. We were also keenly aware that the business archivist or historian who starts a program late in his company's history will find himself working with the most difficult elements of all the records disciplines. Only by permitting each of these disciplines to influence us can our final product be developed to its maximum capability. I will explain how this worked in our situation as I relate the origins and development of the Boeing program to you.

THE BOEING PROGRAM

Origins

The first deliberate effort within the company to assemble records for purposes of historical research came in 1955 when the Board of Directors authorized a history to be written to commemorate the company's 40th anniversary. About four people within the company were selected to review the records that could be found remaining from the founding of the company in 1916. Executive

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and central correspondence files were assembled as well as documents, brochures, and newspaper clippings. The history was written, most of the material collected was sent to storage, and the book was published in 1956. The destruction date set for this stored material was January 1964.

The current Administrator of Historical Services was one of the four-member team assigned to ferret out the records needed to prepare the history. From that time on he continued to identify bits and pieces in original files and to save manufactured artifacts and display models for visual exhibits. Early in 1962 it was recognized that something should be done to preserve these assembled company records. It was at this time that the present Historical Services organization was formally established in the Boeing headquarters offices in Seattle. Thus an organization now exists that provides for these materials.

Before going into the development of our program, I should like to provide you with a brief background of the present records programs at Boeing, the volume of records involved, and the value of the effort to the company.

Records management at Boeing has evolved within the present operating divisions. The first major step was taken in 1923 by the General Manager when he established central files for all incoming and outgoing correspondence and for the retention of inactive records. Records were generally retained 15 years in the system. Forms management and records retention schedules were established in 1946. A vital records program was initiated in 1960. The number of people involved in these programs, as well as the kind of facilities utilized, has varied considerably.

The volume of records currently retained by the rootline organization of the company in Seattle amounts to 400,000 cubic feet. Of this total, 100,000 cubic feet have been brought under the control of the records management operations. It has been determined that new record creation has averaged 15 percent and destruction has averaged 12 percent. Present records storage costs average from \$2.35 in office areas to \$1 per cubic foot in storage. Savings have accrued through records management activities throughout the program's history to a last year [1963] total of \$1,245,000. No cumulative record has been compiled for all the divisions of the company.

To date, because the program is experimental, the archival program has no specific line organization responsibilities. As noted, the responsibilities for specific records functions have been established. We are free to discuss and try out ideas, attempting to discover

the essentials, so that the greatest value may ultimately be received for the effort expended.

In the past 2 years we have assembled about 2 cubic feet of journal reprints and other reference material on many of the better-known archives and museums throughout the world. We regularly receive about a dozen archival, library, and museum society publications. During this time we have been reviewing and selecting records from the divisional records destruction lists and have been receiving donations from "private" collectors.

Development

Fortuitously, it was in the summer of 1962, when our organization broadened its scope, that Dr. Schellenberg conducted a course in archival management at the University of Washington. Unfortunately we were not able to take the course, but we were brought into contact with people able and willing to advise us.

The consensus of all our advisers was that the first effort toward organizing our archives should be directed toward the preparation of a chronological history of the corporate structure of the company, including its predecessors and subsidiaries. This has now been accomplished by documentation and illustrated by a two-part chart. By limiting the organizational depth shown within each specific company to major regional or product segments of that company, we have come up with a total of 79 separate organizations to which we may assign record group numbers.

I do not want to go into our history at this time, but to help you understand part of our problem I will point out the following details.

We have shown our history divided into two basic parts: 1916 to 1934 and 1935 to the present. It was in 1934 that the Government caused the organization created by William E. Boeing to be divided into three separate organizations, the Boeing Airplane Co., United Aircraft Corp., and the present United Air Lines, the transition having been from a holding company to operating companies.

The two time periods may in turn be divided into two parts each, for purposes of records accumulation, as follows:

<i>Time Period</i>	<i>Maximum Number of Record Groups</i>
1916-27	3
1928-34	24
1935-55	6
1956-64	15

These numbers provide us with a sense of the volatility in the aerospace industry.

The time capsule concept presented by Arthur Barcan has enabled us to utilize and apply effectively the collective concepts of archival management to our particular problem. We have expanded on the Barcan scheme and have pictorially summarized the most difficult concepts. Picture, if you will, a cube. Label the three axes of the cube: time, function, and organization. Corporate chronology is revealed by organization over time, the continuity profile is revealed by function over time, and the time capsule (in Barcan's sense) is revealed by function over organization.

Now, with our chronology charts and functions summary, we are able to introduce to many in our company the concepts of record groups and series and to explain why volume must increase over a period of time. The charts are intended to summarize the entire picture.

Actually, constructing an archive at Boeing is relatively simple because the company is physically organized as one large archive. By and large, organizations are given functional names and for each name there is a number assigned at any point in time. The organization numbers are assigned by the finance departments and the individual digits relate to the organization chart. Unfortunately, from our standpoint, the organizations are dynamic with fairly constant reorganization or redesignation.

A second unfortunate situation is that half of our records—the oldest series—consist of individual documents or file folders, or at best very short series, long ago removed from their original contexts. For this reason, none of the standard archival techniques can be used. Nor can standard library techniques be economically used. It was brought to our attention that manuscript techniques, used primarily for the description of private papers, were being successfully applied to miscellaneous industrial papers of the type that we have been accumulating. These techniques were refined by Richard C. Berner, curator of manuscripts at the University of Washington.

Having completed the essential history of the corporate structure of the company and defined the principal corporate functions through the use of Arthur Barcan's time capsule, we commenced our operations in January 1964.

At present, with Mr. Berner as a consultant to Boeing, we are arranging our oldest material with the aid of these manuscript techniques. By this method, miscellany is turning into useful series of correspondence, from and to the company president, general manager, and others; and engineering documents, deeds, contracts, sales

brochures, etc. are being functionally arranged within the chronology of the company. We shall use purely archival techniques for our more recent records series. Thus a relatively smooth transition was effected, and the remaining corporate records are assured proper handling and preservation.

CONCLUSION

The Boeing Archives now contains some 400 record boxes, of about 500 cubic feet, of material. Half this material consists of what we call engineering model-number documents and central files correspondence, all in good order. The other half is neither library nor archival in nature. It consists of the miscellaneous material, long ago removed from its original context, to which we are applying manuscript techniques.

Historically and legally valuable records retained in office areas are a current problem for all concerned: the executives, the records managers, and the historical program. As the visibility of our present collection is increased, however, and as serious gaps in the historical record become obvious, I have little doubt that these retained records will be deposited with us. Further, we anticipate that as executives and others retire from the company, they will in increasing numbers donate their personal files to the Archives.

Our goal is to aid in keeping pace with the increasing need for historical information. To satisfy this need within the company will require constant effort and reappraisal of our procedures. As our procedures and our experience mature, we hope to be in a position to satisfy economically legitimate queries received from outside researchers.

Exhibit

It is because their Revolution has now emerged as a distinct national movement that the Chinese can be so proud of it, so insufferably smug about it. . . . The bourgeoisie have been skillfully won over as individuals.

Indeed, not only the bourgeoisie. The most remarkable convert is the former Son of Heaven, the last Manchu Emperor of China, Pu I, who, having been used by the Japanese as puppet-emperor of "Manchukuo," has now seen the light and works quietly for his new masters in the historical archives of Peking, where he is proudly exhibited to foreigners as a living example of Communist clemency.

—HUGH TREVOR-ROPER, "All's So Smugly Right in Red China," in the *London Sunday Times*, as reprinted in the *Washington Post*, p. E4 (Nov. 14, 1965).