



BHC-MSS 0020

Guide to the Papers of Sam Burger of Columbia Records

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Descriptive Summary

Creator: Sam Burger; Alfred VanSant Bodine

Title: Papers of Sam Burger of Columbia Records

Dates: 1919-1985 [bulk 1965-1985]

Quantity: 6 manuscript boxes, 1 record carton

Abstract: Columbia Records was a major employer in Bridgeport, and had its origins in the American Graphophone Company, which was based in the city. Starting in the 1960s and well into the 1980s, Sam Burger saw the transition of Columbia Records from LP to tapes to CDs. Also in his records is a notebook belonging to Alfred VanSant Bodine, which contains the exact chemical makeups of various records during the late 1919s and into the 1920s, offering insight into manufacture and production in the company's early days, as well as the mid 20th century.

Language: English

Repository: Bridgeport History Center

Biographical History:

Sam Burger

Born September 13, 1920, Sam Burger grew up in Bridgeport, Connecticut. He attended Bassick High School (class of 1938), and proceeded to get his bachelors of science from the University of Alabama. During World War II, he served as a part of the 98th Iroquois Division, spending time in both the Philippines and in occupied Japan.

Burger married his wife Beatrice Marion Lustig (also a Bridgeport resident) in 1947, and was soon hired by Columbia Records as a chemist. He was a part of the lab team that developed the LP record at Bridgeport. At the time, the team was working with electroplating, the appropriate composition of the mother disc, and the vinyl compound proportions, and all the polymers, which was a puzzle at the time. Usually this work is only ever credited to Peter Goldmarc.

During his tenure at Columbia Records, later CBS records, Burger went on to become the head chemist, then lab supervisor, assistant plant manager, plant manager, and then Senior Vice President of Manufacturing, a title which he held until he retired in 1984. He was also president of the International Tape and Disc Association.

Burger's personal life saw him have four children with his wife Beatrice, who in turn had grandchildren who he adored spending time with. He serves as President of Congregation B'nai Israel Brotherhood in Bridgeport, Connecticut. Other hobbies included golf, grilling, and spending time with friends and family.

Sam Burger passed on January 2, 2010.

Columbia Records:

The history of Columbia Records is extremely long and complex. For the purposes of this finding aid, the focus is on Columbia Records and Bridgeport. Originally called the American Graphophone Company (AGC), the company began as a producer of wax cylinders and inexpensive graphophones to play them. The manufacturing switched over to flat recordings in 1900, and innovation continued. Columbia was a large employer within Bridgeport, and produced the first 33 1/3 RPM record in 1948. This coincided with the purchase of Columbia by CBS in 1947. The company retained Columbia in the name until 1961, when it began to be called CBS Records. It was then sold to Sony in 1988.

During all of this, Columbia continued to employ Bridgeport individuals until the manufacturing arm began to branch out in the mid-1960s. Some parts of the operation moved to neighboring Milford, Connecticut (about 20 minutes away from Bridgeport), others moved to new parts of the country.

Alfred VanSant Bodine

Known to friends as Bo, Alfred VanSant Bodine was born in Lambertville, NJ, in 1894. He attended Lehigh University in 1911, and graduated a mechanical engineering degree in 1915. His early career saw him employed at Winchester Arms in New Haven, Connecticut, and then manager of the Columbia Gramophone Company from 1919-1923. It was in 1923 he left to become the vice president of the Dictaphone Corporation, then the Raybestos Company, and then finally the Bodine Corporation which created machines and machine parts. He was with the Bodine Corporation until his death in 1966.

He married Ethel Philips in 1917, and the couple had three children: Alfred VanSant Bodine Jr., Edward, Betty, and Richard. The couple lived in Bridgeport, and Alfred was extremely active in the local community. He was a part of the Bridgeport Chamber, various charitable organizations, and was a trustee at what was at the time called Junior College of Connecticut, now University of Bridgeport. He helped acquire much of the current land in Seaside Park. As such, a building is named in his honor.

Scope and Content Note:

The papers of Sam Burger track his career at Columbia (later CBS) records, going from working in the lab as a chemist to becoming plant manager to Senior Vice President of Manufacturing. Present is information about the production of records, quality control, and like information. Also included are company newsletters, promotional materials, and other activities the company itself engaged in.

Of particular note within the collection that stands as an outlier is the notebook entitled "Data on Columbia Graphophone Manufacturing Company from Alfred VanSant Bodine while on the job, November 1919-July 1923." Alfred Bodine was a chemist who worked at Columbia in the early 1920s. Within is an extensive amount of data about early record manufacturing, including chemical compounds of not only Columbia, but competing manufacturers. (See note for item for further information.) It is unknown how Mr. Burger came to possess this notebook, but a likely explanation is that it was around the office/lab and he decided to hang onto it, sensing it's value.

The notes on this finding aid are the work of Professor Jeffrey Johnson of the University of Bridgeport. His expertise on the technical aspects of production has been instrumental in explaining the documents so that those with similar knowledge know what is in the collection.

Arrangement note:

The papers of Sam Burger are arranged in a way that reflects his career path at Columbia and then CBS Records. Series I, manufacturing activities, contains documents, audio matrixes, and information on chemical manufacturer related to the material produced by Columbia Records. It extends into the late 1970s. Series II, Corporate Activities, picks up in the 1970s and represents the second half of Burger's career in which he took on a more administrative role in the company.

Series III contains material that was saved by Mr. Burger from earlier days at Columbia Records. These two items, especially the notebook of Alfred VanSant Bodine (see both the biographical history, scope/content note, and annotation in the finding aid) are of particular interest.

Series IV represents promotional material created by the organization and retained by Burger, series V contains the "Columbia Record" company newspaper, and series VI contains secondary works that are related to both physical manufacture and audio production.

Provenance:

Donated by Sam Burger's family in 2016. Accession number 2016.08

Preferred Citation:

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Names and Subject Tracings*Personal names*

Bodine, Alfred VanSant, 1894-1966

Corporate Names

CBS Records (Firm)
Columbia Records, Inc.

Subject Tracings

Bridgeport (Conn.)

Detailed box and folder listing

Series I: Manufacturing Activities

Box 1

1. Specifications for 12 inch 33v3 RPM gruv/gard records, compression or injection molding, 1956
Note: This contains descriptions for record specification. Every speed and format contains diagrams of what the specifics should be. The included index is accurate.
2. Columbia Records Operations Department, standard procedure manual industrial engineering, September 1965, 1 of 2
Note: Material within relates to metrics for measuring standards
3. Columbia Records Operations Department, standard procedure manual industrial engineering, September 1965, 2 of 2
4. Columbia Records, Engineering, research, and development, Matrix book #2, 1966, 1 of 3
Note: The material within relates to mothers and master stampers for record production, all with exacting blueprints and schematics.
5. Columbia Records, Engineering, research, and development, Matrix book #2, 1966, 2 of 3

6. Columbia Records, Engineering, research, and development, Matrix book #2, 1966, 3 of 3

Box 2

1. Columbia Records, engineering, research and development department, engineering drawings, matrix department, 1966, 1 of 2
2. Columbia Records, engineering, research and development department, engineering drawings, matrix department, 1966, 2 of 2
3. Columbia Records, Standard Procedure manual, material specifications, 1969, 1 of 2
Note: This contains both quality and process control information. Most importantly, included are ways to test material, as well as what material is comprised of at a chemical level. Included are the compounds for actual vinyl applied to the records at this time (pg. 23-1 and 23-2.)
4. Columbia Records, Standard Procedure manual, material specifications, 1969, 2 of 2
5. Columbia Records, material specifications, 1973, 1 of 3
6. Columbia Records, material specifications, 1973, 2 of 3

Box 3

1. Columbia Records, material specifications, 1973, 3 of 3
2. Manufacture of the 12 inch PVC audio records preliminary analysis of injection molding versus compression molding, June 4, 1976
Note: This is a write up related to experiments using PVC for molding with regards to records. There is no indication that this experiment was rolled out further.
3. Mastersound Vinyl Quality Control manual, 1980
4. Carrollton (plant) matrix audio matrix process manual, 1984
Note: Contains information on audio matrixes. However, this is some 20 years after the Bridgeport plant closed.
5. Carrollton (plant) matrix audio matrix process manual, 1984
6. Automatic procedure for electroplating phonograph matrices, undated
Note: This material relates to the preparation of the mothers and the production of stampers from said mothers. Pressing records impacts their sound. This is extremely technical and specific, but gives insight into early stereo work for vinyl records. It likely dates somewhere from the 1960s into the early 1970s.
7. Bolsey Frenlenes blueprints, 1960
8. System evaluation items, undated
9. 1985 Record National Manufacturing Standards Book, 1985

Series II, Corporate Activities

10. CBS Technology Center, Project 1000 Video Disc Technology - A Tutorial Survey, October 1976

Box 4

1. CBS Records International Manufacturing Seminar, May 16-20, 1977, 1 of 4
2. CBS Records International Manufacturing Seminar, May 16-20, 1977, 2 of 4
3. CBS Records International Manufacturing Seminar, May 16-20, 1977, 3 of 4
4. CBS Records Manufacturing and Distribution Center report, December 1977
5. CRU Manufacturing Technology, February 15, 1978
6. Schedule and Speech for Carrollton groundbreaking, October 17, 1978
7. Audio Engineering Society Technical Session, Recorded Audio Product Manufacturing Synopsis of Presentation, November 2-5, 1979
8. Development and reports for mastersound cassette ("classette"), 1979

9. CBS Records Manufacturing Production Control System Functional Specification, July, 1980
10. CBS Records National Manufacturing Information System Project Definition Report, September, 1980

Box 5

1. CBS Records Warehouse Space Management System Project Definition Report, September, 1980
2. CBS Records Video Disc Project Status Report, Pilot Plant: Milford, CT, October 1, 1980
3. Capacitance Electronic (CED) Video Disc System (report and specifications), 1982
4. 1982 Video Disc National Manufacturing Standards, 1982
5. 1982 Disc Production Manufacturing Overview, 1982
6. CTC Video Disc Mastering Program, February 25, 1982
7. CBS Records Division: Examination of Singles Pricing Alternatives and other actions to increasing sales and reduce returns for singles
8. CBS Records 1984 Manufacturing Facilities Databook, December 31, 1983
9. Digital Audio Tape Record Conference, recommended design standard, specifications of format, July 19, 1985
10. Compact Disc Data, 1985, 1 of 3
11. Compact Disc Data, 1985, 2 of 3
12. Compact Disc Data, 1985, 3 of 3
13. Columbia Records Engineering, Research and Development press kit, c. 1950s
14. Pitman Record (employee newsletter), 1967-1985
15. Photographs of Sam Burger, undated

Series III, Material saved by Sam Burger relating to historic manufacture at Columbia Records

Box 6

1. Data on Columbia Graphophone Manufacturing Company from A.V. [Alfred VanSant] Bodine while on the job, November 1919-July 1923
2. Columbia recording Corporation Pressing Equipment Parts Catalog, October 1944

Series IV, Promotional and other materials

3. "How Tapes are Made" and "How Phonograph Records are Made" promotional material from CBS, c. 1970s
4. Promotional material for various formats, 1980, 1983
5. Clippings: Appointment of Sam Burger to Tape/Disc group (undated) and Phonograph Playback from Popular Electronics, 1980
6. Reference tables and circular slide rule from DuPont, undated
7. Label for World's Fair Records, Paul Whiteman conducts Rhapsody 21, undated
8. Asylum Records, Linda Ronstadt Blue Bayou/Old Paint, undated
9. Columbia Records Field Test Cartridge, undated

Series V. The Columbia Record

Box 7

1. The Columbia Record, October, November 1953
2. The Columbia Record, December 1953
3. The Columbia Record, January, February 1954
4. The Columbia Record, March, April, 1954

5. The Columbia Record, May, June, July 1954
6. The Columbia Record, August Sept 1954
7. The Columbia Record, October, November 1954
8. The Columbia Record, December 1954
9. The Columbia Record, January 1955
10. The Columbia Record, February 1955
11. The Columbia Record, March 1955
12. The Columbia Record, April 1955
13. The Columbia Record, May 1955
14. The Columbia Record, June, July 1955
15. The Columbia Record, August 1955
16. The Columbia Record, September 1955
17. The Columbia Record, October, November 1955
18. The Columbia Record, November 1955
19. The Columbia Record, December 1955
20. The Columbia Record, January, February 1956
21. The Columbia Record, March 1956
22. The Columbia Record, April 1956
23. The Columbia Record, May 1956
24. The Columbia Record, June 1956
25. The Columbia Record, July 1956
26. The Columbia Record, August 1956
27. The Columbia Record, September 1956
28. The Columbia Record, October, November 1956
29. The Columbia Record, December 1956
30. The Columbia Record, January. February 1957
31. The Columbia Record, March 1957
32. The Columbia Record, April 1957
33. The Columbia Record, May 1957
34. The Columbia Record, June 1957
35. The Columbia Record, July 1957
36. The Columbia Record, August 1957
37. The Columbia Record, September, October 1957
38. The Columbia Record, November 1957

Box 8

1. The Columbia Record, January 1958
2. The Columbia Record, February, March 1958
3. The Columbia Record, April 1958
4. The Columbia Record, May 1958
5. The Columbia Record, June, July 1958
6. The Columbia Record, September 1958
7. The Columbia Record, October 1958
8. The Columbia Record, November 1958
9. The Columbia Record, December 1958
10. The Columbia Record, January. 1959
11. The Columbia Record, February, March 1959
12. The Columbia Record, April 1959
13. The Columbia Record, May. June 1959
14. The Columbia Record, July 1959

15. The Columbia Record, August, September 1959
16. The Columbia Record, October, November 1959
17. The Columbia Record, December 1959
18. The Columbia Record, January 1960
19. The Columbia Record, February, March 1960
20. The Columbia Record, April, May 1960
21. The Columbia Record, June 1960
22. The Columbia Record, July, August 1960
23. The Columbia Record, October 1960
24. The Columbia Record, November, December 1960
25. The Columbia Record, January 1961
26. The Columbia Record, February, March 1961
27. The Columbia Record, May, June 1961
28. The Columbia Record, July 1961
29. The Columbia Record, August, September 1961
30. The Columbia Record, October 1961
31. The Columbia Record, November 1961
32. The Columbia Record, December 1961
33. The Columbia Record, January 1962
34. The Columbia Record, February 1962

Box 9

1. The Columbia Record, March, April 1962
2. The Columbia Record, May 1962
3. The Columbia Record, June 1962
4. The Columbia Record, July 1962
5. The Columbia Record, August 1962
6. The Columbia Record, September 1962
7. The Columbia Record, October 1962
8. The Columbia Record, November, December 1962
9. The Columbia Record, January 1963
10. The Columbia Record, February 1963
11. The Columbia Record, March 1963
12. The Columbia Record, April 1963
13. The Columbia Record, May 1963
14. The Columbia Record, June 1963
15. The Columbia Record, July 1963
16. The Columbia Record, August 1963
17. The Columbia Record, October 1963
18. The Columbia Record, November 1963
19. The Columbia Record, December 1963
20. The Columbia Record, January, February 1964
21. The Columbia Record, March, April 1964
22. The Columbia Record, October, November 1964
23. The Columbia Record, December 1964
24. The Columbia Record, January, June, July 1965
25. The Columbia Record, October 1965
26. The Columbia Record, February, March 1966
27. The Columbia Record, April, May, June 1966

Series VI, Oversize and secondary works

Box 10

1. CBS Records International Manufacturing Seminar, May 16-20, 1977, 4 of 4
2. Plastics Molding by John DelMonte, 1952
3. Preservation and Storage of Sound Recordings by A.G. Pickett and M.M. Lemcoe, 1959 (2 copies)
4. Advances in PVC Compounding and Processing edited by M. Kaufman, B.Sc. (Lond.), F.R.I.C., A.P.I., 1962
5. Military Standard Sampling Procedures and Tables for Inspection by Attributes, April 29, 1963
6. Journal of the Audio Engineering Society, Volume 15, Number 1, January 1967 (2 copies)
7. Technical Planning of Injection Molding Operations, by Husky Manufacturing and Tool Works Limited, 1972
8. The Preservation and Restoration of Sound Recordings by Jerry McWilliams, 1979
9. Injection Molding Operations: A Manufacturing Plan by the Systems Engineering Group, Husky Injection Molding Systems Limited, 1980