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Engineering

Physics

Research Laboratory Betatron Files, 1941-90

Box 1:

Board of Trustees reports concerning Physics Research laboratory (PRL), and Betatron financial matters, 1943-47.

Copies of memorandum, reports, and letters dealing with the construction and staffing of the Physics Research Laboratory and the Betatron project. Details include salaries and state appropriations.

Correspondence between Kerst and the Physics Department while Kerst was at Los Alamos, 1943-45.

Correspondence of Kerst with Warren H. Smith, Gerald Almy, C. W. Hahne, Gail D. Adams, Robert K. Clark, P. Gerald Kruger, concerning advice from Kerst on betatron experimental and equipment matters, circuitry diagrams, construction and design of betatron parts such as the vacuum tube, Office of Scientific Research and Development reports and relations with Allis-Chalmers Co.

Kerst correspondence and travel records, 1945-46.

Correspondence collected at the Physics Research Laboratory, of Kerst with H. H. Lester, Almy, J. F. Carlson, C. I. Reed, Sidney M. Dancoff, Richard Kerst, Kruger, Ralph G. Wykoff, Robert Serber, R. Burling, James L. Tuck, J. H. Van Vleck, concerning lectures given to outside groups on the betatron and its applications, publications concerning the betatron research, travel vouchers, research assistantships, betatron equipment, physics department matters and the Ohio State University betatron project.

Correspondence of D. W. Kerst, 1947.

Correspondence of Kerst with Louis N. Ridenour, Ralph Flora, F. Wheeler Loomis, Ernest Stouffer, Serber, Edward Teller, Enrico Fermi, L. Jackson Laslett and others about betatron, research laboratories and physics department matters, recommendations, financial records, budgets, travel vouchers, meetings/lectures, the Institute of Nuclear Studies at the University of Chicago and a vacation of skiing.

Correspondence of D. W. Kerst, 1948.

Correspondence with John T. Tate, C. H. Collie, W. E. Stephens, Edwin McMillan, Edward Teller, Serber, Adams, Almy, Loomis, James L. Tuck, Ridenour, Flora, Warren Blaisdell, Robert O. Haxby, and others concerning passport, betatron information for other physics departments and for magazine articles and letters, Allis-Chalmers relations, medical applications, travel vouchers, budgets and expenses.

Correspondence of D. W. Kerst, 1949.

Correspondence with other physics departments and governmental research councils, with Allis-Chalmers, H. William Koch, R. K. Clark, Flora, Ridenour, Stephens,

John A. Reynolds, Adams, Hugh Bradner, McMillan, and others about betatron application and research, recommendations on others' research proposals, physics department matters, technical developments with the design of betatron parts, the betatron at the Institute for Nuclear Studies, University of Chicago, and other betatrons in the process of being built, medical applications, proposed budgets, publications, patents, cancer research isotopes, travel vouchers, Kerst's status as consultant with the National Institute of Health, national Cancer Institute, two article reprints from Review of Scientific Instruments on University of Illinois work, and pamphlet "Betatron Calibration."

Box 2:

Correspondence of D. W. Kerst, 1950.

Correspondence with Lawrence W. Jones and Kent M. Terwilliger, Edward Teller, Lester Skaggs, R. D. Carmichael, M. L. Engers, A. C. Willard, Leverett Davis, J. D. Cockcroft, Kruger, Reynolds, Leonard I. Schiff, Serber, and others such as Los Alamos laboratory journals, and the University of Chicago researchers about recommendations, travel vouchers, Navy research, conferences, comparison of experimental results from betatron, publications, an announcement of an award for Kerst from the Franklin Institute, advice to other experimentalists, physics department matters, Seminar on Modern Physics at University of Illinois, June 6-9, 1950, the successful completion of the 300 Mev betatron in February, Kerst's resume, inclusive through 1950, list of 33 publications of D. W. Kerst.

Correspondence of D. W. Kerst, 1951.

Correspondence with Almy, J. J. Cochrane, Kenneth Kerst, Karl Lark-Horovitz, Lester Skaggs, John T. Tate, Rolf Wideroe and others about financial problems of Physics Research Lab and betatron research, safety precautions for the lab, advice to other experimentalists, conferences, travel vouchers, Navy research, medical applications, other betatron efforts, the Institute for Nuclear Studies at University of Chicago, recommendations, staffing, applications, a minor dispute in The Physical Review with Wideroe concerning injection mechanism and orbiting of electrons in the betatron, a list of publications

First-Day Cover from Mt. Palomar-stamps (U.S. 3¢) inside envelope from Ms. Frances Wolverton

Correspondence of Kerst, January-June, 1952.

Correspondence with H. W. Koch, Robert O. Haxby, Adams, C. R. Emigh, W. D. H. Panofsky and F. Wachsmann, and others about travel plans, equipment design, advice to other experimentalists at other physics departments and research facilities, betatron projects, publications, recommendations, a memorandum on "disaster procedure" from Housing Director, radiobiology, Kerst's trip to Sao paulo, Brazil

Drafts of articles; Review of Scientific Instruments, "Recent Illinois Work with Gamma Rays and Electrons of 320 Mev and 22 Mev."

Correspondence of Kerst, July-December, 1952.

Correspondence with Koch, John s. Laughlin, Flora, Lawrence W. Jones, Almy, Loomis, F. K. Tallmadge and others about betatron experiments, with other departments and institutes regarding experimental and equipment advice, recommendations, travel literature and vouchers, patenting problems, commercial manufacture of physics-equipments developed in lab, conferences, Sao Paulo trip and the Brazilian research, and "Factors influencing capture of electrons injected into a Betatron."

Correspondence of D. W. Kerst, January-June, 1953.

Correspondence with Laughlin, Panofsky, G. Failla, Alan T. Waterman, Loomis, Robert W. Williams, Gilberto Bernardini, Almy, Koch, Emilio Segré, Leland J. Haworth, Stephens, about Physics Journal club meetings (news, topic-lists, schedules, 1949-51), Naval Research, advice to other physicists, Allis-Chalmers and Los Alamos laboratories, travel vouchers, National Science Foundation grants, departmental duties, Atomic Energy Commission, "personnel security questionnaire," new developments in particle accelerators; Memo: "Activities of D. W. Kerst and Group," '52-'53 school year and a list of Kerst's publications through 1952.

Box 3:

Correspondence of Kerst, July-December, 1953.

Correspondence with Almy, Carl Helmholz, Robert R. Wilson, Leland J. Haworth, Koch, Louis N. Ridenour, Alan J. Waterman, L.R. Ingersoll, and others about departmental matters (e.g., doctoral committees), Kerst's sabbatical, other laboratories and experimental advice (e.g. Allis-Chalmers, Brookhaven, Argonne, Los Alamos), patent law and university patent problems, the Franklin Institute medal.

Correspondence of Kerst, January-March, 1954.

Correspondence with Erwin Bodensadt, Kruger, Milton White, Ray G. Herb, L. Jackson Laslett, Haworth, Jones, Terwilliger, Koch, almy, Stephens, Ernest D. Courant, and others, about theoretical problems with accelerator design with Los Alamos, Argonne, Brookhaven, Allis-Chalmers, the beginnings and the organization of the Midwest Universities' Research Association (MURA), recommendations, travel vouchers, advice to other experimentalists and betatron groups, National Science Foundation (NSF), departmental matters

Memo to members of MURA Organizing Committee, "Report for the NSF on the studies of the MURA", "Publications of D.W. Kerst" (through 1953), "Status of the Midwestern Cosmotron or Accelerator," "The study of the nonlinear Alternating gradient synchrotron's using or digital computers," and the corporate proposal for MURA.

Correspondence of D.W. Kerst, April-May, 1954.

Correspondence with Bodensadt, Almy, Loomis, Laslett, White, Philip C. Fisher, Jones, R.J. Van De Graaff, Courant, R. Rollefson, Keith R. Symon, Koch, Terwilliger, Haworth, Lester Skaggs, about theoretical questions in accelerator design dealt with on analog computers, advice to other labs, travel vouchers, MURA meetings,

the May 3&4 Photonuclear Conference, MURA budget, '54-'55 patents. Manuscript: "Operation of Electron Beam Expansion in Betatron."

Correspondence D.W. Kerst, June-August, 1954.

Correspondents include Kruger, Haxby, Bernardini; manuscript: "Speculations on a 2-Bev Proton Liniac"

Correspondence of D.W. Kerst, Sept.-Dec., 1954.

Correspondents include Robert Serber, John H. Williams, E.R. Peck, Alan F. Waterman, I.I. Rabi, John von Neumann, Kruger, John J. Livingood, and others about new accelerator developments, MURA matters, and abstracts for lecture topics.

Correspondence of D.W. Kerst, Jan.-April, 1955.

Correspondence with research labs and other physics departments including Keith Symon and the MURA Technical Group about MURA meetings, developments and strategy; the Fixed Field Alternating Gradient (FFAG) accelerator and Illinois Physics department matters. Manuscript: "Desirable Conditions for the Midwest Laboratory"

#### Box 4:

Correspondence of D.W. Kerst, May-Aug., 1955.

Correspondence with other labs and departments including Haxby, Panofsky, Courant, Laslett, David Judd, Loomis, Koch, about MURA, and departmental matters. Also, the FFAG design, financing MURA projects. List of MURA reports by Kerst; manuscripts: "Proposal to Graduate College Research Board" (5/20/55), "Disclosure of the Fixed Field, Alternating Gradient Accelerator and some of its Applications" (5/11/55), "Desirable Conditions for the Midwest Lab," "Research at Betatron Laboratory" (1954-55), list of participants' addresses in the MURA Summer Study at Ann Arbor, "Memorandum of Outstanding Problems before the MURA Technical Group."

Correspondence of D.W. Kerst, Sept.-Dec., 1955.

Correspondence of Kerst with Symon, J.D. Cockcroft, Jones, Laslett, Kruger, Adams, M.S. Livingston, and others about MURA strategy, departmental matters and the FFAG design.

Correspondence of D.W. Kerst, Jan.-March, 1956.

Correspondence of Kerst with MURA members, other research institutions and departments, about MURA matters, Illinois' Physics Research Laboratory, accelerator design and ballots for a site for the MURA accelerator.

Correspondence of D.W. Kerst, April-June, 1956.

Correspondence about MURA staffing, strategy meetings, and accelerator design; Rochester Conference on High Energy Physics; and trip to CERN, Geneva, Switzerland. Manuscripts: "On the attainment of Very High Energy by Means of Intersecting Beams of particles" and "An Atomic Energy Commission Proposal."

Correspondence of D.W. Kerst, July-Dec., 1956.

Correspondence with J.J. Cochrane about Kerst's resignation from his post at the Physics Research Laboratory, Kerst's work in Madison with MURA, advice to other

experimentalists and graphs of data for an article.

Correspondence of D.W. Kerst, 1957-63.

Correspondence of Kerst with University of Illinois colleagues while working with General Atomic in San Diego.

Graduate School Proposal and Grant, 1953-55.

Proposals of 1953 and 1955 with attached correspondence, concerning MURA support from the University of Illinois.

Box 5:

Physics Research Laboratory: Seminar Reports, Equipment Calibration, Operating Procedures and Manuals, 1943-58.

Activities induced by 20 MEV X-rays in various elements. Charts of some chemical elements.

Adam's Seminar Report: "X-rays production"

L. Bess' and J.S. Blair's report: "A Theory of Injection"

Betatron Tubes and Donuts, 1943 and 1947

Reports for the Office of Scientific Research Development-National Defense Research Council and Office of Naval Research.

"Summary of Calculations on Electron Disintegration of Nuclei," J.S. Blair

"Geometrical Interpretation of Energy and Momentum Conservation in Atomic Collisions and Disintegration Processes," J. Blaton, 1946-48 (Danish)

"Bremsstrahlung Spectra," J.E. Leiss, 1952, 1954

Clark's Seminar Report: "Monitors"

Dancoff's Seminar Report: "Betatron Orbits"

J.S. Blair: "Effect of Bumps on the Motion of Electrons in the Betatron."

Emulsion reports and correspondence, 1949-50

Correspondence of D.W. Kerst and Gail D. Adams with Hugh Bradner, Eastman Kodak Co. laboratories, William F. Fry, and John S. Lauglin about particle tracks. Report: "Kodak Nuclear Track Plates," and "Nuclear Track Pellicles."

Electrolytic Polishing of Tungsten and Molybdenum, 1948, 1950

Correspondence with Machlett Laboratory in Springdale, CT and Hanovia Chemical Co. in Newark, NJ.

"Initial Adjustment of Fast Scalers," 1954

"Film Characteristics for Gamma Rays with Steel"

Girard's Seminar Report: "Static Frequency Triplers"

"Report on Investigation of Expander Operation," E.L. Goldwasser, 1957

--betatron energy calculation; memo

Greania's Seminar Report: "Injector Filaments"

Porcelain Vacuum Tube, R.K. Hursh, 1943-50

Correspondence with Hanovia Co. (1950)

Report for OSRD-NDRC: "Development of New 20 Mev Betatron and of Porcelain Vacuum Tube" Article reprints: "Development of a Porcelain

Vacuum Tube" and Development of Porcelain Envelope for Betatron Tube," R.K. Hursh.

Hydrogen Liquefier, 1956

Reports: "Operating Procedure and Characteristics of the Hydrogen Liquefier," and "Transferring Liquid Hydrogen," Safety memorandum from E.L. Goldwasser on "Liquid Hydrogen Program" (1956)

Ion Chamber Instructions, 1957

Taken from Ion Chamber Log Book (1953)

Includes memos, Calibrations, and notes, 1953-58

Box 6:

Seminar reports, data tables, article reprints, operating manuals, and Physics Research Laboratory correspondence, 1946-58

"Notes on Betatron Theory and Design," D.W. Kerst, 1942

"Influence of Bumps in the Magnetic Field on a Betatron Orbit," D.W. Kerst

Kerst's Seminar Report, 1946

Table for Kinetic Energy and other values of Elementary Particles

"Method of Charging and Reading the Victoreen Thimble and Flat Ion Chamber,"  
Edwards

"On the Response of Flat Ionization Chambers," L.J. Koester, 1958

Microfilms and Microscope, 1946 and 1949

Los Alamos films; purchase orders and instruction booklets

"Comments on the Moravcsik Method of Analyzing Photomesons Angular Distribution,"  
Robinson, Malmberg, and Pennebaum, 1957

A reprint of a letter to the editor of the Physical Review

"Cross-Section Analysis of Bremsstrahlung Activation Curves," A.S. Denfield and J.E.  
Leiss, 1954

"Notes on Curve Fitting...", S. Penner and C.S. Robinson, 1957

"Magnet Amplitude Stabilization," Smith and Clark

Smith's Seminar Report: "Peaking Transformers"

Santo's Report

Instructions for the use of Dressel's Slide Rule

Welton's Seminar Report

Rolf Widerrores' Article

Reprint of article in Archiv für Elektrotechnik (1928), "A New Principle for  
Producing High Voltages"

Office of Naval Research - Reports, 1946-47

Four reports of the U. of I. betatron group to the ONR.

Historical Organization Chart, 1948

Drawn for the Physics Research Lab, Betatron Project.

Office procedure for the Physics Research Lab, 1947

Doctoral Theses in Physics at the U. of Illinois (1910-75), with note of those done on the  
betatron (marked in index)

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Physics Research Lab correspondence, with Aerovox corporation, 1946-53  
PRL correspondence, with Allis-Chalmers, 1946-48

Box 7:

Physics Research Lab Correspondence, 1945-64  
PRL correspondence  
    With Allis-Chalmers, 1949-52  
    With argonne National Laboratory, 1951-62  
    Concerning Beryllium, 1956-62  
    Concerning the development of the donut, 1945-56  
    Concerning fire inspection, 1950, 1962  
    "GSA - Material Received," 1964 (vouchers)  
    Concerning Helium, 1953-59  
    Concerning Hydrogen Liquefier, 1957-61  
    Concerning Loans, 1954-64  
    With Los Alamos Scientific Laboratory, 1956  
Bass Drum Calibration, L. Rogers, 1957 (manual)  
Correspondence concerning Building Operation of the PRL, 1949-64

Box 8:

Physics Research Laboratory correspondence, 1949-62, and Patent materials, 1944-48  
PRL correspondence  
    Radiation Surveys, 1961-62  
    Radiation Safety (Memos and correspondence), 1957-64  
    Safety Committee, 1955-61  
    Sales and Repairs, 1948-63  
        Sales and repairs of accelerator parts by the PRL  
    Concerning Uranium, 1951-56  
Schedules at the 300 Mev. Betatron, 1961-64  
    Lists of research projects at PRL  
Invention Reports  
    Patent materials, correspondence with law firm, invention description and drawings, 1944-45  
    Correspondence and notes including a copy of General Electric patent "Magnetic Induction Accelerator," for D.W. Kerst, 1946-48  
History of Betatron Patents, 1946  
    Correspondence of Kerst with W.E. Britton concerning betatron patenting  
Betatron patents other than the universities', 1945-46  
Gail D. Adam's file, 1944  
    File of invention reports  
Developed under other contracts, 1949

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Box 9:

National Defense Research Council Patent Correspondence, 1942-46

Box 10:

Patent Materials, 1943-54

Patent applications:

534,060 (Target patent); Canada Case, 526,355; Serial 13,624/45; Serial #2,447,255; 1943-53. Correspondence with patent lawyers, copies of issued patents, and patent application procedures.

596,460 (Porcelain Donut); Almy and Hursh: "Vacuum Tube," 1943-48. Correspondence, forms and issued patents.

607,416 (Time Dependent Field Shape); Patent #2,473,123 Correspondence with patent lawyers and legal counsel; copies of issued patents.

617,255 (Betatron Injector Structure); patent #2,497,891; 1945-53.

General Patent Materials, 1949-55

Correspondence of patent lawyers and legal counsel with Kerst, Flora, Cochrane, and materials concerning the Kerst vs. Wideroe patent interference case.

Includes copies of issued patents and legal briefs for the Kerst vs. Wideroe case.

Box 11:

Patent Application:

#627, 481 (folder 1), 1942-50

Correspondence of Kerst, Almy and Flora with patent lawyers. Copies of prepared patents, drawings and descriptions of the betatron.

(folder 2), Patent Interference Cases, 1951-53

Correspondence, briefs and legal statements concerning the betatron patent and interference cases Kerst vs. William F. Westendorp and Rolf Wideroe



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Ralph F. Flora file: Kerst-Betatron; application #627,481--Interference, 1950-February 1953 (folder 1)  
Correspondence of Flora, Lab administrator concerning the Kerst patent interference case. Includes briefs and statements for the case.  
March 1953-1955 (folder 2)  
Continued correspondence of Flora with the patent lawyers. Includes copy of settlement in favor of Kerst and summaries of the case.  
Patent Application: #627,481, Induction Accelerator, 1945-54  
Correspondence and forms dealing with original betatron patent

Box 12:

Midwest Universities Research Association (MURA): Budget, 1955-56  
Correspondence of Kerst and Flora with MURA members, and of the business managers at the member institutions concerning MURA grants, budgets, estimated expenses and financial reports.  
Budget--Wisconsin Alumni Research Foundation: April-November 1954  
Correspondence, financial reports and budgets dealing with a grant from the Wisconsin Alumni Research Foundation (WARF) to the Illiac Cosmotron group of MURA, and copies of WARF grants to other Midwest Universities.  
Program and Proposal for MURA High-Energy Research Facility, Presented to the Atomic Energy Commission April 5, 1956, Copy 1  
Including letter to J. J. Flaherty of the Atomic Energy Commission from P. Gerald Kruger; summary of the MURA budget aiming for Congressional approval of the MURA projects. This proposal details the fixed-field, alternating gradient accelerator (FFAG) designed by the MURA technical group (includes drawings).  
Copy 2, 1956 (This copy has an expanded Appendix E.)  
MURA Correspondence, 1955-63  
Correspondence of MURA officials including Kerst with J. J. Cochrane at the PRL.  
Includes a memo: "Estimate of Cost of Conversion of Illinois Betatron to FFAG Betatron;" a blueprint of a building for MURA; chart of institutional organization of MURA; and a manuscript: "Proposed Statutes of MURA" (1956).  
MURA: University of Illinois (PRL) finances, 1954-56.  
Financial reports, requisitions, receipts, travel vouchers, and correspondence  
"MURA, University of Illinois Charges from 10/1/56," 1956-57  
Correspondence of Flora concerning MURA financial matters at the University of Illinois and supply lists.  
MURA Personnel, 1956-57  
Correspondence of J. J. Cochrane concerning financial records of MURA workers at the University of Illinois.

Box 13:

**Files received from Professor Alfred O. Hanson on December 3, 1982; formerly held  
by Professor Clark S. Robinson**

Betatron Reprints by D. Kerst et. al., 1940-43  
Betatron Orbits, Injection theory, ca. 1943  
    Sidney Dancoff, Leon Bess, J. S. Blair  
Design of B<sub>6</sub>  
Back wound coil, J. S. Blair, 1947  
Flux Meter and transient trimming, 1948-49  
Expander Problem B<sub>6</sub>, 1947  
Exciting current, Bias current, capacitor ratings  
Air Core Choke substitute for O.P.T.  
Flux Forcing Error  
D. C. Bias, 1945-47  
Circuits, 1947  
Windings, Bias adjustment & Meters for 300 MEV, 1947  
Interyoke leadage and Shielding, 1947  
Physics Station Betatron Budget, 1947-49  
Laboratory Manager, 1946-47  
Steel Procurement, 1946 & Cancer Research  
300 MEV General Correspondence, 1947-50  
Schedule to Shoot at, 1947  
Ceramics, 1943, 1945  
Early Betatrons List, 1952  
Allis-Chalmers Contracts, 1947-49  
Procurement, 300 MEV Purchase Orders, 1947-48, 1950  
End Frame Steel, 1947-48  
Grid Controlled Rectifier System, 1947  
Varnishing of Transon XXX Steel, 1948  
Stacking Fixtures for C's, 1948-49  
Clamping Ring Assembly, 1948  
Copper & Insulating Paper, 1947  
Fabrication of End Frames - Falk, 1947-48  
Motor Generator Set for Bias, 1947-49  
    for charging Auxiliary Capacitor Bank, 1947  
Cincinnati Shear-acquisition, Installation, Disposition, 1947-50  
A. c. Pennoyer Sub-contract, 1948-49  
B<sub>6</sub> Model, 1945  
AC Model Field Tests, 1947  
Erection Contract, Allis-Chalmers, 1947-50  
Specification Contract, Allis-Chalmers, 1947-50  
Resonant Charging Choke Excitation, 1947-48

Field Piece Laminations, Verson Mfg. Co., 1947-49  
American Rolling Mill, 1946-47  
300 MEV Base Blocks, 1948  
Fabrication Allis-Chalmers, 1947-49  
Pumped Ignitrons, G. E., 1947-49  
Auxiliary Capacitor Bank, 1947  
Donuts & Injectors, 1949-50  
Air Core Reactor, 1948  
Heat Exchangers, 1948  
Insurance, 1948  
Stacking Fixture, 1948-49  
General Stack Order, 1948  
Wedging File of "A" Coil, 1949  
Winding Mandrel, 1949  
Bias Reactor, New York Naval Shipyard, 1948-49  
Aerovox Capacitor Bank, Condensers, 1947-51  
Air Core Bias Reactor, Navy Yard, 1947-49  
Armco Iron Order, 1946-48  
Payments to Allis-Chalmers, 1948-50

Box 14:

**Files received from Professor Alfred O. Hanson on March 22, 1995**

Betatron Files:

Archives and Exhibit correspondence, 1962-77  
Donut Fabrication, 1945-62  
80 MEV Betatron photographs, 1947  
Electrical Interference Problems, 1951-63  
Inquiries, 1946-49  
Kerst, Donald W. - Photographs and Correspondence, 1950-94  
Lectures - 300 MEV Betatron (J.R. Harlan), 1961  
Personnel Correspondence, 1945-51  
Photo Book 1 - Photographs 61 - 1508, 1942-46  
2 - Photographs 1509 - 2141, 1946-49  
3 - Photographs 2160 - 4145, 1949-58  
Physics Graduates (1910-74), 1974  
Physics Research Lab - Facilities, Personnel, and Visitors, 1949-82  
Publicity Materials - Correspondence and Press Releases, 1942-49  
Newspaper Clippings, 1946-62  
Photographs and Publications, 1947-60  
Reprints, 1941-56  
300 MEV Betatron photographs, 1949-61  
Life Magazine, 1950 (Oversize in 39/2/20: RES-2)

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Cyclotron Files:

Experiment - Electron Tracks in Cloud Chamber photographs, 1958  
Photographs, 1948-59

Linear Accelerator Files:

MUSL-1, Album, 1971-74

First Microtron Using a Superconducting Linac photographs, 1965-78

Historical File, 1967-79

Photographs, 1971-77

MUSL-2, Development of Second Microtron photographs, 1975-90

Photographs, 1973-76

Proposal to Construct 30 MEV Superconducting Linac, March 1967

Progress Report and Proposal: Superconducting Electron Accelerator and Nuclear  
Structure Research, December 1971

Nuclear Structure Research with Microtron Using Superconducting Linac, January 1973

Microtrons Using Superconducting Linacs: Nuclear Physics Research, August 1977

Box 15:

Cyclotron Magnet Memorial Metal Plate from the Electro Magnet Iron Castings by The  
American Rolling Mill Co., Ohio and The Mosler Safe Co., Ohio 1940

Cyclotron Pictures and Negatives from 1962 Sector Focused Cyclotron Conference, ca. 1962