# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

**Division**

Directorate

**Department**

Public Affairs

**Archives and Records Office Use Only**

**Group**

Creative Services Offices (CSO)/PhotoLab

**Filing Code**

ARO-6745

**Location**

46R0192

**LBNL Accession Date**

10/21/2014

**Transferee**

Bailey,Marilee B

**Head of Department**

Pamela Patterson

**FRC Accession No.**

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

**Inclusive Date of Records**

1944 1966

**No of Containers**

5 FRC Box

**Brief description of records**

AT NARA
This accession provides photographic documentation of the early history of Lawrence Berkeley National Laboratory (LBNL), including significant individuals, projects, instruments and events that were photographed at Lawrence Berkeley National Laboratory.

The collection includes digitized assets from Kodak film negatives of varying sizes. This is a discrete collection of images dated from 1944 through 1966 attributed to George Kagawa, Doug McWilliams, Doug Bradley. The subjects are Bevatron construction and early experiments; bubble chamber equipment, early experiments and research results (events); and Old Town construction, building exteriors, interiors, and equipment.

Key subject matter:

1.BEVATRON 1949–1966
Ernest Lawrence and Edwin McMillan were well aware of the energy needed to produce an antiproton and they made certain their new accelerator would surpass that threshold. Construction was completed in January 1954 and the new machine, a synchrotron designed to accelerate protons up to energies of 6.5 billion electron volts, then designated BeV (now universally known as GeV), was christened the “Bevatron,” a machine that had the energetic muscle to make antiprotons. The Segrè and Chamberlain group returned on Aug. 29 and ran until the Bevatron broke down on Sept. 5. On Sept. 21, a week after operating crews had revived the Bevatron, Segrè and Chamberlain got their first evidence of the antiproton based on momentum and velocity. Subsequent analysis of emulsion stack images by Rad Lab colleague Gerson Goldhaber confirmed the discovery. For leading the discovery of the antiproton, Segrè and Chamberlain shared the 1959 Nobel Prize in physics.
This collection includes: Grading and site preparation; General overview of the building construction, numerous experimental setups. Bevatron magnet model AC8; magnet delivery and setup; ion gun injector; coil winding operation; drift tube installation and alignment; Bevatron RF system, Mark II linac drift tube alignment tubes; and injector; shielding systems; Bevatron alterations, 1962; linac II disassembly, 1962; P-N cross section device (Emilio Segré); Segré’s anti-proton experiment, target area; foundation for shielding, progress shots. Bubble Chamber experiments. Complete collection of images and letters associated with the construction of ¼ scale model built in Old Town, referred to as the “Cyclodrome.” Ticho’s Bevatron setup. Xenon bubble chamber K-plus experiment; Cerenkov counter tests; magnet measuring equipment; QB magnets, and long cradle: Mark VI velocity spectrometer. Associated individuals: Ernest Lawrence, Luis Alvarez, Ed Lofgren, Bill Brobeck, Emilio Segrè, Owen Chamberlain, Gerson Goldhaber, George Trilling.

2.BUBBLE CHAMBER 1955–1966
Donald Glaser won the 1960 Nobel Prize for physics for the invention of the bubble chamber. Glaser first reported his invention at a meeting of the American Physical Society in 1953. Alvarez attended that meeting and he was soon taking his colleague's creation to the next stage of development.

This collection of images includes: John Wood’s original bubble chamber, 1958; 2 ½-inch bubble chamber; 4-inch liquid-hydrogen bubble chamber, 10-inch bubble chamber, 15-inch bubble chamber, 25-inch bubble chamber 72-inch bubble chamber. Collection includes equipment construction and installation with all associated apparatus, scanning projectors and spiral readers, as well as the resulting events. Associated individuals: Don Skillings, Walt Wenzel, Paul Hernandez, Glen Eckman, Luis Alvarez, Jack Frank, Duane Norgren

3.OLD TOWN 1947–1965
Beginning in August of 2014 Old Town will be demolished. These structures, built in the 1940s are no longer useable. Cleanup of legacy contamination will commence, and approximately 3 acres of building space will be made available. This collection includes general construction overviews; construction of Bldg. 4, Bldg. 5, the Chemistry Annex, Bldg. 6, XC Housing; and general overviews of area, including proximity to the 184-inch cyclotron. Interiors include: hot cave, 6-inch chemistry cave box, decontamination chamber, and venting systems.

Approximately 4520 assets total and reviewed, with 82 previously scanned. Total assets retained in this collection: 2,130.

## Materials

Photographs, Black and White Negative

## Records Retention

☐ Historically Valuable Documents. Do not destroy. A detailed folder listing is included with the Records Transmittal

☐ Destroy/Review on a scheduled basis with a minimum retention of years. Disposal/Review Date: Perm.

## This is in accordance with:

☐ The National Archive General Retention Schedule. Citation DOE/ADM/21/1/1A-E

☐ The Department of Energy Retention Schedule. Citation

## Disposal Authorization:

The legal retention of the records listed on this Records Transmittal has elapsed. Since I forsee no use of these records, I authorize their disposal.

Signature of Department Head Date

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
|---|---|---|
| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

**Container** 1 **Of** 5

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**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

| | | |
|---|---|---|
| Box | 1 | DVDs:<br>[Labeled: July 15, 2014, Old Town: Index, PNGs, Tifs]<br>Contents Summary: TIF/XBD201312-04401.tif-XBD201401-00010.tif; PNG/XBD201312-04401.png-XBD201401-00010.png; OldTown_07_15_2014_to_NARA.xls<br><br>[Labeled: Bubble Chamber Disc 1, PNGs, Tifs 1, Excel Sheet]<br>Contents Summary: TIF/XBD9606-02977.TIF-XBD201210-01486.tif; PNG/XBD9606-02977.png-XBD201405-00604.png; BubbleChamber_07_15_2014_to_NARA.xls<br><br>[Labeled: Bubble Chamber Disc 2, Tifs 2]<br>Contents Summary: TIF/XBD201210-01487.tif-XBD201405-00604.tif<br><br>[Labeled: Bevatron Images, Disc 1, PNGs, Tifs 1, Spreadsheet]<br>Contents Summary: TIF/XBD9607-03554-XBD201306-03050.tif; PNG/XBD9606-02952-XBD201310-04212.png; Bevatron_07_15_2014_to_NARA.xls<br><br>[Labeled: July 15, 2014, Bevatron part 2 Tifs]<br>Contents Summary: TIF/XBD9606-02952.TIF-XBD201303-02127.tif<br><br>[Labeled: July 15, 2014, Bevatron part 3 Tifs]<br>Contents Summary: TIF/XBD201303-02128.tif-XBD201304-02495.tif<br><br>[Labeled: July 15, 2014, Bevatron part 4 Tifs]<br>Contents Summary: TIF/XBD201304-02496.tif-XBD201305-02734.tif<br><br>[Labeled: July 15, 2014, Bevatron part 5 Tifs]<br>Contents Summary: TIF/XBD201305-02735.tif-XBD201306-03099.tif<br><br>[Labeled: July 15, 2014, Bevatron part 6 Tifs]<br>Contents Summary: TIF/XBD201306-03100.tif-XBD201310-03966.tif<br><br>[Labeled: July 15, 2014, Bevatron part 7 Tifs]<br>Contents Summary: TIF/XBD201310-03967.tif-XBD201310-04212.tif<br><br>Photos:<br>XBD201312-04401.TIF -- Chemistry annex Bldg. 6. Photograph taken February 24, 1947. Bldg.-255.<br>XBD201312-04402.TIF -- Ditches, ceiling under Chemistry annex Bldg. 6. Photograph taken March 27, 1947. Bldg.-267.<br>XBD201312-04403.TIF -- Ditches, ceiling under Chemistry annex Bldg. 6. Photograph taken March 27, 1947. Bldg.-270.<br>XBD201312-04404.TIF -- Sheet metal hoods and cave, Chemistry annex Bldg. H. Photograph taken April 29, 1947. Bldg.-272.<br>XBD201312-04405.TIF -- View of Old Town looking from Bldg. 6 roof. Photograph taken May 5, 1947. Bldg.-250.<br>XBD201312-04406.TIF -- Chemistry annex, Bldg. 6. Photograph taken January 14, 1947. Bldg.-239<br>XBD201312-04407.TIF -- Sheet metal hoods, Chemistry annex Bldg. H. Photograph taken April 29, 1947. Bldg.-273. |

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**Group** Creative Services Offices (CSO)/PhotoLab

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Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201312-04408.TIF -- Cement flooring, Chemistry annex Bldg. H. Photograph taken April 29, 1947. Bldg.-274.
XBD201312-04409.TIF -- Cave in Chemistry annex Bldg. 6. Photograph taken May 9, 1947. Bldg.-276.
XBD201312-04410.TIF -- Chemistry annex Bldg. H. Photograph taken June 24, 1947. Declassified April 30, 1959. Bldg.-298.
XBD201312-04411.TIF -- Hallway in Bldg. 5. Photograph taken July 25, 1947. Bldg.-302.
XBD201312-04412.TIF -- Room 202-B, Bldg. 4. Photograph taken October 28, 1947. Bldg.-314.
XBD201312-04414.TIF -- Room 202-B, Bldg. 4. Photograph taken December 23, 1947. Bldg.-344.
XBD201312-04416.TIF -- Hot Cave room cement wall, Bldg. 5. Photograph taken February 25, 1948. Bldg.-377.
XBD201312-04417.TIF -- Hot Cave room cement wall, Bldg. 5. Photograph taken February 25, 1948. Bldg.-378.
XBD201312-04419.TIF -- Room 101, Bldg. 5. Photograph taken April 27, 1948. Bldg.-390.
XBD201312-04420.TIF -- Room 105, Bldg. 5. Photograph taken June 24, 1948. Bldg.-342.
XBD201312-04421.TIF -- Room 105, Bldg. 5. Photograph taken August 22, 1948. Bldg.-441.
XBD201312-04422.TIF -- Room 203-F, Bldg. 4 remodeling. Photograph taken September 22, 1948. Bldg.-448.
XBD201312-04423.TIF -- Room 203-F, Bldg. 4 construction. Photograph taken October 19, 1948. Bldg.-466.
XBD201312-04424.TIF -- Room 203-F, Bldg. 4 alterations Photograph taken November 18, 1948. Bldg.-474.
XBD201312-04425.TIF -- Demolition of existing laboratories in Bldg. 4. Photograph taken March 2, 1955. Bldg.-1189.
XBD201312-04426.TIF -- Bldg. 4 remodeling progress. Photograph taken July 26, 1955. Bldg.-1224.
XBD201312-04427.TIF -- Bldg. 4 alterations progress. Photograph taken August 26, 1955. Bldg.-1234.
XBD201312-04428.TIF -- Bldg. 4 renovation completed. Photograph taken September 19, 1955. Bldg.-1238.
XBD201312-04429.TIF -- Bldg. 4 renovation completed. Photograph taken September 19, 1955. Bldg.-1239.
XBD201312-04430.TIF -- Bldg. 4 renovation completed. Photograph taken September 19, 1955. Bldg.-1241.
XBD201312-04431.TIF -- Chemistry annex cave. Photograph taken May 25, 1947. Chem.-408.
XBD201312-04432.TIF -- Chemistry annex cave. Photograph taken May 25, 1947. Chem.-409.
XBD201312-04433.TIF -- Chemistry annex, vent system for cave. Photograph taken May 25, 1947. Chem.-410.
XBD201312-04434.TIF -- Chemistry annex, vent system for cave. Photograph taken May 25, 1947. Chem.-411.
XBD201312-04435.TIF -- General view of interior of Chemistry annex. Photograph taken May 26, 1947. Chem.-412.
XBD201312-04436.TIF -- Remote control for handling chemical samples, Bldg. 6. Photograph taken May 29, 1947. Chem.-413.
XBD201312-04437.TIF -- Remote control for handling chemical samples, Bldg. 6. Photograph taken May 29, 1947. Chem.-414.
XBD201312-04438.TIF -- Remote control for handling chemical samples, Bldg. 6. Photograph taken May 29, 1947. Chem.-415.

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XBD201312-04439.TIF -- Chemistry annex cave. Photograph taken June 3, 1947. Chem.-416.
XBD201312-04440.TIF -- Chemistry annex, storage pit next to hot cave. Photograph taken June 18, 1947. Chem.-426.
XBD201312-04441.TIF -- Chemistry annex, hot cave. Photograph taken June 18, 1947. Chem.-427.
XBD201312-04442.TIF -- Chemistry annex, hot cave. Photograph taken June 24 1947. Chem.-430.
XBD201312-04443.TIF -- Chemistry annex, hot cave (inside shot.) Photograph taken July 16, 1947. Chem.-446.
XBD201312-04444.TIF -- First sample of isolated curium hydroxide. Photograph taken August 4, 1947. Chem.-452.
XBD201312-04445.TIF -- Diagram of high vacuum line for Grignard reactions. Photograph taken August 15, 1947. Chem.-461.
XBD201312-04446.TIF -- Mass Spectrograph, Bldg. 9. Photograph taken August 19, 1947. Chem.-462.
XBD201312-04447.TIF -- Heater coil for 300 watt induction heater, "experimental model." Photograph taken August 25, 1947. Chem.-463.
XBD201312-04448.TIF -- Construction of North Room, Bldg. 5. Photograph taken May 26, 1948. Chem.-804.
XBD201312-04451.TIF -- View of hot cave exterior, Bldg. 5. Photograph taken June 1, 1949. Health Pro-158.
XBD201312-04452.TIF -- General view of interior hot cave from north end, Bldg. 5. Photograph taken June 1, 1949. Health Pro-162.
XBD201312-04453.TIF -- Slug sawing equipment for removal of pile capsules from their containers, Bldg. 5. Photograph taken January 23, 1950. Health Pro-205.
XBD201312-04454.TIF -- Bldg. 5 annex decontamination room. Photograph taken February 3, 1950. Health Pro-210.
XBD201312-04455.TIF -- New lead cave, Bldg. 4, room 202. Photograph taken February 6, 1950. Health Pro-212.
XBD201312-04456.TIF -- New lead cave, Bldg. 4, room 202. Photograph taken February 6, 1950. Health Pro-213.
XBD201312-04465.TIF -- Working facilities and boxes, Bldg. 5 hot lab. Photograph taken February 9, 1951. Health Pro-241.
XBD201312-04466.TIF -- Decontamination chamber for glove boxes (exterior), Bldg. 5 annex. Photograph taken April 21, 1952. Health Pro-271.
XBD201312-04467.TIF -- Decontamination chamber for glove boxes (interior), Bldg. 5 annex. Photograph taken April 21, 1952. Health Pro-272.
XBD201312-04468.TIF -- Decontamination chambers for glove boxes, Bldg. 5 annex. Photograph taken April 21, 1952. Health Pro-273.
XBD201312-04469.TIF -- Six-inch cave box working front, Bldg. 5. Photograph taken February 4, 1954. Health Pro-337.
XBD201312-04482.TIF -- 6-inch cave shift tongs, ORL. Photograph taken May 6, 1954. Health Pro-356.
XBD201312-04483.TIF -- 6-inch chemistry cave box, ORL. Photograph taken May 6, 1954. Health Pro-357.
XBD201312-04484.TIF -- 6-inch chemistry cave box, ORL. Photograph taken May 6, 1954. Health Pro-358.
XBD201312-04485.TIF -- 6-inch chemistry cave box, ORL. Photograph taken May 6, 1954. Health Pro-359.

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XBD201312-04486.TIF -- 6-inch chemistry cave box, ORL. Photograph taken May 6, 1954. Health Pro-360.
XBD201312-04501.TIF -- Decontamination Department, Bldg. 5. Photograph taken May 5, 1958. Health Pro-589.
XBD201312-04502.TIF -- Decontamination Department, Bldg. 5. Photograph taken May 5, 1958. Health Pro-590.
XBD201312-04506.TIF -- Small scale model of Low Background Counting Facility made of Serpentine, Bldg. 72, with Al Smith. Photograph taken June 6, 1962. Health Pro-1003.
XBD201312-04507.TIF -- Chart showing working space per employee. Photograph taken July 7, 1962. Health Pro-1204-C.
XBD201312-04510.TIF -- Human decontamination box with Bert Kidd. Photograph taken June 9, 1965. Health Pro-1247.
XBD201312-04511.TIF -- Human decontamination box. Photograph taken June 9, 1965. Health Pro-1248.
XBD201312-04512.TIF -- Building 16, Carpenter Shop. Photograph taken July 29, 1946. Bldg.-133.
XBD201312-04513.TIF -- XC Housing, Bldg. 6, 184-inch area. Photograph taken August 25, 1947. Bldg.-305.
XBD201312-04514.TIF -- XC Housing, Bldg. 6, 184-inch area. Photograph taken September 4, 1947. Bldg.-307.
XBD201312-04515.TIF -- XC Housing, Bldg. 6, 184-inch area. Photograph taken September 4, 1947. Bldg.-308.
XBD201312-04516.TIF -- XC Housing, Bldg. 6, 184-inch area. Photograph taken September 29, 1947. Bldg.-310.
XBD201312-04517.TIF -- XC Housing, Bldg. 16, 184-inch area. Photograph taken October 28, 1947. Bldg.-315.
XBD201312-04518.TIF -- General view of inside of Bldg. 16 looking south from magnet showing new shop construction. Photograph taken April 27,1948. Bldg.-389.
XBD201312-04521.TIF -- Bevatron Bldg. 52 addition. Photograph taken December 6, 1957. Bldg.-1847.
XBD201312-04523.TIF -- Exterior of buildings 16 and 52. Photograph
taken December 5, 1957. Bldg.-1851.
XBD201401-00001.TIF -- General view of 184-inch cyclotron and surrounding buildings. October, 1954. Building-2573.
XBD201401-00002.TIF -- General view of 184-inch cyclotron and surrounding buildings. February 11, 1948. Misc.-287.
XBD201401-00003.TIF -- Aerial view of North Berkeley and UC Berkeley after September 17, 1923 fire. Copy from Berkeley Daily Gazette December 2, 1988. Copyright 1923 George E. Russell. XBB8812-11271.
XBD201401-00004.TIF -- General view of 184-inch cyclotron and surrounding area. April 25, 1945. Building-00085.
XBD201401-00005.TIF -- New pit being dug, Bldg. 16. Photograph taken February 27, 1959. Building-2015.
XBD201401-00006.TIF -- New pit being dug, Bldg. 16. Photograph taken February 27, 1959. Building-2016.
XBD201401-00007.TIF -- General view of 184-inch cyclotron with Bevatron in foreground. Stack parking visible in lower right. Photograph taken February 24, 1960. Building-2677.
XBD201401-00008.TIF -- General view of 184-inch cyclotron and surrounding area. Misc.-256.

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XBD201401-00009.TIF -- Building 5, Room 105. Photograph taken June 24, 1948. Building-423.
XBD201401-00010.TIF -- Building 5, Room 105. Photograph taken August 22, 1948. Building-441.

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Box 2 Photos:

XBD9606-02977.TIF -- First tracks observed in John Wood's one-and-1/2-inch liquid hydrogen bubble chamber. Photograph taken May 25, 1955. Bubble Chamber-24.

XBD9606-02979.TIF -- 72-inch bubble chamber assembly removed from its instrumentation. Photograph taken August 18, 1958. Bubble Chamber-605.

XBD9606-02981.TIF -- The 72-inch liquid hydrogen bubble chamber in its home, building 59. Patent release 9/22/1960. Photograph taken April 1, 1959. Bubble Chamber-720.

XBD9606-02982.TIF -- Margaret Lawrence sitting at Jack Franck's "Franckenstein," the 72-inch bubble chamber measuring projector which reduces bubble chamber film to machine-readable data. Photograph taken January 18, 1960. Bubble Chamber-872.

XBD9607-03037.TIF -- A view of tracks in the window of the 72-inch bubble chamber. Photograph taken January 24, 1966. Bubble Chamber-1271A.

XBD9607-03038.TIF -- Bubble chamber event. Decay of neutral cascade hyperon. A negative kaon entering from below produces an uncharged kaon and a previously unknown particle that, in turn, decays into two uncharged particles. The dotted lines in the inset follow the trackless participants. Patent release 5/12/1960. Photograph taken December 15, 1958. Bubble Chamber-661A.

XBD9607-03039.TIF -- A 10-inch bubble chamber event. A pion entering from the left and striking a proton produces two uncharged particles that leave no tracks until they too decay. Patent release 7/6/1962. Photograph taken October 17, 1957. Bubble Chamber-340.

XBD9609-04753.TIF -- Bubble chamber event. Antiproton annihilation, four charged pions, neutral pion consistent with the production of an omega meson. Patent release 10/5/1962. Image undated. Bubble Chamber-1041A.

XBD9705-02275.TIF -- Walking 72-inch bubble chamber. Paul Hernandez of mechanical engineering conceived the ingenious idea of devising a hydraulic walking method. With this system the bubble-chamber magnet could make right angle turns and maneuver into very tight spaces, thus eliminating the need for an outside rigging contractor. Patent release 4/15/1959. Photograph taken May 8, 1958. Bubble Chamber-497.

XBD9706-02724.TIF -- Sidewalk superintendents were out in full force to oversee Berkeley's 72-inch bubble chamber's "walk" from Building 59 to its new temporary site against the Bevatron's west wall. The move took place on July 5, 1961. Paul Hernandez of mechanical engineering conceived the ingenious idea of devising a hydraulic walking method. With this system the bubble-chamber magnet could make right angle turns and maneuver into very tight spaces, thus eliminating the need for an outside rigging contractor. Bubble Chamber-1030.

XBD9707-02853.TIF -- The four-inch bubble chamber. The first hydrogen chamber to produce results of scientific interest. It was built at Lawrence Radiation Laboratory in 1955 by Doug Parmentier (l.) and Pete Schwemin (r.), technicians in the Alvarez group. The year before, Parmentier and Schwemin, continuing a line of research begun by their coworker John Wood, had demonstrated another important "first." The first workable chamber of combined metal-and-glass, rather than all-glass, construction. That chamber, the 2 1/2-inch, was the first real prototype of a modern, practical, liquid-hydrogen bubble chamber. Photograph taken November 19, 1954. Bubble Chamber-2.

XBD9708-03162.TIF -- Bubble Chamber Event. Resonances last typically for a mere 10(-23 power) seconds and therefore leave no discernible track in a bubble chamber. But by calculating back from the energies and angles of the particles that are detected, physicists can infer that a resonance has existed. In this picture from a bubble chamber at Berkley, an antiproton, coming from below, annihilates with a proton to produces two negative pions, a neutral pion and two positive pions. The negative pions move off to the left, the positive pions to the right, while the pi-zero is undetected.

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The lower pi-plus decays to a muon, the short piece of track, and then to a positron, which curls out of the picture. The information in the picture is consistent with the lower-energy pions, the lower tracks on left and right-being the decay products of a resonance state known as the omega. Image not dated. Bubble Chamber-1041.
XBD9803-00520.TIF -- Bubble chamber event. Electron position pair production in 9000 gauss magnetic field. Photograph taken December 16, 1958. Bubble Chamber-315.
XBD9807-01712.TIF -- 72-inch bubble chamber assembly. Patent release 8/13/1962. Photograph taken August 18, 1958. Bubble Chamber-603; ZN-3300.
XBD9901-00118.TIF -- Bubble Chamber Event, 1969, XBB6911-07285.
XBD9907-01699.TIF -- Bubble chamber event (Roll 164857) nuclear reaction catalyzed by mu mesons. Photograph taken March 29, 1957. Bubble Chamber-134.
XBD9907-01700.TIF -- Bubble chamber event (Roll 199340) K spins. Photograph taken March 29, 1957. Bubble Chamber-135.
XBD9907-01701.TIF -- Bubble chamber event. Nuclear reaction catalyzed by mu mesons. The visible tracks are mu yields mu-negative yields epsilon-negative. Photograph taken March 29, 1957. Bubble Chamber-137.
XBD9907-01702.TIF -- Bubble chamber event. Multiple P-P scatter. Photograph taken April 3, 1957. Bubble Chamber-138.
XBD9907-01703.TIF -- Bubble chamber event (Roll 244 937), electron triplet and pairs. Patent released 5/17/1960. Photograph taken August 1, 1957. Bubble Chamber-308.
XBD9907-01704.TIF -- Bubble chamber event. Photograph taken December 16, 1958. Bubble Chamber-315B.
XBD9907-01705.TIF -- Bubble chamber event. Decay of neutral lambda, anti-lambda hyperons. Photograph circa July 1959. Bubble Chamber-772A.
XBD9907-01706.TIF -- Bubble chamber event (Roll 3130, Frame 376) featuring xi baryon. Photograph taken January 22, 1962. Bubble Chamber-1096.
XBD9907-01707.TIF -- Bubble chamber event (Roll 3130, Frame 376) showing production and decay of a xi minus and k plus tau decay. Patent release 10/5/1962. Photograph taken January 22, 1962. Bubble Chamber-1096A.
XBD9907-01708.TIF -- Bubble chamber event. Anti-Kaon momentum. Photograph taken May 5, 1962. Bubble Chamber-1111.
XBD9907-01709.TIF -- Bubble chamber event (Roll 3423, Frame 602). Photograph taken April 28, 1965. Bubble Chamber-1466.
XBD9909-01983.TIF -- Bubble Chamber Event, formula demonstration. K-negative + P yields sigma-negative + pi-positive, L, pi-positive + h. Photograph taken May 8, 1956. Bubble Chamber-79.
XBD9909-01984.TIF -- Bubble chamber event, subatomic particles formation. Photograph taken September 11, 1957. Bubble Chamber-277A.
XBD9909-01985.TIF -- Bubble chamber event, formula demonstration. Photograph taken August 26, 1957. Bubble Chamber-315A.
XBD9909-01986.TIF -- Bubble chamber event. Photograph taken September 11, 1957. Bubble Chamber-319A.
XBD9909-01987.TIF -- 15-inch bubble chamber event. Photograph taken March 27, 1958. Bubble Chamber-439.
XBD200001-00045.TIF -- Bubble chamber event. Invisible gamma ray photons produce pairs of electrons and positrons in a bubble chamber at the Lawrence Berkeley National Laboratory. One of the most important results of modern physics, the direct conversion of energy into matter. See also

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XBD200007-01094.TIF. XBB6911-07281
XBD200007-01095.TIF -- Bubble chamber event showing xi omega production by antikaon. Photograph taken May 2, 1966. Bubble Chamber-1711.
XBD200305-00300.TIF -- Technician operating bubble chamber scanner. Patent release 5/12/1960. Photograph taken December 3, 1959. Bubble Chamber-844.
XBD201209-01125.TIF -- John Wood's original bubble chamber. Photograph taken May 13, 1958. Bubble Chamber-A.
XBD201209-01126.TIF -- John Wood's original bubble chamber. Photograph taken May 13, 1958. Bubble Chamber-B.
XBD201209-01127.TIF -- Liquid-hydrogen bubble chamber. Photograph taken November 19, 1954. Bubble Chamber-1.
XBD201209-01128.TIF -- Liquid-hydrogen bubble chamber. Photograph taken December 28, 1954. Bubble Chamber-3.
XBD201209-01129.TIF -- 4-inch liquid-hydrogen bubble chamber event. Photograph taken December 29, 1954. Bubble Chamber-5.
XBD201209-01130.TIF -- 4-inch liquid-hydrogen bubble chamber event. Photograph taken December 28, 1954. Bubble Chamber-6.
XBD201209-01131.TIF -- Event produced in 4-inch hydrogen bubble chamber. Photograph taken March 16, 1955. Bubble Chamber-7.
XBD201209-01132.TIF -- Event produced in 4-inch hydrogen bubble chamber (stereoscopic view.) Photograph taken March 16, 1955. Bubble Chamber-8.
XBD201209-01133.TIF -- Image of pi-mu electron decay. Bubble chamber event. Photograph taken March 25, 1955. Bubble Chamber-11.
XBD201209-01134.TIF -- Stereoscopic view of an event and the resulting four prong star tentatively identified as pion pair production. Photograph taken March 25, 1955. Bubble Chamber-12.
XBD201209-01135.TIF -- Stereoscopic view of an event and the resulting four prong star tentatively identified as pion pair production. Photograph taken March 25, 1955. Bubble Chamber-13.
XBD201209-01136.TIF -- Pete Schwemin with the 4-inch hydrogen bubble chamber. Photograph taken May 4, 1955. Bubble Chamber-14.
XBD201210-01146.TIF -- 4-inch hydrogen bubble chamber. Photograph taken May 4, 1955. Bubble Chamber-17.
XBD201210-01147.TIF -- Breakage in Pyrex port. Photograph taken May 24, 1955. Bubble Chamber-21.
XBD201210-01148.TIF -- One of the first magnetic yield pictures (events) and new dark field illumination. PO-BE source. Photograph taken June 8, 1955. Bubble Chamber-26.
XBD201210-01149.TIF -- Synchrotron background test in 4-inch bubble chamber. Photograph taken July 27, 1955. Bubble Chamber-27.
XBD201210-01150.TIF -- Synchrotron background test in 4-inch bubble chamber. Photograph taken July 27, 1955. Bubble Chamber-29.
XBD201210-01151.TIF -- 10-inch bubble chamber. Patent release 10/23/1959. Photograph taken July 27, 1955. Bubble Chamber-30.
XBD201210-01152.TIF -- 10-inch bubble chamber. Patent release 10/23/1959. Photograph taken July 27, 1955. Bubble Chamber-31.
XBD201210-01153.TIF -- 10-inch bubble chamber and components in operation with Dick Blumberg, designer and Glenn Eckman, operator. Photograph taken September 30, 1955. Bubble Chamber-32.
XBD201210-01154.TIF -- 10-inch bubble chamber and components in operation with Dick

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
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| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

Blumberg, designer and Glenn Eckman, operator. Photograph taken September 30, 1955. Bubble Chamber-34.
XBD201210-01155.TIF -- Double gasket direct-compression fixture assembled. Patent release 10/23/1959. Photograph taken October 13, 1955. Bubble Chamber-38.
XBD201210-01156.TIF -- 10-inch bubble chamber broken window glass in tank. Photograph taken October 13, 1955. Bubble Chamber-39.
XBD201210-01157.TIF -- 10-inch bubble chamber broken window. Photograph taken October 13, 1955. Bubble Chamber-41.
XBD201210-01158.TIF -- 10-inch bubble chamber assembly. Dick Blumberg and Glen Eckman in photograph. Photograph taken October 26, 1955. Bubble Chamber-44.
XBD201210-01159.TIF -- 4-inch bubble chamber pi electron decay. Photograph taken November 1955. Bubble Chamber-45.
XBD201210-01160.TIF -- First track in deuterium. Photograph taken October 1955. Bubble Chamber-46.
XBD201210-01161.TIF -- 10-inch bubble chamber igloo test. Photograph taken November 17, 1955. Bubble Chamber-47.
XBD201210-01162.TIF -- 10-inch bubble chamber igloo test with Luis Alvarez, right. Photograph taken November 17, 1955. Bubble Chamber-49.
XBD201210-01163.TIF -- 10-inch bubble chamber igloo test. Patent released 10/23/1959. Photograph taken November 17, 1955. Bubble Chamber-52.
XBD201210-01164.TIF -- 10-inch bubble chamber igloo test with Luis Alvarez, right. Photograph taken November 17, 1955. Bubble Chamber-53.
XBD201210-01165.TIF -- First test photos in the 10-inch bubble chamber. Photograph taken November 29, 1955. Bubble Chamber-54.
XBD201210-01166.TIF -- Liquid hydrogen expansions for 10-inch bubble chamber. Photograph taken November 29, 1955. Bubble Chamber-56.
XBD201210-01167.TIF -- Liquid hydrogen expansions for 10-inch bubble chamber. Photograph taken November 24, 1955. Bubble Chamber-57.
XBD201210-01168.TIF -- Bubble chamber grid in Building 64. Photograph taken January 30, 1956. Bubble Chamber-59.
XBD201210-01169.TIF -- Window seal gasket assembly, inflatable type. Photograph taken February 3, 1956. Bubble Chamber-62.
XBD201210-01170.TIF -- Window seal gasket assembly, inflatable type. Photograph taken February 3, 1956. Bubble Chamber-61.
XBD201210-01171.TIF -- Window failure test, peak pressure 400 psi. Photograph taken February 7, 1956. Bubble Chamber-63.
XBD201210-01172.TIF -- Number 3, window failure test, 1-inch Pyrex 250 psi, 30 seconds. Photograph taken February 8, 1956. Bubble Chamber-65.
XBD201210-01173.TIF -- Shot 7, 1-inch herculite impact. Photograph taken February 20, 1956. Bubble Chamber-67.
XBD201210-01174.TIF -- Window failure test shot 6, 1-inch soft glass, 11 1/2-inch diameter. Fractured at 225 psi, 7-minutes, 20 seconds. Photograph taken February 20, 1956. Bubble Chamber-68.
XBD201210-01175.TIF -- 10-inch bubble chamber. Photograph taken February 24, 1956. Bubble Chamber-69.
XBD201210-01176.TIF -- 10-inch bubble chamber setup in operation. Released for publication in German magazine: "Wonders of the World," by K. Gottstein for Luis Alvarez, 3/26/1957

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| Division | Department | Filing Code |
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| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

Photograph taken March 8, 1956. Bubble Chamber-72.
XBD201210-01177.TIF -- 10-inch bubble chamber setup in operation. Photograph taken March 8, 1956. Bubble Chamber-74.
XBD201210-01178.TIF -- Inelastic scattering of pi-mesons in the 10-inch bubble chamber. Photograph taken March 26, 1956. Bubble Chamber-75.
XBD201210-01179.TIF -- Atypical image from the 10-inch bubble chamber run at the Bevatron. Patent release 11/19/1962. Photograph taken March 26, 1956. Bubble Chamber-76.
XBD201210-01180.TIF -- Inelastic scattering of pi-mesons in the 10-inch bubble chamber. Photograph taken March 26, 1956. Bubble Chamber-77.
XBD201210-01181.TIF -- Feynman diagram from 10-inch bubble chamber run at Bevatron. Richard Phillips Feynman, American theoretical physicist. Photograph taken March 26, 1956. Bubble Chamber-78.
XBD201210-01182.TIF -- Electron radiates gamma ray which produces e-equals e-plus pair. Photograph taken May 8, 1956. Bubble Chamber-81.
XBD201210-01183.TIF -- First recorded track by Donald Glaser, of the University of Michigan. Selected frames from 3000 frames/second movie. Times 0, 1/3, 4, 20, 71, and 250 milliseconds. Photograph taken May 10, 1956. Bubble Chamber-82.
XBD201210-01184.TIF -- Roger Hildebrand and Darragh Nagle's first successful hydrogen chamber at the University of Chicago. Photograph taken May 10, 1956. Bubble Chamber-83.
XBD201210-01185.TIF -- K stopping which causes "v" (proton and pi-negative). Photograph taken May 10, 1956. Bubble Chamber-84.
XBD201210-01186.TIF -- K formula demonstration: K-negative + P yields E-negative + pi-positive pi-negative. Photograph taken May 10, 1956. Bubble Chamber-85.
XBD201210-01187.TIF -- Liquid hydrogen storage area. Patent release 9/15/1960. Photograph taken July 11, 1956. Bubble Chamber-89.
XBD201210-01188.TIF -- Hydrogen bubble chamber 35mm film reader. Photograph taken August 2, 1956. Bubble Chamber-90.
XBD201210-01189.TIF -- Hydrogen bubble chamber 35mm film scanner. Photograph taken August 2, 1956. Bubble Chamber-91.
XBD201210-01190.TIF -- Hydrogen bubble chamber microscope. Photograph taken August 2, 1956. Bubble Chamber-92.
XBD201210-01191.TIF -- Hydrogen bubble chamber 35mm film reader. Photograph taken August 2, 1956. Bubble Chamber-93.
XBD201210-01192.TIF -- Hydrogen bubble chamber 35mm film reader. Photograph taken August 2, 1956. Bubble Chamber-94.
XBD201210-01193.TIF -- Bubble chamber setup. Photograph taken August 1, 1956. Bubble Chamber-96.
XBD201210-01194.TIF -- Bubble chamber setup. Photograph taken August 1, 1956. Bubble Chamber-99.
XBD201210-01195.TIF -- Bubble chamber setup. Photograph taken August 1, 1956. Bubble Chamber-100.
XBD201210-01196.TIF -- Bubble chamber equipment outside the Bevatron. Photograph taken August 1, 1956. Bubble Chamber-102.
XBD201210-01197.TIF -- 600 liter hydrogen dewar. Photograph taken August 1, 1956. Bubble Chamber-106.
XBD201210-01198.TIF -- 72-inch hydrogen bubble chamber, 600 liter hydrogen dewar. Photograph taken September 13, 1956. Bubble Chamber-109.

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| Division | Department | Filing Code |
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| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201210-01200.TIF -- 15-inch bubble chamber spiraling electron. Patent release 12/4/1962. Photograph taken October 29, 1956. Bubble Chamber-110.
XBD201210-01201.TIF -- K scatters with protons. Patent release 5/12/1960. Photograph taken October 29, 1956. Bubble Chamber-111.
XBD201210-01202.TIF -- K spins: K-negative + P yields K-negative + P; K-negative + P yields E-positive + pi-negative; E yields pi-positive. Patent release 2/7/1962. Photograph taken October 29, 1956. Bubble Chamber-112A. See also XBD201210-01203.TIF.
XBD201210-01203.TIF -- A figure showing K-negative scattering and interaction. A K-negative meson scatters on one proton and then interacts with another proton to form a sigma-positive and a pi-negative. The sigma positive decays to a pi-positive and a neutron. Photograph taken October 29, 1956. Bubble Chamber-112B. See also XBD201210-01202.TIF.
XBD201210-01204.TIF -- Pulsed beam of 14 meV neutrons on 2 1/2-inch bubble chamber. Photograph taken October 29, 1956. Bubble Chamber-113.
XBD201210-01205.TIF -- Strength of glass under head gaskets with annotation regarding load strength. Photograph taken November 9, 1956. Bubble Chamber-114.
XBD201210-01206.TIF -- Strength of glass under head gaskets with annotation regarding load strength. Photograph taken November 9, 1956. Bubble Chamber-115.
XBD201210-01207.TIF -- Strength of glass under head gaskets with annotation regarding load strength. Photograph taken November 9, 1956. Bubble Chamber-116.
XBD201210-01208.TIF -- Vacuum chamber showing air operated vacuum valve, cold trap, and diffusion pump. The stainless steel beam window is being held by unidentified individual. Photograph taken November 28, 1956. Bubble Chamber-117.
XBD201210-01325.TIF -- Cooling blowers and illumination housing. Photograph taken January 8, 1957. Bubble Chamber-119.
XBD201210-01326.TIF -- 35mm film scanner #2 with unidentified operator in Building 50. Photograph taken January 8, 1957. Bubble Chamber-120.
XBD201210-01327.TIF -- 35mm film scanner #1 projection lenses and film handling mechanism in Building 50. Patent release 10/23/1959. Photograph taken January 8, 1957. Bubble Chamber-121.
XBD201210-01328.TIF -- 72-inch bubble chamber magnet coil joints in copper conductor. Photograph taken January 8, 1957. Bubble Chamber-124.
XBD201210-01329.TIF -- 72-inch bubble chamber magnet coil joints in copper conductor. Photograph taken January 8, 1957. Bubble Chamber-125.
XBD201210-01330.TIF -- 72-inch bubble chamber magnet coil joints in copper conductor. Photograph taken January 8, 1957. Bubble Chamber-126.
XBD201210-01331.TIF -- 1/12 scale model of the 72-inch bubble chamber. Photograph taken January 16, 1957. Bubble Chamber-127.
XBD201210-01332.TIF -- 1/12 scale model of the 72-inch bubble chamber. Photograph taken January 16, 1957. Bubble Chamber-129.
XBD201210-01333.TIF -- 1/12 scale model of the 72-inch bubble chamber. Photograph taken January 16, 1957. Bubble Chamber-130.
XBD201210-01334.TIF -- Lead plate chamber. Photograph taken January 21, 1957. Bubble Chamber-131.
XBD201210-01335.TIF -- Pi spins. Photograph taken March 29, 1957. Bubble Chamber-133.
XBD201210-01336.TIF -- K spins. Photograph taken March 29, 1957. Bubble Chamber-136.
XBD201210-01337.TIF -- Spins showing mu-mu-epsilon. Photograph taken April 3, 1957. Bubble Chamber-139.
XBD201210-01338.TIF -- 35mm measuring projector with unidentified operator. Photograph taken

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| Division | Department | Filing Code |
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| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

April 8, 1957. Bubble Chamber-140.
XBD201210-01339.TIF -- Magnet core for the 72-inch bubble chamber. Photograph taken April 25, 1957. Bubble Chamber-144.
XBD201210-01340.TIF -- Magnet core for the 72-inch bubble chamber, located at Todd Shipyard. Photograph taken April 25, 1957. Bubble Chamber-145.
XBD201210-01341.TIF -- Transporting the 64-ton magnet core for the bubble chamber up the hill toward Blackberry Gate. Photograph taken April 29, 1957. Bubble Chamber-148.
XBD201210-01342.TIF -- Crane unloading the 72-inch bubble chamber core. Photograph taken April 29, 1957. Bubble Chamber-152.
XBD201210-01343.TIF -- Three unidentified persons with the 72-inch hydrogen bubble chamber pattern. Photograph taken April 30, 1957. Bubble Chamber-153.
XBD201210-01344.TIF -- Mastic being applied to the 72-inch magnet for the bubble chamber. Photograph taken May 9, 1957. Bubble Chamber-155.
XBD201210-01345.TIF -- Installation of the 72-inch magnet coil for the bubble chamber. Photograph taken May 9, 1957. Bubble Chamber-156.
XBD201210-01346.TIF -- Installation of the 72-inch magnet coil for the bubble chamber. Patent release 9/21/1960. Photograph taken May 9, 1957. Bubble Chamber-157.
XBD201210-01347.TIF -- Installation of the 72-inch magnet coil for the bubble chamber. Photograph taken May 9, 1957. Bubble Chamber-158.
XBD201210-01348.TIF -- H2 purifier heat-exchanger. Photograph taken June 26, 1957. Bubble Chamber-165.
XBD201210-01349.TIF -- H2 purifier heat-exchanger. Photograph taken June 26, 1957. Bubble Chamber-166.
XBD201210-01350.TIF -- 72-inch bubble chamber casting. Photograph taken July 1, 1957. Bubble Chamber-167.
XBD201210-01351.TIF -- 72-inch bubble chamber casting. Labeled "King Tut." Patent release 4/15/1959. Photograph taken July 1, 1957. Bubble Chamber-170.
XBD201210-01352.TIF -- Vacuum tank hand-welding. It had originally been planned to machine-weld the tank but the welds failed. This image is of the hand-welding that had to be used. Because of this fabrication time was about doubled. Photograph taken April 2, 1956. Bubble Chamber-172.
XBD201210-01353.TIF -- Production and decay of neutral lambda and anti-lambda hyperons. Patent release 10/5/1962. Photograph taken July 8, 1959. Bubble Chamber-172A.
XBD201210-01354.TIF -- Vacuum tank lower section. Image shows the lower part of the vacuum tank made from Jessop non-magnetic steel. The section was straightened and then welded to the upper section. Photograph taken April 2, 1956. Bubble Chamber-174.
XBD201210-01355.TIF -- Vacuum tank upper section. Part of the internal bracing can be seen. Photograph taken April 2, 1956. Bubble Chamber-176.
XBD201210-01356.TIF -- Special curved magnet coil being fabricated by Pacific Electric Co. Photograph taken July 9, 1956. Bubble Chamber-182.
XBD201210-01357.TIF -- Coil winding fixture in position. Photograph taken November 21, 1956. Bubble Chamber-191.
XBD201210-01358.TIF -- Second start of winding of lower coil. Photograph taken January 1, 1957. Bubble Chamber-201.
XBD201210-01359.TIF -- Second and third lengths of conductor removed from lower coil after defective joints were located. Photograph taken January 9, 1957. Bubble Chamber-202.
XBD201210-01360.TIF -- First layer nearly finished. Note wooden shelf to position terminal pieces. Patent release 9/21/1960. Photograph taken January 29, 1957. Bubble Chamber-205.

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| Division | Department | Filing Code |
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| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201210-01361.TIF -- Machine used to wrap insulating tape on copper conductor. Patent release 9/21/1960. Photograph taken February 15, 1957. Bubble Chamber-210.
XBD201210-01362.TIF -- Bending terminal piece between two bolts in order to obtain a better fit against outer turn of pancake. Photograph taken March 1, 1957. Bubble Chamber-211.
XBD201210-01363.TIF -- Fitting the terminal piece to the fourth pancake layer on the lower coil. Photograph taken March 1, 1957. Bubble Chamber-212.
XBD201210-01364.TIF -- Taping space between spool and top insulation piece prior to placing cover plate. Photograph taken April 4, 1957. Bubble Chamber-219.
XBD201210-01365.TIF -- Workman cleaning out holes and placing coil hold-down bolts. Photograph taken April 2, 1957. Bubble Chamber-221.
XBD201210-01366.TIF -- Bigge crane lifting fully wound coil from turntable. Photograph taken April 18, 1957. Bubble Chamber-233.
XBD201210-01367.TIF -- Individuals associated with 72-inch bubble chamber coil winding. Left to right: Jim Allen, PEMCO; Paul Hernandez, UCRL; Don Klein, PEMCO; Bill Eaton, UCRL; Jack Hart, UCRL. Photograph taken April 22, 1957. Bubble Chamber-240.
XBD201210-01368.TIF -- Terminal end of lower coil with cooling water connections in place. Patent release 9/15/1960. Photograph taken April 13, 1957. Bubble Chamber-244.
XBD201210-01369.TIF -- Copper busses soldered in place. Photograph taken April 17, 1957. Bubble Chamber-246.
XBD201210-01370.TIF -- Insulation being repaired on faulty joints. Two pieces of conductor were removed from the first layer of the lower coil. The leaky joints were cut out and the previously shaped conductor was used in the ninth layer of the upper coil. Photograph taken May 31, 1957. Bubble Chamber-262.
XBD201210-01371.TIF -- Making connection in shape conductor, used on the ninth layer of upper coil. Photograph taken May 31, 1957. Bubble Chamber-264.
XBD201210-01372.TIF -- Ninth layer of hydrogen purifier heat exchanger. Photograph taken July 18, 1957. Bubble Chamber-265.
XBD201210-01373.TIF -- Measuring the water flow through the last pancake pair of the upper coil. Photograph taken June 11, 1957. Bubble Chamber-266.
XBD201210-01374.TIF -- Cleaning out the tapped mounting holes on the underside of the upper coil, prior to delivery to UCRL. Photograph taken January 28, 1957. Bubble Chamber-267.
XBD201210-01375.TIF -- UCRL trailer being eased in under the completed upper coil. Note the long steel beams used to temporarily support the coil during the loading operation. Photograph taken July 1, 1957. Bubble Chamber-268.
XBD201210-01376.TIF -- Lower 72-inch bubble chamber coil box assembly. Received at Pacific Electric Motor Company, October 25, 1956. Photograph taken October 25, 1956. Bubble Chamber-269.
XBD201210-01377.TIF -- Workers checking to see whether there is sufficient clearance to slip the vacuum tank down into the mating aperture in the lower coil. It fit with room to spare. Photograph taken June 1, 1957. Bubble Chamber-270.
XBD201210-01378.TIF -- Placing upper coil in its final position in the 72-inch bubble chamber. Photograph taken July 1, 1957. Bubble Chamber-272.
XBD201210-01379.TIF -- Slipping bubble chamber vacuum tank down through both coils during check for fit of parts. Photograph taken July 1, 1957. Bubble Chamber-273.
XBD201210-01387.TIF -- Subatomic particle formation. Pi-negative + p yields pi-negative + pi-positive + n; muon-positive + e-positive. Photograph taken July 26, 1957. Bubble Chamber-279.
XBD201210-01388.TIF -- Subatomic particle formation. Pi-negative + p yields k-positive + sigma-

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| Division | Department | Filing Code |
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| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

negative yields pi-negative. Photograph taken July 26, 1957. Bubble Chamber-282.
XBD201210-01389.TIF -- Three-pronged zoon. Photograph taken July 26, 1957. Bubble Chamber-283.
XBD201210-01390.TIF -- Subatomic particles formation. Pi-negative + p yields lambda + theta. Photograph taken July 26, 1957. Bubble Chamber-284.
XBD201210-01391.TIF -- Subatomic particles formation. K + p yields lambda yields pi-negative + p. Photograph taken July 31, 1957. Bubble Chamber-287.
XBD201210-01392.TIF -- Subatomic particles formation. K-negative + p yields theta-negative + n yields pi-positive + pi-negative. Photograph taken July 31, 1957. Bubble Chamber-289.
XBD201210-01393.TIF -- Subatomic particles formation. K-negative + p yields sigma-negative + pi-positive; sigma-negative yields pi-negative. Photograph taken July 31, 1957. Bubble Chamber-290.
XBD201210-01394.TIF -- Subatomic particles formation. K-negative + p yields sigma-positive + pi-negative; sigma-positive yields pi-positive. Photograph taken July 31, 1957. Bubble Chamber-291.
XBD201210-01395.TIF -- Subatomic particles formation. Tau-negative yields 3 pi's. Photograph taken July 31, 1957. Bubble Chamber-292.
XBD201210-01396.TIF -- Subatomic particles formation, four-pronged star. Pi-negative + p yields lambda + theta. Photograph taken July 31, 1957. Bubble Chamber-295.
XBD201210-01397.TIF -- Pi-negative event. Photograph taken July 31, 1957. Bubble Chamber-297.
XBD201210-01398.TIF -- Double ghost. Photograph taken July 31, 1957. Bubble Chamber-300.
XBD201210-01399.TIF -- Muon minus anti-electron, no gap. Photograph taken July 31, 1957. Bubble Chamber-303.
XBD201210-01400.TIF -- Hyperfragment giving three particles. Photograph taken August 1, 1957. Bubble Chamber-304.
XBD201210-01401.TIF -- Subatomic particles formation, Dalitz: pi-negative + p yields r + pi. Patent released 11/19/1962. Photograph taken August 1, 1957. Bubble Chamber-306.
XBD201210-01402.TIF -- Subatomic particles formation, tan decay: pi-negative + p yields sigma-negative + k-positive; pi-negative. Photograph taken August 1, 1957. Bubble Chamber-307.
XBD201210-01403.TIF -- Bubble chamber event. Electron triplet and pairs. Photograph taken August 1, 1957. Bubble Chamber-308A.
XBD201210-01404.TIF -- Don Skillings working on the hydrogen purifier heat exchanger. Photograph taken July 19, 1957. Bubble Chamber-309.
XBD201210-01405.TIF -- 15-inch H2 bubble chamber recompression compressor (side view). Photograph taken July 30, 1957. Bubble Chamber-311.
XBD201210-01406.TIF -- Don Skillings working on the 72-inch hydrogen bubble chamber's purifier heat exchanger, 15th layer. Photograph taken July 30, 1957. Bubble Chamber-312.
XBD201210-01407.TIF -- Instrument panel for the 15-inch bubble chamber (front view). Photograph taken July 30, 1957. Bubble Chamber-313.
XBD201210-01408.TIF -- Instrument panel for the 15-inch bubble chamber (back view). Photograph taken July 30, 1957. Bubble Chamber-314.
XBD201210-01409.TIF -- Bubble chamber event: pi-negative + p yields lambda + k; lambda + p yields sigma-positive + n yields pi-positive + n. Photograph taken August 26, 1957. Bubble Chamber-315.
XBD201210-01431.TIF -- 72-inch bubble chamber. Patent release 1/5/1959. Photograph taken August 16, 1957. Bubble Chamber-316.
XBD201210-01432.TIF -- Subatomic particles formation. Photograph taken August 26, 1957. Bubble Chamber-317.
XBD201210-01433.TIF -- Bubble chamber event. ZN-1757. Patent release 10/23/1959. Photograph

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| Division | Department | Filing Code |
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| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

taken September 11, 1957. Bubble Chamber-320.
XBD201210-01434.TIF -- 10-inch bubble chamber damage due to rapid magnetic charge. Photograph taken August 28, 1983. Bubble Chamber-322.
XBD201210-01435.TIF -- 10-inch bubble chamber damage due to rapid magnetic charge. Photograph taken August 28, 1983. Bubble Chamber-323.
XBD201210-01436.TIF -- Jack Harvey with one end of the 72-inch bubble chamber stainless steel casting. It is being prepared for a vacuum tightness test. Because of the uneven surface of the casting, rubber gasketing was cemented to the edge then the rubber was machine-sanded to a plane so that a coor plate could be sealed to the "tub." Photograph taken July 1, 1957. Bubble Chamber-327.
XBD201210-01437.TIF -- Installing upper-core sections around magnet coils. Patent release 1/5/1959. Photograph taken September 15, 1957. Bubble Chamber-328.
XBD201210-01438.TIF -- Progress on the 72-inch hydrogen bubble chamber. Photograph taken September 30, 1957. Bubble Chamber-335.
XBD201210-01439.TIF -- Subatomic pattern, Compton electron. Photograph taken October 17, 1957. Bubble Chamber-337.
XBD201210-01440.TIF -- Subatomic particles formation, ZN 1792 (also ZN-2054.) Photograph taken October 17, 1957. Bubble Chamber-338.
XBD201210-01441.TIF -- Associated production K0 lambda-0 on 10-inch bubble chamber. Pairs collide, both decay. See also XBB8511-9655 and 9656. Photograph taken October 17, 1957. Bubble Chamber-340A.
XBD201210-01442.TIF -- 4-inch bubble chamber. Photograph taken October 15, 1957. Bubble Chamber-345.
XBD201210-01443.TIF -- Fabrication of 72-inch bubble chamber bearing plates. Photograph taken in 1957. Bubble Chamber-348.
XBD201210-01444.TIF -- Fabrication of 72-inch bubble chamber hydrogen shield pressure container. Photograph taken in 1957. Bubble Chamber-350.
XBD201210-01445.TIF -- 15-inch bubble chamber "coat hangers." Patent release 10/23/1959. Photograph taken November 7, 1957. Bubble Chamber-356.
XBD201210-01446.TIF -- 15-inch bubble chamber with technician. Photograph taken November 8, 1957. Bubble Chamber-359.
XBD201210-01447.TIF -- 15-inch bubble chamber. Photograph taken November 8, 1957. Bubble Chamber-360.
XBD201210-01448.TIF -- 72-inch bubble chamber body. Photo shows seven locations for jack screws on side of chamber. Photograph taken November 8, 1957. Bubble Chamber-364.
XBD201210-01449.TIF -- Hydrogen bubble chamber 35-mm measuring projector, MK-I. Photograph taken November 14, 1957. Bubble Chamber-367.
XBD201210-01450.TIF -- Hydrogen bubble chamber 35-mm scanning projector, MK-III. Photograph taken November 14, 1957. Bubble Chamber-369.
XBD201210-01451.TIF -- Model of the 72-inch bubble chamber measuring projector, 1/4 scale. Photograph taken November 27, 1957. Bubble Chamber-371.
XBD201210-01452.TIF -- 72-inch bubble chamber body with pressure test cover plate in place. Photograph taken September 1957. Bubble Chamber-373.
XBD201210-01453.TIF -- 15-inch bubble chamber. Photograph taken December 9, 1957. Bubble Chamber-374.
XBD201210-01454.TIF -- 15-inch bubble chamber. Photograph taken December 9, 1957. Bubble Chamber-375.

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| Division | Department | Filing Code |
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| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201210-01455.TIF -- The inflatable gasket clamped between special retaining plates in preparation for a 1,000 psig hydrostatic test. Photograph taken November 1957. Bubble Chamber-376.
XBD201210-01456.TIF -- High-pressure test in progress. The gasket was unharmed and leak-free after being cycled several times from 0-1,000 psig. Photograph taken November 1957. Bubble Chamber-377.
XBD201210-01457.TIF -- Subatomic particle event. Patent release 12/19/1962. Photograph taken November 1957. Bubble Chamber-380.
XBD201210-01458.TIF -- Subatomic particle event. ZN-1899. Photograph taken April 2, 1958. Bubble Chamber-380A.
XBD201210-01459.TIF -- Subatomic particle event. Photograph not dated. Bubble Chamber-380B.
XBD201210-01460.TIF -- 15-inch bubble chamber, first liquid hydrogen operation. Photograph taken November 24, 1957. Bubble Chamber-382.
XBD201210-01461.TIF -- 15-inch bubble chamber, first liquid hydrogen operation, view 1. Photograph taken November 1957. Bubble Chamber-383.
XBD201210-01462.TIF -- 15-inch bubble chamber, first liquid hydrogen operation, view 2. Photograph taken November 24,  1957. Bubble Chamber-384.
XBD201210-01463.TIF -- A dry ice, cold-trap and vacuum pump were used to remove the water from the bellows after hydrostatic tests. Photograph taken December 1957. Bubble Chamber-385.
XBD201210-01464.TIF -- 72-inch bubble chamber, showing Jack Hart and the start of cool down and gas consumption tests on liquid-nitrogen and liquid-hydrogen storage Dewars. Photograph taken December 1957. Bubble Chamber-386.
XBD201210-01465.TIF -- Liquid-nitrogen trailer, insulated tank, leak detector, and Leroy Lucas taking data. Photograph taken December 1957. Bubble Chamber-394.
XBD201210-01466.TIF -- Film scanner Mark II power supply. Photograph taken February 7, 1958. Bubble Chamber-396.
XBD201210-01467.TIF -- Subatomic particle event, two gamma-rays. Photograph taken February 18, 1958. Bubble Chamber-400.
XBD201210-01469.TIF -- Gardner Denver intercooler (tube sheet.) Photograph taken February 25, 1958. Bubble Chamber-414.
XBD201210-01470.TIF -- Bubble chamber feet. Photograph taken March 10, 1958. Bubble Chamber-428.
XBD201210-01471.TIF -- Walt Wenzel with bubble chamber feet. Photograph taken March 10, 1958. Bubble Chamber-430.
XBD201210-01472.TIF -- 72-inch hydrogen bubble chamber expansion system. Patent release 9/21/1960. Photograph taken March 14, 1958. Bubble Chamber-431.
XBD201210-01473.TIF -- Jack Hart with the 72-inch bubble chamber hydrogen shield and frame. Photograph taken March 13, 1958. Bubble Chamber-435.

**Container** 2 **Of** 5

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
|---|---|---|
| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

Box 1 Photos:

XBD201210-01474.TIF -- 15-inch bubble chamber antiproton display. Photograph taken March 27, 1958. Bubble Chamber-437.

XBD201210-01475.TIF -- 15-inch bubble chamber antiproton display. Photograph taken March 27, 1958. Bubble Chamber-440.

XBD201210-01476.TIF -- 15-inch bubble chamber event. Photograph taken March 27, 1958. Bubble Chamber-442.

XBD201210-01477.TIF -- 15-inch bubble chamber event. Photograph taken April 9, 1958. Bubble Chamber-459.

XBD201210-01478.TIF -- Bill Eason and view of top bubble chamber vacuum tank just before the hydrostatic pressure test. The wires lead to strain gages. The dial indicators measure total deflection. Patent release 9/21/1960. Photograph taken February 1958. Bubble Chamber-460.

XBD201210-01479.TIF -- 72-inch bubble chamber tank top with camera and light parts in place prior to the hydrostatic test. Photograph taken February 1958. Bubble Chamber-462.

XBD201210-01480.TIF -- 15-inch bubble chamber event. Photograph taken May 1, 1958. Bubble Chamber-472.

XBD201210-01481.TIF -- 15-inch bubble chamber in Bevatron. Photograph taken April 28, 1958. CN-43. Bubble Chamber-475.

XBD201210-01482.TIF -- Equipment associated with the 15-inch bubble chamber. Photograph taken May 6, 1958. Bubble Chamber-480.

XBD201210-01483.TIF -- Equipment associated with the 15-inch bubble chamber. Photograph taken May 6, 1958. Bubble Chamber-481.

XBD201210-01484.TIF -- Moving the 72-inch bubble chamber from the Bevatron parking lot. Photograph taken May 7, 1958. Bubble Chamber-485A.

XBD201210-01485.TIF -- "Walking" the 72-inch bubble chamber. Engineers: Jack Hart, Matt Renkas, Jim Shand, Paul Hernandez, and Bill Eason. Paul Hernandez of mechanical engineering conceived the ingenious idea of devising a hydraulic walking method. With this system the bubble-chamber magnet could make right angle turns and maneuver into very tight spaces, thus eliminating the need for an outside rigging contractor. Patent release 1/5/1959. Photograph taken May 8, 1958. Bubble Chamber-488.

XBD201210-01486.TIF -- "Walking" the 72-inch bubble chamber, movie setup. Paul Hernandez of mechanical engineering conceived the ingenious idea of devising a hydraulic walking method. With this system the bubble-chamber magnet could make right angle turns and maneuver into very tight spaces, thus eliminating the need for an outside rigging contractor. Photograph taken May 8, 1958. Bubble Chamber-494.

XBD201210-01487.TIF -- "Walking" the 72-inch bubble chamber in the Bevatron parking lot. Paul Hernandez of mechanical engineering conceived the ingenious idea of devising a hydraulic walking method. With this system the bubble-chamber magnet could make right angle turns and maneuver into very tight spaces, thus eliminating the need for an outside rigging contractor. Photograph taken May 8, 1958. Bubble Chamber-498.

XBD201210-01488.TIF -- "Walking" the 72-inch bubble chamber. Paul Hernandez of mechanical engineering conceived the ingenious idea of devising a hydraulic walking method. With this system the bubble-chamber magnet could make right angle turns and maneuver into very tight spaces, thus eliminating the need for an outside rigging contractor. Photograph taken May 7, 1958. Bubble Chamber-500.

XBD201210-01489.TIF -- 10-inch, 15-inch, and 72-inch bubble chambers. Photograph taken May 16, 1958. Bubble Chamber-507.

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| Division | Department | Filing Code |
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**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201210-01490.TIF -- Internal view of detecting head of Jack Frank's Franckenstein. Photograph taken May 23, 1958. Bubble Chamber-515.
XBD201210-01491.TIF -- Plumbing for the 72-inch bubble chamber. Photograph taken June 6, 1958. Bubble Chamber-517.
XBD201210-01492.TIF -- Jack Frank's Franckenstein scanner, close-up. Photograph taken July 14, 1958. Bubble Chamber-531.
XBD201210-01493.TIF -- Franckenstein scanning equipment with Jack Franck (center.) Franckenstein was the bubble chamber 72-inch measuring projector which reduced bubble chamber film to machine-readable data. Photograph taken July 15, 1958. Bubble Chamber-534.
XBD201211-01494.TIF -- Compressor room in Building 57. Patent release 4/15/1959. Photograph taken July 21, 1958. Bubble Chamber-537.
XBD201211-01495.TIF -- Luis Alvarez at the 72-inch bubble chamber. Photograph taken July 21, 1958. Bubble Chamber-540.
XBD201211-01496.TIF -- 72-inch bubble chamber assembly. Photograph taken July 21, 1958. Bubble Chamber-543.
XBD201211-01497.TIF -- Bubble chamber assembly. Photograph taken July 28, 1958. Bubble Chamber-552.
XBD201211-01498.TIF -- Bubble chamber assembly: Luis Alvarez, Robbi Schmit, Ed Stewart. Photograph taken July 28, 1958. Bubble Chamber-558.
XBD201211-01499.TIF -- Bubble chamber assembly: Lou Silvia, Ed Stewart, Robbi Schmit. Photograph taken July 28, 1958. Bubble Chamber-560.
XBD201211-01500.TIF -- Refrigeration test. Photograph taken July 31, 1958. Bubble Chamber-565.
XBD201211-01501.TIF -- Bubble chamber assembly. Patent release 9/21/1960. Photograph taken August 5, 1958. Bubble Chamber-576.
XBD201211-01502.TIF -- Bubble chamber assembly. Photograph taken August 5, 1958. Bubble Chamber-578.
XBD201211-01506.TIF -- Thermocouples attached to glass. Photograph taken July 31, 1958. Bubble Chamber-580.
XBD201211-01511.TIF -- Interior chamber. Patent release 8/13/1962. Photograph taken July 31, 1958. Bubble Chamber-582.
XBD201211-01512.TIF -- Bubble chamber and test stand. Photograph taken July 31, 1958. Bubble Chamber-583.
XBD201211-01513.TIF -- Tightening bolts on bubble chamber. Photograph taken July 31, 1958. Bubble Chamber-584.
XBD201211-01514.TIF -- Soldering indium gasket. Photograph taken July 31, 1958. Bubble Chamber-586.
XBD201211-01515.TIF -- 72-inch bubble chamber assembly. Photograph taken August 6, 1958. Bubble Chamber-591.
XBD201211-01516.TIF -- Bubble chamber assembly. Photograph taken August 8, 1958. Bubble Chamber-594.
XBD201211-01517.TIF -- Bubble chamber assembly. Photograph taken August 14, 1958. Bubble Chamber-595.
XBD201211-01518.TIF -- Bubble chamber assembly. Photograph taken August 18, 1958. Bubble Chamber-600.
XBD201211-01519.TIF -- Bubble chamber assembly. Patent release 10/13/1958. Photograph taken August 18, 1958. Bubble Chamber-602.
XBD201211-01520.TIF -- 72-inch bubble chamber tank being raised into position, with various

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| Division | Department | Filing Code |
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| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

parts of the tank diagramed. ZN-2460. Patent release 6/13/1962. Photograph taken May 27, 1960. Bubble Chamber-603A.
XBD201211-01521.TIF -- Bubble chamber assembly. Photograph taken August 18, 1958. Bubble Chamber-609.
XBD201211-01522.TIF -- Bubble chamber assembly. Photograph taken August 18, 1958. Bubble Chamber-614.
XBD201211-01523.TIF -- Bubble chamber assembly. Photograph taken August 18, 1958. Bubble Chamber-617.
XBD201211-01524.TIF -- Bubble chamber assembly. Patent release 9/15/1960. Photograph taken September 10, 1958. Bubble Chamber-624.
XBD201211-01525.TIF -- 15-inch bubble chamber deuterium event. Photograph taken September 22, 1958. Bubble Chamber-633.
XBD201211-01526.TIF -- Bubble chamber assembly, with Luis Alvarez (standing, third from right). Photograph taken August 18, 1958. Bubble Chamber-612.
XBD201211-01527.TIF -- First bubbles from 72-inch chamber, nitrogen, source in. Photograph taken September 25, 1958. Bubble Chamber-635.
XBD201211-01528.TIF -- Bubble chamber-72-inch pipe diagram. Photograph taken November 6, 1958. Bubble Chamber-640.
XBD201211-01529.TIF -- Bubble chamber-72-inch pipe diagram. Photograph taken November 6, 1958. Bubble Chamber-652.
XBD201211-01530.TIF -- Bubble chamber event showing first xi baryon seen, ZN-2118. Photograph taken December 15, 1958. Bubble Chamber-661.
XBD201211-01531.TIF -- Three anti-kaon meson decays in 15-inch hydrogen bubble chamber. Photograph taken January 15, 1959. Bubble Chamber-679.
XBD201211-01532.TIF -- 72-inch bubble chamber, 8-chamber cavity. Photograph taken January 14, 1959. Bubble Chamber-680.
XBD201211-01533.TIF -- 72-inch bubble chamber being lifted. Patent release 4/15/1959. Photograph taken February 19, 1959. Bubble Chamber-687.
XBD201211-01534.TIF -- Interior of Building 59. Patent release 4/15/1959. Photograph taken February 19, 1959. Bubble Chamber-688.
XBD201211-01535.TIF -- 72-inch bubble chamber camera designed by Duane Norgren. Patent release 4/15/1959. Photograph taken February 19, 1959. Bubble Chamber-696.
XBD201211-01536.TIF -- 72-inch bubble chamber. Patent release 3/26/1959. Photograph taken February 19, 1959. Bubble Chamber-698.
XBD201211-01537.TIF -- Mark III measuring engine. Photograph taken March 12, 1959. Bubble Chamber-703.
XBD201211-01538.TIF -- Mark III measuring engine. Photograph taken March 12, 1959. Bubble Chamber-704.
XBD201211-01539.TIF -- 72-inch bubble chamber first tracks. Photograph taken March 26, 1959. Bubble Chamber-715.
XBD201211-01540.TIF -- 72-inch bubble chamber camera designed by Duane Norgren. Patent release 4/15/1959. Photograph taken April 1, 1959. Bubble Chamber-724.
XBD201211-01541.TIF -- Duane Norgren working on the 72-inch bubble chamber camera. Patent release 9/22/1960. Photograph taken April 1, 1959. Bubble Chamber-725.
XBD201211-01542.TIF -- 72-inch bubble chamber pump room control panel. Photograph taken April 1, 1959. Bubble Chamber-727.
XBD201211-01543.TIF -- Composite photograph: 72-inch hydrogen bubble chamber, first operation

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| Division | Department | Filing Code |
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| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

(March 24, 1959); 72-inch hydrogen bubble chamber operating with 3.5 Bev/C negative pions (March 25, 1959). Composite photograph taken April 1, 1959. Bubble Chamber-730.
XBD201211-01544.TIF -- 72-inch bubble chamber control room, Bob West at the controls. Photograph taken April 17, 1959. Bubble Chamber-736.
XBD201211-01545.TIF -- 2 1/2-inch bubble chamber. Photograph taken April 28, 1959. Bubble Chamber-737.
XBD201211-01546.TIF -- Concentric lens for Mark III reader. Photograph taken May 19, 1959. Bubble Chamber-740.
XBD201211-01547.TIF -- Concentric lens for Mark III reader. Photograph taken May 19, 1959. Bubble Chamber-741.
XBD201211-01548.TIF -- Concentric lens for Mark III reader. Photograph taken May 19, 1959. Bubble Chamber-743.
XBD201211-01549.TIF -- Bubble chamber event: 6-prong scatter and Dalitz pair. Photograph taken June 1, 1959. Bubble Chamber-745.
XBD201211-01551.TIF -- Expansion regenerator line. Photograph taken May 28, 1959. Bubble Chamber-748.
XBD201211-01552.TIF -- Bonnie Glaeser working at the 72-inch scanner. Photograph taken June 17, 1959. Bubble Chamber-760.
XBD201211-01553.TIF -- Jack Frank's Franckenstein, measuring device with technician. Photograph taken June 17, 1959. Bubble Chamber-764.
XBD201211-01554.TIF -- Two neutrinos and electron pair. Photograph taken July 4, 1959. Bubble Chamber-771.
XBD201211-01555.TIF -- Bubble chamber event. K-meson decays to a muon, which takes part in catalysis twice and decays to an electron. Patent release 5/16/1960. Photograph undated (probably taken in March 1959). Bubble Chamber-714A.
XBD201211-01556.TIF -- Bubble chamber event: beta decay of kaon. Photograph taken March 26, 1959. Bubble Chamber-716.
XBD201211-01557.TIF -- Bubble chamber event. Beta decay of kaon2. Photograph taken March 26, 1959. Bubble Chamber-716B.
XBD201211-01558.TIF -- 72-inch hydrogen bubble chamber. First liquid hydrogen run with beam. Patent release 5/12/1960. Photograph taken March 24, 1959. Bubble Chamber-717.
XBD201211-01559.TIF -- Production and decay of neutral lambda and anti-lambda hyperons. Patent release 5/16/1960. Photograph undated (probably taken July 1959). Bubble Chamber-773.
XBD201211-01560.TIF -- Anti-proton star. Photograph taken July 10, 1959. Bubble Chamber-777.
XBD201211-01561.TIF -- 4-prong event with pion, leptons. Photograph taken July 10, 1959. Bubble Chamber-778.
XBD201211-01562.TIF -- Kaon decay event. Photograph taken July 10, 1959. Bubble Chamber-781.
XBD201211-01563.TIF -- Pairs, star. Photograph taken July 10, 1959. Bubble Chamber-782.
XBD201211-01564.TIF -- 15-inch bubble chamber compressor. Photograph taken July 17, 1959. Bubble Chamber-789.
XBD201211-01565.TIF -- Schematic diagram of anti-proton experiment setup. Photograph taken July 14, 1959. Bubble Chamber-791.
XBD201211-01566.TIF -- Console perspective sketch of measuring projector III-A. Photograph taken June 8, 1959. Bubble Chamber-792.
XBD201211-01567.TIF -- Anti-lambda event. Photograph taken August 12, 1959. Bubble Chamber-802.
XBD201211-01595.TIF -- 8-prong anti-proton annihilation. Patent release 11/15/1962. Photograph

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| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

taken August 13, 1959. Bubble Chamber-805.
XBD201211-01596.TIF -- Harold Ticho's anti-kaon beam for xi experiment. Left: separator on three anti-kaon decays. Right: separator off, giving heavy beam. Photograph taken August 18, 1959. Bubble Chamber-806.
XBD201211-01597.TIF -- 10-inch bubble chamber event: High-energy delta rays on negative pions. Photograph taken September 10, 1959. Bubble Chamber-810.
XBD201211-01598.TIF -- 10-inch bubble chamber event: high-energy delta rays on negative pions. Photograph taken September 10, 1959. Bubble Chamber-811.
XBD201211-01599.TIF -- Lambda, anti-lambda production. Photograph taken September 21, 1959. Bubble Chamber-814.
XBD201211-01600.TIF -- Dick Blumberg with the 15-inch bubble chamber refrigerator. Patent release 10/14/1959. Photograph taken October 5, 1959. Bubble Chamber-816; ZN-3303.
XBD201211-01601.TIF -- Model of computer with Tom Taussig. Photograph taken October 7, 1959. Bubble Chamber-820.
XBD201211-01602.TIF -- Ferrite core plane assembly. Photograph taken October 14, 1959. Bubble Chamber-823.
XBD201211-01603.TIF -- Logic board: 7V6161. Photograph taken October 16, 1959. Bubble Chamber-825.
XBD201211-01604.TIF -- 72-inch bubble chamber event with inset diagram. Production of an anti-sigma-zero. Photograph taken October 19, 1959. Bubble Chamber-827A.
XBD201211-01605.TIF -- Mark III measuring projector. Photograph taken November 18, 1959. Bubble Chamber-840.
XBD201211-01606.TIF -- Bubble chamber piping. Photograph taken November 25, 1959. Bubble Chamber-853.
XBD201211-01607.TIF -- Bubble chamber piping. Photograph taken November 25, 1959. Bubble Chamber-858.
XBD201211-01608.TIF -- Measuring projector 2A illumination, film transport. The three clear discs to the left are acrylic light source control lenses. Photograph taken December 10, 1959. Bubble Chamber-862.
XBD201211-01609.TIF -- 72-inch bubble chamber tape control. Photograph taken January 12, 1960. Bubble Chamber-868.
XBD201211-01610.TIF -- 4-inch bubble chamber showing entrance and exit windows with VP cell visible. Photograph taken January 14, 1960. Bubble Chamber-874; ZN-2518.
XBD201211-01611.TIF -- 4-inch bubble chamber with magnet coil. Photograph taken January 14, 1960. Bubble Chamber-875; ZN-2587.
XBD201211-01612.TIF -- 4-inch bubble chamber out of LN jacket. Patent release 5/12/1960. Photograph taken January 14, 1960. Bubble Chamber-876; ZN-2519.
XBD201211-01613.TIF -- 4-inch bubble chamber. Photograph taken January 13, 1960. Bubble Chamber-886; ZN-2523.
XBD201211-01614.TIF -- Hi-speed buffer memory. Photograph taken February 3, 1960. Bubble Chamber-896.
XBD201211-01615.TIF -- Inelastic anti-proton charge exchange followed by anti-neutron annihilation. Photograph taken April 19, 1960. Bubble Chamber-908.
XBD201211-01616.TIF -- Anti-lambda plus sigma found in the 72-inch hydrogen bubble chamber. Photograph taken April 22, 1960. Bubble Chamber-909.
XBD201211-01617.TIF -- Differential ray on incident antipion. Photograph taken April 22, 1960. Bubble Chamber-911.

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# Records Transmittal

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|---|---|---|
| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201211-01619.TIF -- Bubble chamber event: antipion-proton pair hits bottom of chamber. Photograph taken May 25, 1960. Bubble Chamber-916.
XBD201211-01620.TIF -- Cosmic ray event. Photograph taken July 1, 1960. Bubble Chamber-924.
XBD201211-01621.TIF -- 20-inch hydrogen bubble chamber. Photograph taken June 21, 1960, courtesy of Dr. Ralph Shutt, Brookhaven National Laboratory. Bubble Chamber-932; ZN-2458.
XBD201211-01622.TIF -- Digitized track segment. Photograph taken June 20, 1960. Bubble Chamber-921; ZN-2667.
XBD201211-01623.TIF -- Bubble chamber event. Photograph taken July 21, 1960. Bubble Chamber-937.
XBD201211-01624.TIF -- Bubble chamber event through spiral reader scanning disc. Photograph undated. Bubble Chamber-950.
XBD201211-01625.TIF -- Bubble chamber event, pairs decay. Photograph taken October 5, 1960. Bubble Chamber-958.
XBD201211-01626.TIF -- Bubble chamber displays stopping tritons, deuterons, protons. Photograph taken October 19, 1960. Bubble Chamber-960.
XBD201211-01627.TIF -- 10-inch bubble chamber positive film tracks. Photograph undated. Bubble Chamber-976.
XBD201211-01628.TIF -- 72-inch bubble chamber negative film tracks. Photograph undated. Bubble Chamber-977.
XBD201211-01629.TIF -- Bubble chamber event. Elastic antiproton-proton scatter near 180 degrees in center of mass with antiproton stopping and annihilating. Photograph taken December 2, 1960. Bubble Chamber-981.
XBD201211-01630.TIF -- Bubble chamber event. Leptonic decay of sigma hyperon, with inset caption. Photograph undated. Bubble Chamber-985A.
XBD201211-01631.TIF -- Bubble chamber event. Antineutron annihilates into three charged pions. Photograph taken March 7, 1961. Bubble Chamber-993.
XBD201211-01636.TIF -- Scanning drum (top view). Photograph taken March 16, 1961. Bubble Chamber-997.
XBD201211-01637.TIF -- Film projector head. Photograph taken March 16, 1961. Bubble Chamber-999.
XBD201211-01638.TIF -- Leptonic decay of sigma hyperon. Patent release 11/19/1962. Photograph taken April 7, 1961. Bubble Chamber-1003.
XBD201211-01639.TIF -- Moving bubble chamber. 72-inch bubble chamber's "walk" from Building 59 to its new temporary site against the Bevatron's west wall. Paul Hernandez of mechanical engineering conceived the ingenious idea of devising a hydraulic walking method. With this system the bubble-chamber magnet could make right angle turns and maneuver into very tight spaces, thus eliminating the need for an outside rigging contractor. Photograph taken July 5, 1961. Bubble Chamber-1018.
XBD201211-01640.TIF -- Moving bubble chamber. 72-inch bubble chamber's "walk" from Building 59 to its new temporary site against the Bevatron's west wall. Paul Hernandez of mechanical engineering conceived the ingenious idea of devising a hydraulic walking method. With this system the bubble-chamber magnet could make right angle turns and maneuver into very tight spaces, thus eliminating the need for an outside rigging contractor. Photograph taken July 5, 1961. Bubble Chamber-1022.
XBD201211-01641.TIF -- Moving bubble chamber. 72-inch bubble chamber's "walk" from Building 59 to its new temporary site against the Bevatron's west wall. Paul Hernandez of mechanical engineering conceived the ingenious idea of devising a hydraulic walking method. With this system

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|---|---|---|
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**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

the bubble-chamber magnet could make right angle turns and maneuver into very tight spaces, thus eliminating the need for an outside rigging contractor. Photograph taken July 5, 1961. Bubble Chamber-1025.
XBD201211-01642.TIF -- Moving bubble chamber. 72-inch bubble chamber's "walk" from Building 59 to its new temporary site against the Bevatron's west wall. Paul Hernandez of mechanical engineering conceived the ingenious idea of devising a hydraulic walking method. With this system the bubble-chamber magnet could make right angle turns and maneuver into very tight spaces, thus eliminating the need for an outside rigging contractor. Photograph taken July 5, 1961. Bubble Chamber-1027.
XBD201211-01643.TIF -- Bubble chamber event. Antiproton film: 4-prong plus anti-electron. Photograph taken July 19, 1961. Bubble Chamber-1034.
XBD201211-01644.TIF -- Film transport system. Patent release 2/15/1962. Photograph taken July 21, 1961. Bubble Chamber-1036.
XBD201211-01645.TIF -- Bubble chamber event. Leptonic decay of a lambda with inset diagram. Photograph undated. Bubble Chamber-1040B.
XBD201211-01646.TIF -- Bubble chamber event. One 4-prong antiproton annihilation. Photograph dated August 17, 1961. Bubble Chamber-1042.
XBD201211-01647.TIF -- Bubble chamber event. Production and decay of a xi zero. Photograph undated. Bubble Chamber-1053A.
XBD201211-01648.TIF -- Bubble chamber event. Production and decay of a xi minus. Photograph undated. Bubble Chamber-1054A.
XBD201211-01649.TIF -- M.P. II-D ("Franckenstein" apparatus). Photograph taken November 30, 1961. Bubble Chamber-1068.
XBD201211-01650.TIF -- M.P. III spiral reader. Photograph taken December 5, 1961. Bubble Chamber-1076.
XBD201211-01651.TIF -- M.P. III spiral reader. Photograph taken December 5, 1961. Bubble Chamber-1082.
XBD201211-01652.TIF -- Technician with the 72-inch bubble chamber microscope measuring apparatus. Photograph taken December 6, 1961. Bubble Chamber-1083A.
XBD201211-01653.TIF -- M.P. II-D ("Franckenstein" apparatus). Patent release 2/15/1962. Photograph taken December 13, 1961. Bubble Chamber-1084.
XBD201211-01654.TIF -- M.P. II-D ("Franckenstein" apparatus). Photograph taken December 13, 1961. Bubble Chamber-1087.
XBD201211-01655.TIF -- John Lax with the M.P. III machine. Photograph taken December 19, 1961. Bubble Chamber-1093.
XBD201211-01656.TIF -- Display chart of subatomic particles. Photograph taken December 21, 1961. Bubble Chamber-1094.
XBD201211-01657.TIF -- Scanning-measuring projector (SMP) for bubble chamber film analysis. Patent release 9/22/1960. Photograph taken May 21, 1962. Bubble Chamber-1121.
XBD201211-01658.TIF -- Scanning-measuring projector (SMP) main mirror. Photograph taken June 25, 1962. Bubble Chamber-1129.
XBD201211-01659.TIF -- Scanning-measuring projector (SMP) universal low-voltage direct current power supply. Photograph taken June 24, 1962. Bubble Chamber-1141.
XBD201211-01660.TIF -- Aluminum alloy body of 60-inch British national bubble chamber. Photograph taken September 5, 1962. Bubble Chamber-1163.
XBD201211-01661.TIF -- Aluminum alloy body of 60-inch British national bubble chamber. Photograph taken September 5, 1962. Bubble Chamber-1164.

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
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| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201211-01662.TIF -- 25-inch bubble chamber precision window, damaged during polishing. Photograph taken October 17, 1962. Bubble Chamber-1186.
XBD201211-01664.TIF -- 25-inch bubble chamber control panel. Photograph taken October 26, 1962. Bubble Chamber-1201.
XBD201211-01665.TIF -- 25-inch bubble chamber magnet. Photograph taken October 26, 1962. Bubble Chamber-1203.
XBD201211-01666.TIF -- 25-inch bubble chamber magnet. Photograph taken October 26, 1962. Bubble Chamber-1204.
XBD201211-01667.TIF -- 25-inch bubble chamber magnet coil fabrication at Westinghouse. Photograph taken October 30, 1962. Bubble Chamber-1206.
XBD201211-01668.TIF -- Jack Harvey fabricating 25-inch bubble chamber magnet coils at Westinghouse. Photograph taken October 30, 1962. Bubble Chamber-1207.
XBD201211-01669.TIF -- Jack Harvey fabricating 25-inch bubble chamber magnet coils at Westinghouse. Photograph taken October 30, 1962. Bubble Chamber-1210.
XBD201211-01670.TIF -- Glass electrode for spectrometers. Photograph taken November 20, 1962. Bubble Chamber-1211.
XBD201211-01671.TIF -- Scanning-measuring projector (SMP) IV. Photograph taken November 20, 1962. Bubble Chamber-1216.
XBD201211-01672.TIF -- Milling bubble chamber body. Photograph taken November 26, 1962. Bubble Chamber-1221.
XBD201211-01673.TIF -- Fabricating bubble chamber support legs. Photograph taken November 26, 1962. Bubble Chamber-1222.
XBD201211-01674.TIF -- Bubble chamber event. Muonic decay of a neutral k meson with inset diagram. Photograph undated. Bubble Chamber-1240A.
XBD201211-01675.TIF -- Jack Harvey with the 25-inch bubble chamber potted coil. Photograph taken March 6, 1963. Bubble Chamber-1251.
XBD201211-01677.TIF -- 25-inch bubble chamber lens window. Photograph taken March 15, 1963. Bubble Chamber-1260.
XBD201211-01678.TIF -- 25-inch bubble chamber bellows weld. Photograph taken April 23, 1963. Bubble Chamber-1272.
XBD201211-01679.TIF -- 25-inch bubble chamber bellows weld. Photograph taken April 26, 1963. Bubble Chamber-1277.
XBD201211-01680.TIF -- 25-inch bubble chamber, coil potting procedures. Photograph taken May 9, 1963. Bubble Chamber-1282.
XBD201211-01681.TIF -- Scanning-measuring projector (SMP) scan table. Photograph taken July 15, 1963. Bubble Chamber-1296.
XBD201211-01682.TIF -- 25-inch bubble chamber and top plate assembly with Frank Barrera. Photograph taken July 26, 1963. Bubble Chamber-1299.
XBD201211-01683.TIF -- 25-inch bubble chamber and top plate assembly. Photograph taken July 26, 1963. Bubble Chamber-1300.
XBD201211-01685.TIF -- 25-inch bubble chamber, Frank Barrera in background. Photograph taken October 29, 1963. Bubble Chamber-1325.
XBD201211-01686.TIF -- Bubble chamber event. Inset diagram indicating form of A-plus production in peripheral collision (performed at Brookhaven National Laboratory). Photograph taken January 31, 1964. Bubble Chamber-1348.
XBD201211-01687.TIF -- 25-inch bubble chamber plumbing. Photograph taken January 27, 1964. Bubble Chamber-1350.

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**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201211-01688.TIF -- Duane Norgren with 25-inch bubble chamber camera and related equipment. Photograph taken February 6, 1964. Bubble Chamber-1352.
XBD201211-01689.TIF -- Duane Norgren with 25-inch bubble chamber camera and related equipment. Photograph taken February 5, 1964. Bubble Chamber-1354.
XBD201211-01696.TIF -- Cascade 0 production in 14-inch bubble chamber at Brookhaven National Laboratory. Photograph taken March 12, 1964. Bubble Chamber-1366.
XBD201211-01697.TIF -- Ray trace diagrams for first stage of K-63 beam. Photograph taken June 9, 1964. Bubble Chamber-1376.
XBD201211-01698.TIF -- Ray trace diagrams for second stage of K-63 beam. Photograph taken June 9, 1964. Bubble Chamber-1377.
XBD201211-01699.TIF -- Dalitz plots from four antikaon lab events. Each dot represents one event. The kinematic envelopes for each plot are plotted for the minimum and maximum laboratory momentum in that sample. Scales on the four plots are different in order to make most efficient use of the face of the tube. Photograph taken July 28, 1964. Bubble Chamber-1380.
XBD201211-01700.TIF -- Scanning projector 1-F. Photo requested by Jack Franck. Photograph taken September 23, 1964. Bubble Chamber-1397.
XBD201211-01701.TIF -- Bubble chamber event. Particles passing through lead shielding. Photo requested by Ed Hoedemaker. Photograph taken November 17, 1964. Bubble Chamber-1408.
XBD201211-01702.TIF -- Scanning projectors, spiral reader and associated equipment. Photo requested by Bob Atchison. Photograph taken December 15, 1964. Bubble Chamber-1430.
XBD201211-01703.TIF -- Grinding and polishing ceiling mirror for the Scanning-measuring projector (SMP.) Photo requested by Pete Schwemin. Photograph taken February 1, 1965. Bubble Chamber-1438.
XBD201211-01704.TIF -- Jack Borde grinding and polishing the ceiling mirror for the Scanning-measuring projector (SMP.) Photo requested by Pete Schwemin. Photograph taken February 1, 1965. Bubble Chamber-1440.
XBD201211-01705.TIF -- Scanning table used at the CERN Laboratory in Geneva for scanning film from the CERN 80-cm hydrogen bubble chamber. Photograph taken February 16, 1965. Bubble Chamber-1449.
XBD201211-01706.TIF -- 72-inch bubble chamber Gardner Denver panel. Photograph taken June 7, 1965. Bubble Chamber-1471.
XBD201211-01707.TIF -- Jack Kroll with the base plate for the 80-inch stereo camera. Polyethylene bags to keep part from sagging while being scraped to 0.0005-inch. Photograph taken June 8, 1965. Bubble Chamber-1479.
XBD201211-01708.TIF -- SPV-B X measuring head. Photograph taken August 9, 1965. Bubble Chamber-1494.
XBD201211-01709.TIF -- Bubble chamber explosion at Cambridge, Massachusetts. Photo requested by Ed Hoedemaker. Photograph taken October 15, 1965. Bubble Chamber-1543.
XBD201211-01710.TIF -- Bubble chamber explosion at Cambridge, Massachusetts. Photo requested by Ed Hoedemaker. Photograph taken October 15, 1965. Bubble Chamber-1544.
XBD201211-01711.TIF -- Bubble chamber explosion at Cambridge, Massachusetts. Photo requested by Ed Hoedemaker. Photograph taken October 15, 1965. Bubble Chamber-1548.
XBD201211-01712.TIF -- Bubble chamber explosion at Cambridge, Massachusetts, concrete-slab roof blown off. Photo requested by Ed Hoedemaker. Photograph taken October 15, 1965. Bubble Chamber-1549.
XBD201211-01713.TIF -- Bubble chamber explosion at Cambridge, Massachusetts. Photo requested by Ed Hoedemaker. Photograph taken October 15, 1965. Bubble Chamber-1551.

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
|---|---|---|
| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201211-01714.TIF -- Bubble chamber explosion at Cambridge, Massachusetts. Photo requested by Ed Hoedemaker. Photograph taken October 15, 1965. Bubble Chamber-1553.
XBD201211-01715.TIF -- Bubble chamber explosion at Cambridge, Massachusetts. Photo requested by Ed Hoedemaker. Photograph taken July 5, 1965. Bubble Chamber-1557.
XBD201211-01716.TIF -- Spiral reader operating console. Photograph taken November 15, 1965. Bubble Chamber-1588.
XBD201211-01717.TIF -- Spiral reader scan table. Photograph taken November 15, 1965. Bubble Chamber-1589.
XBD201211-01718.TIF -- Spiral reader R-Theta data display. Photograph taken November 15, 1965. Bubble Chamber-1592.
XBD201211-01719.TIF -- Spectrometer glass grinding. Photograph taken December 2, 1965. Bubble Chamber-1595.
XBD201211-01720.TIF -- Brookhaven National Laboratory 80-inch bubble chamber camera. Photograph taken December 6, 1965. Bubble Chamber-1607.
XBD201211-01721.TIF -- Brookhaven National Laboratory 80-inch bubble chamber camera, Luis Alvarez (standing center). Photograph taken December 6, 1965. Bubble Chamber-1612.
XBD201211-01722.TIF -- Scanning-measuring projector (SMP) overhead mirror. Photograph taken December 22, 1965. Bubble Chamber-1618.
XBD201211-01723.TIF -- Bubble chamber event. Kaon leptonic decays, a typical event, with inset diagram. Photograph taken January 13, 1966. Bubble Chamber-1619A.
XBD201211-01724.TIF -- Spiral reader with technician. Photograph taken April 25, 1966. Bubble Chamber-1712.
XBD201211-01725.TIF -- Bubble chamber event track with descriptive diagram. Photo requested by John Kadyk. Photograph taken May 13, 1966. Bubble Chamber-1716.
XBD201211-01726.TIF -- 25-inch bubble chamber in block house. Photo requested by Paul Hernandez. Photograph taken May 9, 1966. Bubble Chamber-1741.
XBD201211-01727.TIF -- H.E.P.P.E. main gondola components. Photograph taken June 1, 1966. Bubble Chamber-1784.
XBD201211-01728.TIF -- H.E.P.P.E. main gondola components. Photograph taken June 1, 1966. Bubble Chamber-1790.
XBD201211-01729.TIF -- Main gondola H.E.P.P.E. Zero. Photograph taken May 31, 1966. Bubble Chamber-1792.
XBD201211-01730.TIF -- Crutch point digitizer. Photograph taken July 27, 1966. Bubble Chamber-1798.
XBD201211-01731.TIF -- Crutch point digitizer. Photograph taken July 27, 1966. Bubble Chamber-1800.
XBD201211-01732.TIF -- Dynamic crossed field electron multiplier, Stanford Beam Project. Photograph taken August 10, 1966. Bubble Chamber-1822.
XBD201211-01733.TIF -- Cherenkov bag and equipment. Photograph taken August 24, 1966. Bubble Chamber-1836.
XBD201211-01734.TIF -- Spiral reader. Photograph taken November 23, 1966. Bubble Chamber-1871.
XBD201405-00604.TIF -- 72-inch bubble chamber event showing the characteristic kinked tracks due to both a negative and positive sigma, caption included. Bubble Chamber-72.

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
|---|---|---|
| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

Box 2 Photos:

XBD9606-02952.TIF -- Injector tank completely open from outside, showing injector nozzle. Mario Carotta is shown fabricating one of the four straight connecting segments of the bevatron. Photograph taken December 29, 1953. Patent release 3/25/1960. Bevatron-656.

XBD9606-02953.TIF -- Artist's rendering of the bevatron and bevatron building. The beam injector is at 4 o'clock, the experimental area and emergent beam at 8 o'clock. photograph taken May 15, 1949. Bevatron-26.

XBD9606-02955.TIF -- Interior of bevatron building under construction. Preparation for foundation to be poured for magnet. Photograph taken June 13, 1950. Bevatron-260.

XBD9606-02956.TIF -- Large motor generators, with 65-ton flywheels for storing power, supplied 100,000 kilowatts to the bevatron for each accelerating cycle of 1.85 seconds. Photograph taken July 19, 1951. Bevatron-439.

XBD9606-02957.TIF -- A Cockroft-Walton accelerator (right) feeding protons to an Alvarez linac (center) for injection into the bevatron at 10 MeV. Photograph taken February 5, 1954. Patent release 9/29/1958. Bevatron-680.

XBD9606-02965.TIF -- Anti-proton detecting setup at the bevatron. Photograph taken October 6, 1955. Bevatron-933.

XBD9606-02966.TIF -- Blackboard showing day-to-day results of the antiproton experiment were displayed in the bevatron. Photograph taken October 6,1955. Bevatron-943.

XBD9606-02969.TIF -- Antiproton experiment at the time of the discovery of the antiproton. From left to right: Dr. Emilio Segre, Dr. Clyde Wiegand, Dr. Edward Lofgren, Dr. Owen Chamberlain and Tom Ypsilantis, then a graduate student. Drs. Chamberlain and Segre were awarded the Nobel Prize in physics in 1959 for the discovery. Photograph taken October 6, 1955. Bevatron-940.

XBD9607-03554.TIF -- Antiproton experiment at the time of the discovery of the antiproton. From left to right: Dr. Emilio Segre, Dr. Clyde Wiegand, Dr. Edward Lofgren, Dr. Owen Chamberlain and Tom Ypsilantis, then a graduate student. Drs. Chamberlain and Segre were awarded the Nobel Prize in physics in 1959 for the discovery. Photograph taken October 6, 1955. Bevatron-939.

XBD9609-04772.TIF -- Spark chamber automatic scanning system (SASS) is shown with four members of the group who worked on its design and development. Left to right: Don Zurlinden, Ray Kenyon, Leroy Kerth and Al Clark. Photograph taken November 21, 1966. Bevatron-4135.

XBD9703-01215.TIF -- Overall view of the Bevatron. Ed Lofgren seated, center. Photograph taken October 1960. Bevatron-2140; color version 2140-C.

XBD9705-02171.TIF -- Moveable targets (gap mounted traveling flip targets) can be positioned and even removed from Bevatron tank by remote control. Mechanical engineer Ken Stone, who designed the mechanism, checks installation. Targets can be raised into position in less than 100 milliseconds. Photograph taken December 18, 1962. Bevatron-3181.

XBD9705-02172.TIF -- Heart of new injection system is the 19 Mev strong-focusing linear accelerator. The Linac II was built and tested in Building 64, then moved by truck to its permanent site at the Bevatron. Not visible in the picture is the 480 kv Cockcroft-Walton ion gun that starts the protons on their long ride to relativistic energies. Image includes Glen White, Bob Richter, Bill Everett. Color version: Bev.-3137-C. Photograph taken November 15, 1962. Bevatron-3122.

XBD9705-02179.TIF -- West main motor generator set pole piece dove tail failure discovered by electronics technician Willie Thompson during a routine inspection. Photo taken December 19, 1966. Bevatron-4134.

XBD9708-03296.TIF -- Wilson Powell's set up at the Bevatron, Building 51. Photograph taken June 23, 1961. Bevatron-2254.

XBD9709-03469.TIF -- Bevatron main control room with Robert Richter, Building 51. Photograph

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
|---|---|---|
| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

taken April 28, 1954. Bevatron-733; ZN-1001.
XBD9709-03488.TIF -- Bevatron scale model with D. Neilson Photograph taken October 20, 1949. Bevatron-157.
XBD9709-03489.TIF -- Bevatron building under construction, external framework in place. Photograph taken March 28, 1950. Bevatron-226.
XBD9709-03490.TIF -- Ernest O. Lawrence, Edwin McMillan, William Brobeck, and Edward Lofgren looking at plans in bevatron. Photograph taken February 5, 1954. Bevatron-678. See also XBD201310-04019.TIF for similar.
XBD9709-03491.TIF -- Bevatron anti-proton set-up. From left to right: Emilio Segre, Clyde Wiegand, Edward Lofgren, Owen Chamberlain, and Tom Ypsilantis. Photograph taken October 6, 1955. Patent release 1/11/1960. Bevatron-938.
XBD9709-03553.TIF -- Eight-inch quadrapole magnet with Bob Kilpatrick. Photograph taken June 21, 1956. Bevatron-1085.
XBD9709-03554.TIF -- Bevatron parallel plate spectrometer. Photograph taken May 8, 1959. Bevatron-1795.
XBD9709-03556.TIF -- Grading and site work for bevatron (looking southwest). Photograph taken July 15, 1949. Bevatron-64.
XBD9709-03557.TIF -- Northwest view of bevatron site, as construction begins. Photograph taken October 6, 1949. Bevatron-149.
XBD9709-03558.TIF -- Southwest corner of the bevatron building construction area. Photograph taken November 17, 1949. Bevatron-171.
XBD9709-03561.TIF -- North view of the Bevatron building during construction. Photograph taken September 29, 1950. Bevatron-328.
XBD9709-03562.TIF -- Construction of the Bevatron magnet core (publicity view). Photograph taken September 26, 1951. Bevatron-449.
XBD9709-03563.TIF -- Linac injector for the bevatron turning mechanism at Building 51. Photograph taken May 2, 1952. Bevatron-450.
XBD9709-03564.TIF -- Bevatron, moving curve tank into magnet for storage. Petent clearance 6/25/1959. Photo taken December 17, 1952. Released for publication in German magazine, "Wonders of the World," by Gottstein for Luis Alvarez, March 26, 1957. Bevatron-517.
XBD9709-03565.TIF -- Bevatron (Bldg. 51) taken from Bldg. 50. Photograph taken January 25, 1954. Bevatron-674.
XBD9709-03566.TIF -- Installing injector inflector at bevatron.Photograph taken January 20, 1954. Bevatron-668.
XBD9709-03567.TIF -- Anti-neutron discovery team with the focus magnet of the bevatron accelerator, the machine they used to create and detect the anti-particle of the neutron. From left: William Wenzel, Bruce Cork, Glen Lambertson, and Oreste Piccioni. This team's discovery of the antineutron, together with the discovery of the antiproton, confirmed Dirac's prediction of antimatter. Photograph taken September 21, 1956. Bevatron-1154.
XBD9908-01831.TIF -- Segre's anti-proton experiment counting area with Clyde Wiegand at the bevatron, Bldg. 51. Photograph taken April 17, 1959. Bevatron-1784.
XBD200103-00490.TIF -- Bevatron model magnet AC8, 22 1/2-degree section. Photograph taken September 9, 1949. Bevatron-103.
XBD200103-00491.TIF -- View from crane truck. Photograph taken October 20, 1958. Bevatron-623.
XBD200103-00492.TIF -- Interior of bevatron building under construction. Preparation for foundation to be poured. Photograph taken June 2, 1950. Bevatron-255.

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
|---|---|---|
| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD200204-00192.TIF -- Bevatron excavation looking west. Photograph taken July 28, 1949. Bevatron-78.
XBD200204-00193.TIF -- Bevatron excavation site looking southeast. Photograph taken August 29, 1949. Bevatron-101.
XBD200204-00194.TIF -- Site and grading work for the bevatron. Bldg. 50 under construction. Photograph taken March 29, 1949. Bevatron-20.
XBD200304-00260.TIF -- Bevatron building construction site looking southwest. Photograph taken February 23, 1950. Bevatron-211.
XBD200304-00261.TIF -- General view of bevatron building construction site for Andersson Report. Photograph taken January 4, 1950. Bevatron-187.
XBD200304-00262.TIF -- Bevatron building under construction, magnet room interior. Photograph taken August 25, 1950. Bevatron-295.
XBD200304-00263.TIF -- Bevatron magnet foundation. Photograph taken August 25, 1950. Bevatron-307.
XBD200304-00264.TIF -- Bevatron magnet core showing foundation and supports. Photograph taken November 2, 1950. Bevatron-337.
XBD200304-00265.TIF -- General view of Bevatron magnet, south side.
Photograph taken March 11, 1952. Bevatron-471.
XBD200304-00266.TIF -- Overall view of Bevatron, showing shielding.
Photograph taken March 1954. Bevatron-692.
XBD200304-00267.TIF -- Bevatron, showing shielding. Photograph taken July 14, 1955. Bevatron-889.
XBD200304-00268.TIF -- Fabrication of foundation for Bevatron shielding. Photograph taken April 4, 1957. Bevatron-1285.
XBD200404-00185.TIF -- Close up of bevatron west tank, open. Photograph taken December 29, 1953. Patent release 2/3/1059. Bevatron-657.
XBD200404-00186.TIF -- Overall view of bevatron showing injector, left foreground. Patent release 10/1/1962. Photograph taken October 20, 1958. Bevatron-1654.
XBD200404-00187.TIF -- Quadrant of magnet core of bevatron. Patent release 4/20/1959. Photograph taken November 22, 1950. Bevatron-354.
XBD200404-00188.TIF -- Coil winding operation for bevatron magnet quadrant #3. Photograph taken September 19, 1951. Bevatron-448.
XBD200404-00189.TIF -- Bevatron building under construction, magnet room interior. Photograph taken August 1, 1950. Bevatron-288.
XBD200511-00376.TIF -- Initial stage of bevatron construction, looking northwest. Photograph taken September 29, 1949. Bevatron-132.
XBD200511-00377.TIF -- Wide angle view of injector tank completely open from outside, showing injector nozzle. Mario Carotta is shown fabricating one of the four straight connecting segments of the Bevatron. Photograph taken December 29, 1953. Patent release 3/21/1960. Bevatron-654.
XBD200511-00378.TIF -- Bevatron building interior construction looking west. Photograph taken June 28, 1950. Bevatron-267.
XBD200511-00379.TIF -- Interior of the Bevatron magnet room during construction. Photograph taken October 31, 1950. Bevatron-331.
XBD200511-00380.TIF -- Bevatron magnet core showing foundation and supports. Photograph taken November 2, 1950. Bevatron-336.
XBD200511-00381.TIF -- Bevatron, south side of the magnet room. Photograph taken November 29, 1950. Bevatron-362.

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
|---|---|---|
| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD200511-00382.TIF -- General view of injector bouncer. Photograph taken June 19, 1953. Bevatron-574.
XBD200511-00383.TIF -- Overall view of bevatron. Photograph taken December 4, 1953. Patent clearance 3/21/1960. Bevatron-627.
XBD200511-00384.TIF -- View of Bevatron building construction, looking north. Photograph taken April 14, 1950. Bevatron-244.
XBD200511-00385.TIF -- Construction of central column supports for the Bevatron. Photograph taken February 8, 1950. Bevatron-203.
XBD200511-00386.TIF -- Interior of bevatron building under construction. Photograph taken April 22, 1950. Bevatron-247.
XBD200511-00387.TIF -- Overall view of the bevatron. Patent release 3/21/1960. Color version: Bevatron-1653-C. Photograph taken October 20, 1958. Bevatron-1653.
XBD200603-00046.TIF -- Panoramic view of interior of the bevatron. Photograph taken April 3, 1956. Bevatron-1049.
XBD201211-01735.TIF -- Bevatron building model showing inside, includes the crane system magnet and a model of a person for scale. Photograph taken May 13, 1948. Bevatron-25.
XBD201211-01736.TIF -- Bevatron study number 6: Diagram showing floor plan of Bevatron. Requested by Ray Wakerling. Photograph taken September 28, 1948. Bevatron-55.
XBD201211-01737.TIF -- Preliminary drawing of Bevatron building. Photograph taken January 11, 1949. Bevatron-119.
XBD201211-01738.TIF -- Grading and site work for Bevatron. Photograph taken January 14, 1949. Bevatron-129.
XBD201212-01749.TIF -- Grading and site work for Bevatron. Photograph taken January 14, 1949. Bevatron-130.
XBD201212-01750.TIF -- Grading and site work for Bevatron area warehouse. Photograph taken January 14, 1949. Bevatron-131.
XBD201212-01751.TIF -- Grading and site work for Bevatron. Photograph taken February 7, 1949. Bevatron-11.
XBD201212-01752.TIF -- Grading and site work for Bevatron. Caterpillar tractors pulling out lower area. Requested by Dick Carnel. Photograph taken February 18, 1949. Bevatron-14.
XBD201212-01753.TIF -- Grading and site work for Bevatron (looking west toward North Berkeley and Albany.) Photograph taken March 8, 1949. Bevatron-15.
XBD201212-01754.TIF -- Grading and site work for Bevatron. Photograph taken March 26, 1949. Bevatron-17.
XBD201212-01755.TIF -- Pipeline for Bevatron grading and site work. Photograph taken March 29, 1949. Bevatron-22.
XBD201212-01756.TIF -- Bevatron grading and site work, Wilson Tract. Photograph taken April 19, 1949. Bevatron-23.
XBD201212-01757.TIF -- Bevatron grading and site work, looking toward Building 50. Photograph taken May 16, 1949. Bevatron-27.
XBD201212-01758.TIF -- Scale model of Bevatron. Photograph taken May 25, 1949. Bevatron-32.
XBD201212-01759.TIF -- Scale model of Bevatron, with roof off. Photograph taken May 25, 1949. Bevatron-36.
XBD201212-01760.TIF -- Bevatron site preparation, looking toward Building 50. Photograph taken June 17, 1949. Bevatron-37.
XBD201212-01761.TIF -- Bevatron site preparation. Photograph taken June 17, 1949. Bevatron-41.
XBD201212-01762.TIF -- Bevatron site preparation, looking toward cyclotron. Requested by Dave

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
|---|---|---|
| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

Carnel. Photograph taken June 17, 1949. Bevatron-43.
XBD201212-01763.TIF -- Excavation and site work for Bevatron and Bevatron warehouse. Photograph taken June 27, 1949. Bevatron-49.
XBD201212-01764.TIF -- Excavation and site work for Bevatron, looking south. Photograph taken July 6, 1949. Bevatron-54.
XBD201212-01765.TIF -- Bevatron magnet core tools, yoke slab, and assembly fixture bed frame. Photograph taken July 1, 1949. Bevatron-60.
XBD201212-01766.TIF -- Schematic drawing of Bevatron building and surrounding area. Photograph taken July 22, 1949. Bevatron-62.
XBD201212-01767.TIF -- West end Bevatron excavation site. Photograph taken July 15, 1949. Bevatron-68.
XBD201212-01768.TIF -- Drawing of Bevatron, October 1, 1947. Bevatron-73.
XBD201212-01769.TIF -- Bevatron excavation looking north. Photograph taken July 29, 1949. Bevatron-81.
XBD201212-01770.TIF -- Bevatron excavation, grading, and site work. Photograph taken August 16, 1949. Bevatron-84.
XBD201212-01771.TIF -- Bevatron yoke assembly. Photograph taken August 17, 1949. Bevatron-91.
XBD201212-01772.TIF -- Bevatron jack earthquake load test. Photograph taken August 24, 1949. Bevatron-100.
XBD201212-01773.TIF -- Bevatron model magnet AC8, 22 1/2-degree section. Photograph taken September 9, 1949. Bevatron-102.
XBD201212-01774.TIF -- Bevatron model magnet AC8, 22 1/2-degree section. Photograph taken September 9, 1949. Bevatron-104.
XBD201212-01775.TIF -- Bevatron model magnet AC8, 22 1/2-degree section. Photograph taken September 9, 1949. Bevatron-106.
XBD201212-01776.TIF -- Jig for Bevatron magnet core. Photograph taken September 9, 1949. Bevatron-109.
XBD201212-01777.TIF -- Model magnet for Bevatron (half assembled). Requested by Duane Sewell. Photograph taken September 9, 1949. Bevatron-112.
XBD201212-01778.TIF -- Bevatron grading and site work, extreme southeast section. Photograph taken September 15, 1949. Bevatron-114.
XBD201212-01779.TIF -- Jig for leg of Bevatron magnet core at Moore dry dock. Photograph taken September 16, 1949. Bevatron-117.
XBD201212-01780.TIF -- Jig for yoke of Bevatron magnet core at Moore dry dock, includes Jim Hodges, Bob Pratt, and Cedric Larsen (unspecified order.) Photograph taken September 16, 1949. Bevatron-120.
XBD201212-01781.TIF -- Jig for yoke of Bevatron magnet core at Moore dry dock, includes Bob Pratt and Cedric Larsen (unspecified order.) Photograph taken September 16, 1949. Bevatron-121.
XBD201212-01782.TIF -- Magnet section for Bevatron magnet core. Photograph taken September 16, 1949. Bevatron-122.
XBD201212-01783.TIF -- Bevatron magnet core assembly, including flipper table. Photograph taken September 16, 1949. Bevatron-123.
XBD201212-01784.TIF -- Grading and initial construction in southeast Bevatron construction site. Photograph taken September 22, 1949. Bevatron-128.
XBD201212-01785.TIF -- General view of Bevatron construction site. Photograph taken September 22, 1949. Bevatron-130.
XBD201212-01786.TIF -- Initial stage of Bevatron building construction. Photograph taken

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
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| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

September 29, 1949. Bevatron-133.
XBD201212-01787.TIF -- Initial stage of Bevatron building construction. Photograph taken September 29, 1949. Bevatron-135.
XBD201212-01788.TIF -- Bevatron construction site, east bank slide area. Photograph taken September 29, 1949. Bevatron-137.
XBD201212-01789.TIF -- Bevatron construction site, south bank slide area. Photograph taken September 29, 1949. Bevatron-138.
XBD201212-01790.TIF -- Curve plotter, top view. Photograph taken October 4, 1949. Bevatron-143.
XBD201212-01791.TIF -- Diagram of the Bevatron magnet cooling system, duct and outer radius circuit. Photograph taken October 10, 1949. Bevatron-145.
XBD201212-01792.TIF -- Southwest view of Bevatron construction site. Photograph taken October 6, 1949. Bevatron-147.
XBD201212-01793.TIF -- Northwest view of Bevatron construction site. Photograph taken October 6, 1949. Bevatron-148.
XBD201212-01794.TIF -- Initial stage of Bevatron building construction. Photograph taken October 13, 1949. Bevatron-152.
XBD201212-01795.TIF -- Cribbing for bracing slide area at the Bevatron construction site. Photograph taken October 20, 1949. Bevatron-153.
XBD201212-01796.TIF -- Bevatron magnet cooling equipment, used for air flow tests of inner radius coil section. Photograph taken October 25, 1949. Bevatron-154.
XBD201212-01797.TIF -- North end of Bevatron construction site with early building construction. Photograph taken October 24, 1949. Bevatron-159.
XBD201212-01798.TIF -- North end view of Bevatron building construction. Requested by Bill Brobeck. Photograph taken October 24, 1949. Bevatron-162.
XBD201212-01813.TIF -- Bevatron model magnet AC8. Photograph taken November 9, 1949. Bevatron-165.
XBD201212-01814.TIF -- Bevatron model magnet AC8. Photograph taken November 9, 1949. Bevatron-166.
XBD201212-01815.TIF -- East slide area of the Bevatron construction site. Photograph taken November 17, 1949. Bevatron-169.
XBD201212-01816.TIF -- Southeast corner of Bevatron building construction site, showing east bank slides. Photograph taken November 17, 1949. Bevatron-170.
XBD201212-01817.TIF -- Southern section of the Bevatron building construction site. Photograph taken November 28, 1949. Bevatron-174.
XBD201212-01818.TIF -- Bevatron magnet coil spacer stack test. Photograph taken December 5, 1949. Bevatron-177.
XBD201212-01819.TIF -- Bevatron magnet coil spacer stack test. Photograph taken December 5, 1949. Bevatron-178.
XBD201212-01820.TIF -- One unit of thirteen for the Bevatron injector RF rectifier (40KV at 100KC). Photograph taken December 6, 1949. Bevatron-180.
XBD201212-01821.TIF -- Bevatron building construction site looking east. Photograph taken December 6, 1949. Bevatron-183.
XBD201212-01822.TIF -- Bevatron building construction site looking northeast. Photograph taken December 6, 1949. Bevatron-184.
XBD201212-01823.TIF -- Model Bevatron radio-frequency system (diagram). Photograph taken December 28, 1949. Bevatron-186.
XBD201212-01824.TIF -- Ion source for ion gun. Photograph taken December 29, 1949. Bevatron-

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**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

189.
XBD201212-01825.TIF -- Ion gun injector. Patent release 4/20/1959. Photograph taken January 12, 1950. Bevatron-194.
XBD201212-01826.TIF -- Ion gun injector. Photograph taken January 12, 1950. Bevatron-195.
XBD201212-01827.TIF -- Bevatron building construction. Photograph taken January 30, 1950. Bevatron-197.
XBD201212-01828.TIF -- Ion gun for Bevatron. Photograph taken February 3, 1950. Bevatron-198.
XBD201212-01829.TIF -- Bevatron cooling tube, rubber spacer pressure test. Photograph taken February 7, 1950. Bevatron-206.
XBD201212-01830.TIF -- Northeast side of the Bevatron building construction site. Photograph taken February 23, 1950. Bevatron-209.
XBD201212-01831.TIF -- Southwest view of the Bevatron building construction site. Photograph taken March 2, 1950. Bevatron-215.
XBD201212-01832.TIF -- Cascade rectifier. Photograph taken March 10, 1950. Bevatron-216.
XBD201212-01833.TIF -- Cascade rectifier. Photograph taken March 10, 1950. Bevatron-217.
XBD201212-01834.TIF -- Cascade rectifier. Photograph taken March 10, 1950. Bevatron-218.
XBD201212-01835.TIF -- Ion gun, cascade rectifier. Photograph taken March 10, 1950. Bevatron-220.
XBD201212-01836.TIF -- Ion gun, cascade rectifier. Photograph taken March 10, 1950. Bevatron-222.
XBD201212-01837.TIF -- Ion gun, cascade rectifier, 13 units stacked. Photograph taken March 10, 1950. Bevatron-224.
XBD201212-01838.TIF -- High voltage electrode rectifier and accelerator column, Crockcroft-Walton accelerator. Photograph taken March 31, 1950. Bevatron-228.
XBD201212-01839.TIF -- High voltage electrode rectifier and accelerator column, Crockcroft-Walton accelerator. Photograph taken March 31, 1950. Bevatron-229.
XBD201212-01841.TIF -- Injector, ion gun showing surrounding enclosure and Crockcroft-Walton accelerator. Photograph taken March 31, 1950. Bevatron-230.
XBD201212-01842.TIF -- Drayage of the 93-foot, 21-ton crane beam heading to the Bevatron building. Photograph taken April 6, 1950. Bevatron-232.
XBD201212-01843.TIF -- Bevatron core assembly at Gilmore Steel. Photograph taken April 6, 1950. Bevatron-236.
XBD201212-01844.TIF -- Bevatron core assembly at Gilmore Steel, plate cutting. Photograph taken April 6, 1950. Bevatron-242.
XBD201212-01845.TIF -- View of Bevatron building construction, east wing. Photograph taken April 14, 1950. Bevatron-246.
XBD201212-01846.TIF -- Bevatron building interior construction. Photograph taken April 22, 1950. Bevatron-248.
XBD201212-01847.TIF -- Sample castings for Bevatron magnet coil, radial tie anchors. Photograph taken April 19, 1950. Bevatron-251.
XBD201212-01848.TIF -- Bevatron building construction, south side. Photograph taken May 11, 1950. Bevatron-253.
XBD201212-01849.TIF -- Bevatron building interior construction. Photograph taken June 1, 1950. Bevatron-256.
XBD201212-01850.TIF -- Bevatron magnet foundation reinforcing, showing insulators. Photograph taken June 13, 1950. Bevatron-263.
XBD201212-01851.TIF -- Bevatron magnet foundation reinforcing. Photograph taken June 13,

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1950. Bevatron-264.
XBD201212-01852.TIF -- Bevatron magnet foundation reinforcing. Photograph taken June 13, 1950. Bevatron-266.
XBD201212-01853.TIF -- Corona test setup on Bevatron cable and supports. Photograph taken June 29, 1950. Bevatron-271.
XBD201212-01854.TIF -- Steel-reinforced concrete magnet supports being constructed in Bevatron. Photograph taken June 28, 1950. Bevatron-274.
XBD201212-01855.TIF -- Steel-reinforced concrete magnet supports being constructed in the Bevatron. Photograph taken June 28, 1950. Bevatron-275.
XBD201212-01856.TIF -- Steel-reinforcing for concrete magnet supports being constructed in Bevatron. Photograph taken June 28, 1950. Bevatron-276.
XBD201212-01857.TIF -- Magnet generator room. Photograph taken August 1, 1950. Bevatron-287.
XBD201212-01858.TIF -- Magnet foundation. Photograph taken August 1, 1950. Bevatron-291.
XBD201212-01859.TIF -- Low voltage excitation cubicle. Photograph taken August 17, 1950. Bevatron-293.
XBD201212-01860.TIF -- Dual T.C. vacuum gauge panel. Photograph taken September 12, 1950. Bevatron-311.
XBD201212-01861.TIF -- Dual T.C. vacuum gauge panel. Photograph taken September 12, 1950. Bevatron-313.
XBD201212-01862.TIF -- Interior of the Bevatron generator room. Photograph taken September 29, 1950. Bevatron-322.
XBD201212-01864.TIF -- Interior of the Bevatron magnet room during construction. Photograph taken September 29, 1950. Bevatron-323.
XBD201212-01865.TIF -- Interior of the Bevatron generator room during construction. Photograph taken October 31, 1950. Bevatron-332.
XBD201212-01869.TIF -- Bevatron magnet construction. Photograph taken November 17, 1950. Bevatron-347.
XBD201212-01870.TIF -- Bevatron magnet construction. Photograph taken November 17, 1950. Bevatron-348.
XBD201212-01871.TIF -- Bevatron magnet construction. Photograph taken November 17, 1950. Bevatron-351.
XBD201212-01872.TIF -- Bevatron magnet construction. Photograph taken November 17, 1950. Bevatron-353.
XBD201212-01873.TIF -- Coil box for Bevatron magnet. Photograph taken November 17, 1950. Bevatron-355.
XBD201212-01874.TIF -- Bevatron coil test setup. Photograph taken November 28, 1950. Bevatron-356.
XBD201212-01875.TIF -- Bevatron coil test setup, coil bender. Photograph taken November 28, 1950. Bevatron-357.
XBD201212-01876.TIF -- Bevatron generator room, looking south. Patent release 9/28/1959. Photograph taken November 29, 1950. Bevatron-359.
XBD201212-01877.TIF -- Bevatron general view of magnet room, looking southwest. Photograph taken November 29, 1950. Bevatron-360.
XBD201212-01878.TIF -- Bevatron generator room, looking north. Photograph taken November 29, 1950. Bevatron-361.
XBD201212-01879.TIF -- Bevatron general view of the magnet room. Photograph taken November 29, 1950. Bevatron-363.

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XBD201212-01880.TIF -- Gate valve in vacuum manifold showing wheel and axle assembly supporting valve disk. Photograph taken December 14, 1950. Bevatron-364.
XBD201212-01881.TIF -- Radial bar to corner bar gasket detail. Photograph taken December 14, 1950. Bevatron-365.
XBD201212-01882.TIF -- Molded rubber "H" gaskets used for vacuum seal at corner of radial bar. Photograph taken December 14, 1950. Bevatron-368.
XBD201212-01883.TIF -- Vacuum system tests. Jack Hart performing curve tank test setup. Photograph taken December 14, 1950. Bevatron-369.
XBD201212-01884.TIF -- Bevatron auxiliary building. Photograph taken December 22, 1950. Bevatron-374.
XBD201212-01885.TIF -- 80V. 2A. power supply for Bevatron current marker regulator. Photograph taken January 2, 1951. Bevatron-379.
XBD201212-01886.TIF -- 80V. 2A. power supply for Bevatron current marker regulator (rear view). Photograph taken January 2, 1951. Bevatron-380.
XBD201212-01887.TIF -- Open coil box on end of quadrant. Photograph taken January 9, 1951. Bevatron-382.
XBD201212-01888.TIF -- Test winding of coil, end winding. Photograph taken January 16, 1951. Bevatron-391.
XBD201212-01890.TIF -- General view of the Bevatron magnet room. Photograph taken February 27, 1951. Bevatron-394.
XBD201212-01891.TIF -- Bevatron coil winding operation. Photograph taken March 19, 1951. Bevatron-395.
XBD201212-01892.TIF -- Bevatron coil winding operation, quadrant end section. Photograph taken March 19, 1951. Bevatron-400.
XBD201212-01893.TIF -- Cinched cable on internal winding. Photograph taken March 20, 1951. Bevatron-401.
XBD201212-01894.TIF -- Coil winding, use of tapered board on lateral bend. Photograph taken March 28, 1951. Bevatron-407.
XBD201212-01895.TIF -- First quadrant of coil box winding. Photograph taken April 9, 1951. Bevatron-411.
XBD201212-01896.TIF -- Internal winding, inner radius. Photograph taken April 9, 1951. Bevatron-412.
XBD201212-01897.TIF -- Internal windings, inner and outer radii. Photograph taken April 9, 1951. Bevatron-413.
XBD201212-01898.TIF -- Dee, close up of slit. Photograph taken April 11, 1951. Bevatron-416.
XBD201212-01899.TIF -- Injector arc source, dee assembly. Photograph taken April 11, 1951. Bevatron-417.
XBD201212-01900.TIF -- Upper coil box of Bevatron magnet quadrant. Photograph taken April 13, 1951. Bevatron-418.
XBD201212-01901.TIF -- Coil winding, interlayer spring support installation. Patent clearance 6/25/1959. Photograph taken April 13, 1951. Bevatron-420.
XBD201212-01902.TIF -- Inter-layer spring supports for coils. Patent clearance 6/25/1959. Photograph taken April 13, 1951. Bevatron-421.
XBD201212-01903.TIF -- Top coil winding operation. Photograph taken April 20, 1951. Bevatron-423.
XBD201212-01904.TIF -- Upper coil box, east end quadrant #1. Photograph taken May 14, 1951. Bevatron-428.

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**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201212-01905.TIF -- Coil winding operation for Bevatron magnet, second quadrant. Patent clearance 6/25/1959. Photograph taken June 4, 1951. Bevatron-431.
XBD201212-01906.TIF -- Ignitrons in the Bevatron generator room. Photograph taken July 19, 1951. Bevatron-433.
XBD201212-01907.TIF -- Second quadrant, coil winding operation. Photograph taken July 19, 1951. Bevatron-440.
XBD201212-01908.TIF -- Switchgear level showing 540KW motor generator and diesel generator set for emergency (250KVA-480V). Photograph taken July 7, 1951. Bevatron-442.
XBD201212-01909.TIF -- Linac accelerator DT alignment and spacing. Photograph taken May 2, 1952. Bevatron-452.

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**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

Box 1 Photos:

XBD201212-01910.TIF -- Bevatron model magnet AC8 tangent tank assembly. Photograph taken May 23, 1952. Bevatron-457.
XBD201302-01962.TIF -- New linac tank. Photograph taken October 10, 1961. Bevatron-2383.
XBD201302-01963.TIF -- Installing new flywheel at the Bevatron. Photograph taken October 12, 1961. Bevatron-2385.
XBD201302-01964.TIF -- Interior of linac tank. Photograph taken October 12, 1961. Bevatron-2386.
XBD201302-01965.TIF -- Removal of old flywheel at the Bevatron. Photograph taken October 10, 1961. Bevatron-2391.
XBD201302-01966.TIF -- Abe Glicksman with flexible joint mold. Photograph taken October 12, 1961. Bevatron-2400.
XBD201302-01967.TIF -- Mold for RBE III coil. Photograph taken October 12, 1961. Bevatron-2404.
XBD201302-01968.TIF -- Quadrant 4 upper coil re-support. Photograph taken October 13, 1961. Bevatron-2406.
XBD201302-01969.TIF -- North inside platform in the Bevatron building. Photograph taken October 13, 1961. Bevatron-2408.
XBD201302-01970.TIF -- New flywheel at the Bevatron. Photograph taken October 13, 1961. Bevatron-2411.
XBD201302-01971.TIF -- Target probe assembly. Photograph taken October 12, 1961. Bevatron-2413.
XBD201302-01972.TIF -- Flywheel installation progress. Photograph taken October 16, 1961. Bevatron-2414.
XBD201302-01973.TIF -- Flywheel installation progress. Photograph taken October 16, 1961. Bevatron-2416.
XBD201302-01974.TIF -- Bevatron external proton beam, magnet plunging activator. Photograph taken October 17, 1961. Bevatron-2427.
XBD201302-01975.TIF -- Grain-sized studies on flange end of new flywheel and shaft (x100 magnification.) Photograph taken October 18, 1961. Bevatron-2438.
XBD201302-01976.TIF -- Grain-sized studies on flange end of new flywheel and shaft (x100 magnification). Photograph taken October 18, 1961. Bevatron-2431.
XBD201302-01977.TIF -- O panels R1220. Photograph taken October 20, 1961. Bevatron-2444.
XBD201302-01978.TIF -- X4 trouble panel, bubble chamber. Photograph taken October 20, 1961. Bevatron-2445.
XBD201302-01979.TIF -- X4 trouble panel, bubble chamber (rear). Photograph taken October 20, 1961. Bevatron-2446.
XBD201302-01980.TIF -- Ion gun III. Photograph taken October 20, 1961. Bevatron-2449.
XBD201302-01981.TIF -- Ion gun III. Photograph taken October 20, 1961. Bevatron-2450.
XBD201302-01982.TIF -- Ion gun III. Photograph taken October 20, 1961. Bevatron-2451.
XBD201302-01983.TIF -- Flywheel installation with unidentified individual. Photograph taken October 20, 1961. Bevatron-2455.
XBD201302-01984.TIF -- Quad III 29-degree area flex joint. Photograph taken October 20, 1961. Bevatron-2457.
XBD201302-01985.TIF -- South igloo wall sleeves. Photograph taken October 20, 1961. Bevatron-2460.
XBD201302-01986.TIF -- Linac tank, installation of cooling tubes. Photograph taken October 20, 1961. Bevatron-2465.

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**Group** Creative Services Offices (CSO)/PhotoLab

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Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201302-01987.TIF -- Ion gun number II. Photograph taken October 20, 1961. Bevatron-2467.
XBD201302-01988.TIF -- Linac support for high energy. Photograph taken October 20, 1961. Bevatron-2469.
XBD201302-01989.TIF -- Linac low energy end support. Photograph taken October 20, 1961. Bevatron-2470.
XBD201302-01990.TIF -- Linac low energy end support (close up view). Photograph taken October 20, 1961. Bevatron-2471.
XBD201302-01991.TIF -- Magnet model. Photograph taken October 23, 1961. Bevatron-2482.
XBD201302-01992.TIF -- Installation of flywheel. Photograph taken October 27, 1961. Bevatron-2485.
XBD201302-01993.TIF -- Epoxy seal mix and application on cooling tubes, Glenn White and Bob Richter. Photograph taken October 27, 1961. Bevatron-2486.
XBD201302-01994.TIF -- Epoxy seal mix and application on cooling tubes. Photograph taken October 27, 1961. Bevatron-2492.
XBD201302-01995.TIF -- Ion gun II, Emery Zajec. Photograph taken November 2, 1961. Bevatron-2495.
XBD201302-01996.TIF -- Ion gun II, Frank Garnier. Photograph taken November 2, 1961. Bevatron-2496.
XBD201302-01997.TIF -- Refrigerator unit. Photograph taken November 2, 1961. Bevatron-2501.
XBD201302-01998.TIF -- Linac tank. Photograph taken October 31, 1961. Bevatron-2505.
XBD201302-01999.TIF -- New Dewars, Rene Ballard. Photograph taken October 30, 1961. Bevatron-2504.
XBD201302-02000.TIF -- Rapid beam ejector III. Photograph taken October 30, 1961. Bevatron-2507.
XBD201302-02001.TIF -- South tangent tank radio induction electrode model II. Photograph taken October 31, 1961. Bevatron-2512.
XBD201302-02002.TIF -- Flywheel installation. Photograph taken October 31, 1961. Bevatron-2514.
XBD201302-02003.TIF -- 29-degree area vacuum tank extension with M-1 magnet. Photograph taken November 2, 1961. Bevatron-2518.
XBD201302-02004.TIF -- Kilovolt main pulse power supply, high-voltage terminal. Photograph taken November 7, 1961. Bevatron-2523.
XBD201302-02005.TIF -- Drift tube installation and alignment. Photograph taken November 13, 1961. Bevatron-2526.
XBD201302-02006.TIF -- Drift tube installation and alignment, Bob Richter. Photograph taken November 13, 1961. Bevatron-2529.
XBD201302-02007.TIF -- Drift tube installation and alignment. Photograph taken November 13, 1961. Bevatron-2532.
XBD201302-02008.TIF -- Injector model II main pulse charging choke, original design. Photograph taken November 27, 1961. Bevatron-2533.
XBD201302-02009.TIF -- 15-kva portable power supply. Photograph taken November 30, 1961. Bevatron-2541.
XBD201302-02010.TIF -- Linac II. Photograph taken December 4, 1961. Bevatron-2542.
XBD201302-02011.TIF -- Linac II. Photograph taken December 4, 1961. Bevatron-2544.
XBD201302-02012.TIF -- Linac II drift tubes. Photograph taken December 4, 1961. Bevatron-2545.
XBD201302-02013.TIF -- Linac II drift tubes. Photograph taken December 4, 1961. Bevatron-2546.
XBD201302-02014.TIF -- Linac II drift tubes. Photograph taken December 4, 1961. Bevatron-2548.
XBD201302-02015.TIF -- Rapid beam ejector II. Photograph taken December 12, 1961. Bevatron-

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**Group** Creative Services Offices (CSO)/PhotoLab

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2552.
XBD201202-02016.TIF -- Ion source. Photograph taken December 13, 1961. Bevatron-2556.
XBD201302-02017.TIF -- Ion source. Photograph taken December 13, 1961. Bevatron-2557.
XBD201302-02018.TIF -- Ion source. Photograph taken December 13, 1961. Bevatron-2560.
XBD201303-02025.TIF -- 4-jaw aperture and beam transformer housing assembly - Bevatron Injector II. Photograph taken December 20, 1961. Bevatron-2562.
XBD201303-02026.TIF -- 4-jaw aperture and beam transformer housing assembly - Bevatron Injector II. Photograph taken December 20, 1961. Bevatron-2565.
XBD201303-02027.TIF -- Main pulse power supply after revisions. Photograph taken January 18, 1962. Bevatron-2574.
XBD201303-02028.TIF -- Q2 coil. Photograph taken January 22, 1962. Bevatron-2575.
XBD201303-02029.TIF -- Potting tank and oven. Photograph taken January 22, 1962. Bevatron-2579.
XBD201303-02030.TIF -- Main pulse power supply after revisions. Photograph taken January 23, 1962. Bevatron-2581.
XBD201303-02031.TIF -- Deplating linac II. Photograph taken January 24, 1962. Bevatron-2582.
XBD201303-02032.TIF -- Deplating linac II. Photograph taken January 24, 1962. Bevatron-2586.
XBD201303-02033.TIF -- Deplating head, Ross Nemetz. Photograph taken January 24, 1962. Bevatron-2589.
XBD201303-02034.TIF -- Bevatron annex utility trench. Photograph taken January 26, 1962. Bevatron-2592.
XBD201303-02035.TIF -- Bevatron annex utility trench. Photograph taken January 26, 1962. Bevatron-2593.
XBD201303-02036.TIF -- Bevatron annex utility trench. Photograph taken January 26, 1962. Bevatron-2595.
XBD201303-02037.TIF -- Dalic plating on injector II linac tank. Photograph taken February 2, 1962. Bevatron-2619.
XBD201303-02038.TIF -- Bob Meuser with Dalic plating on injector II linac tank. Photograph taken February 2, 1962. Bevatron-2622.
XBD201303-02039.TIF -- Vince Romano with Bevatron external proton beam, internal deflection magnet Q1. Photograph taken February 9, 1962. Bevatron-2623.
XBD201303-02040.TIF -- Walt Wenzel with Bevatron external proton beam, internal deflection magnet Q1. Photograph taken February 9, 1962. Bevatron-2625.
XBD201303-02041.TIF -- Bevatron external proton beam, internal deflection magnet Q2. Photograph taken February 9, 1962. Bevatron-2626.
XBD201303-02042.TIF -- Tunnel elevation rod, Tran Canton. Photograph taken March 6, 1962. Bevatron-2634.
XBD201303-02043.TIF -- Bevatron injector II, ion gun to linac, viewing bad assembly. Photograph taken March 7, 1962. Bevatron-2637.
XBD201303-02044.TIF -- Bevatron RF system, wide-band driver model II. Photograph taken March 15, 1962. Bevatron-2640.
XBD201303-02045.TIF -- Bevatron RF system, wide-band driver model II. Photograph taken March 15, 1962. Bevatron-2641.
XBD201303-02047.TIF -- Bevatron RF system, wide-band driver model II. Photograph taken March 15, 1962. Bevatron-2644.
XBD201303-02048.TIF -- M-1 Q1 assembly. Photograph taken March 20, 1962. Bevatron-2652.
XBD201303-02049.TIF -- 6-inch chevron seal housing. Photograph taken March 20, 1962. Bevatron-

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**Group** Creative Services Offices (CSO)/PhotoLab

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2653.
XBD201303-02050.TIF -- South tank, external proton beam magnets. Photograph taken March 30, 1962. Bevatron-2664.
XBD201303-02051.TIF -- South tank, external beam magnets. Photograph taken March 30, 1962. Bevatron-2667.
XBD201303-02052.TIF -- East tank, external proton beam magnets. Photograph taken March 30, 1962. Bevatron-2671.
XBD201303-02053.TIF -- Measurement equipment on Sagane magnet. Photograph taken April 20, 1962. Bevatron-2687.
XBD201303-02054.TIF -- Bevatron injector II, main pulse line power supply. Photograph taken April 17, 1962. Bevatron-2691.
XBD201303-02055.TIF -- Bevatron injector II, main pulse line power supply. Photograph taken April 17, 1962. Bevatron-2692.
XBD201303-02056.TIF -- Bevatron Mark II linac drift tube, ball alignment jigs in place. Photograph taken April 17, 1962. Bevatron-2697.
XBD201303-02057.TIF -- Bevatron Mark II linac, drift tube alignment jigs, end outlet. Photograph taken April 17, 1962. Bevatron-2699.
XBD201303-02058.TIF -- Bevatron Mark II linac, drift tube alignment jigs: prism holder with prism and lamps. Photograph taken April 17, 1962. Bevatron-2701.
XBD201303-02059.TIF -- Tolestrup set-up, Cal Tech, John Barale. Photograph taken April 30, 1962. Bevatron-2703.
XBD201303-02060.TIF -- Igloo wall at pit. Photograph taken May 22, 1962. Bevatron-2742.
XBD201303-02061.TIF -- Q1 magnet. Photograph taken May 28, 1962. Bevatron-2749.
XBD201303-02062.TIF -- Mark II injector. Photograph taken May 28, 1962. Bevatron-2750.
XBD201303-02063.TIF -- Mark II injector. Photograph taken May 18, 1962. Bevatron-2752.
XBD201303-02064.TIF -- Mark II injector. Photograph taken May 18, 1962. Bevatron-2753.
XBD201303-02065.TIF -- Mark II injector. Photograph taken May 18, 1962. Bevatron-2755.
XBD201303-02066.TIF -- Mark II injector. Photograph taken May 18, 1962. Bevatron-2757.
XBD201303-02067.TIF -- Misalignment of oil type transformer. Photograph taken May 31, 1962. Bevatron-2765.
XBD201303-02068.TIF -- Injector II, gun to linac section buncher. Photograph taken June 7, 1962. Bevatron-2768.
XBD201303-02069.TIF -- External proton beam magnet plunging actuator. Photograph taken June 7, 1962. Bevatron-2769.
XBD201303-02070.TIF -- Model of Bevatron new shielding. Photograph taken June 11, 1962. Bevatron-2771. Color version: Bev.-2772-C.
XBD201303-02071.TIF -- Model of shielding blocks. Photograph taken June 11, 1962. Bevatron-2773.
XBD201303-02072.TIF -- Walt Wenzel with external proton beam magnet, plunging actuator. Photograph taken June 11, 1962. Bevatron-2777.
XBD201303-02073.TIF -- Accelerating electrode Mark II, Ken Lou in background. Photograph taken June 15, 1962. Bevatron-2781.
XBD201303-02074.TIF -- IM 1 magnet assembly. Photograph taken June 21, 1962. Bevatron-2783.
XBD201303-02075.TIF -- Vacuum tank for IM 1. Photograph taken June 21, 1962. Bevatron-2787.
XBD201303-02076.TIF -- Potting tank. Photograph taken June 28, 1962. Bevatron-2795.
XBD201303-02079.TIF -- Shielding for Bevatron at the Richmond site. Photograph taken July 13, 1962. Bevatron-2804.

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**Group** Creative Services Offices (CSO)/PhotoLab

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XBD201303-02081.TIF -- Shielding for Bevatron at the Richmond site. Photograph taken July 13, 1962. Bevatron-2807.
XBD201303-02082.TIF -- Bevatron modification project. Photograph taken July 13, 1962. Bevatron-2816.
XBD201303-02083.TIF -- Bevatron modification project. Photograph taken July 13, 1962. Bevatron-2817.
XBD201303-02084.TIF -- Injector II inflector magnet IM 2. Photograph taken July 19, 1962. Bevatron-2824.
XBD201303-02085.TIF -- Bevatron igloo. Photograph taken July 24, 1962. Bevatron-2832.
XBD201303-02086.TIF -- Auxiliary magnet special to Bevatron external proton beam M-3. Photograph taken July 30, 1962. Bevatron-2834.
XBD201303-02087.TIF -- Bevatron injector - wire orbit magnet IQ prototype, Don Nelson, electronic engineer, right. Photograph taken August 6, 1962. Bevatron-2841.
XBD201303-02088.TIF -- Bevatron injector - wire orbit magnet IQ prototype, Don Nelson, electronic engineer. Photograph taken August 6, 1962. Bevatron-2842.
XBD201303-02089.TIF -- Concrete pouring, Bevatron target area. Photograph taken August 17, 1962. Bevatron-2855.
XBD201303-02090.TIF -- Ignitron anode bushing. Color version: Bev.-2867-C. Photograph taken August 23, 1962. Bevatron-2868.
XBD201303-02091.TIF -- Bevatron alteration, center steel section (second section). Photograph taken August 28, 1962. Bevatron-2874.
XBD201303-02092.TIF -- Bevatron alteration, center steel section (second section). Photograph taken August 28, 1962. Bevatron-2875.
XBD201303-02093.TIF -- Bevatron alteration, center steel section (second section). Photograph taken August 28, 1962. Bevatron-2876.
XBD201303-02094.TIF -- Bevatron alteration, center steel section (second section). Photograph taken August 28, 1962. Bevatron-2879.
XBD201303-02095.TIF -- Bevatron alteration, center steel section (second section). Photograph taken August 28, 1962. Bevatron-2881.
XBD201303-02096.TIF -- Bevatron alteration, center steel section (second section). Photograph taken August 28, 1962. Bevatron-2882.
XBD201303-02097.TIF -- Bevatron alteration, center steel section (second section). Photograph taken August 28, 1962. Bevatron-2886.
XBD201303-02098.TIF -- Bevatron alteration, center steel section (second section). Photograph taken August 28, 1962. Bevatron-2887.
XBD201303-02099.TIF -- Bevatron alteration, center steel section (second section). Photograph taken August 28, 1962. Bevatron-2891.
XBD201303-02100.TIF -- Bevatron alteration, center section (third section). Photograph taken August 29, 1962. Bevatron-2896.
XBD201303-02101.TIF -- Bevatron alteration, center section (third section). Photograph taken August 29, 1962. Bevatron-2898.
XBD201303-02102.TIF -- Bevatron alteration, center section (third section). Photograph taken August 29, 1962. Bevatron-2903.
XBD201303-02103.TIF -- Bevatron alteration, center section (fourth section). Photograph taken August 30, 1962. Bevatron-2906.
XBD201303-02104.TIF -- Bevatron alteration, center steel section (second section). Photograph taken August 28, 1962. Bevatron-2878.

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
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| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201303-02105.TIF -- Bevatron alteration, center steel section (second section). Photograph taken August 28, 1962. Bevatron-2880.
XBD201303-02106.TIF -- Bevatron alteration, center steel section (second section). Photograph taken August 28, 1962. Bevatron-2883.
XBD201303-02107.TIF -- Bevatron alteration, center steel section (second section). Photograph taken August 28, 1962. Bevatron-2884.
XBD201303-02108.TIF -- Bevatron alteration, center steel section (second section). Photograph taken August 28, 1962. Bevatron-2885.
XBD201303-02109.TIF -- Bevatron alteration, center steel section (second section) on a truck in Bevatron parking lot looking up towards Building 90. Photograph taken August 28, 1962. Bevatron-2888.
XBD201303-02110.TIF -- Bevatron alteration, center steel section (second section). Photograph taken August 28, 1962. Bevatron-2889.
XBD201303-02111.TIF -- Bevatron alteration, center steel section (second section). Photograph taken August 28, 1962. Bevatron-2890.
XBD201303-02112.TIF -- Bevatron alteration, center steel section (second section). Photograph taken August 28, 1962. Bevatron-2892.
XBD201303-02113.TIF -- Bevatron alteration, center steel section (second section), on flatbed truck. Photograph taken August 28, 1962. Bevatron-2893.
XBD201303-02114.TIF -- Bevatron alteration, center steel section (third section). Photograph taken August 29, 1962. Bevatron-2894.
XBD201303-02115.TIF -- Bevatron alteration, center steel section (third section). Photograph taken August 29, 1962. Bevatron-2895.
XBD201303-02116.TIF -- Bevatron alteration, center steel section (third section). Photograph taken August 29, 1962. Bevatron-2897.
XBD201303-02117.TIF -- Bevatron alteration, center steel section (third section). Photograph taken August 29, 1962. Bevatron-2899.
XBD201303-02118.TIF -- Bevatron alteration, center steel section (third section). Photograph taken August 29, 1962. Bevatron-2900.
XBD201303-02119.TIF -- Bevatron alteration, center steel section (third section). Photograph taken August 29, 1962. Bevatron-2901.
XBD201303-02120.TIF -- Bevatron alteration, center steel section (third section). Photograph taken August 29, 1962. Bevatron-2902.
XBD201303-02121.TIF -- Bevatron alteration, center steel section (fourth section). Photograph taken August 30, 1962. Bevatron-2904.
XBD201303-02122.TIF -- Bevatron alteration, center steel section (fourth section). Photograph taken August 30, 1962. Bevatron-2905.
XBD201303-02123.TIF -- Bevatron alteration, center steel section (fourth section). Photograph taken August 30, 1962. Bevatron-2909.
XBD201303-02124.TIF -- Bevatron alteration, center steel section (fourth section). Photograph taken August 30, 1962. Bevatron-2910.
XBD201303-02125.TIF -- Bevatron alteration progress. Photograph taken August 27, 1962. Bevatron-2917.
XBD201303-02126.TIF -- Bevatron alteration progress. Photograph taken September 5, 1962. Bevatron-2922.
XBD201303-02127.TIF -- Bevatron alteration progress. Photograph taken September 5, 1962. Bevatron-2927.

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# Records Transmittal

| Division | Department | Filing Code |
|---|---|---|
| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201303-02128.TIF -- Bevatron alteration progress. Photograph taken September 5, 1962. Bevatron-2929.
XBD201303-02129.TIF -- 89-degree stanchion. Herman Grunder (second from left), Bob Everett, Jack Gunn, and Abe Glicksman. Photograph taken September 10, 1962. Bevatron-2933.
XBD201303-02130.TIF -- 89-degree stanchion, Herman Grunder. Photograph taken September 10, 1962. Bevatron-2934.
XBD201303-02131.TIF -- Linac II disassembly in Building 64. Photograph taken September 11, 1962. Bevatron-2935.
XBD201303-02132.TIF -- Linac II disassembly in Building 64. Photograph taken September 11, 1962. Bevatron-2942.
XBD201303-02133.TIF -- Linac II disassembly in Building 64. Photograph taken September 11, 1962. Bevatron-2943.
XBD201303-02134.TIF -- Linac II disassembly of optical bench, buncher, and quadrapole. Photograph taken September 12, 1962. Bevatron-2947.
XBD201303-02135.TIF -- Linac II disassembly of optical bench, buncher, and quadrapole. Photograph taken September 12, 1962. Bevatron-2949.
XBD201303-02136.TIF -- Linac II disassembly of optical bench, buncher, and quadrapole. Photograph taken September 12, 1962. Bevatron-2950.
XBD201303-02149.TIF -- Bevatron linac II disassembly of optical bench, buncher, and quadrapole. Photograph taken September 12, 1962. Bevatron-2953.
XBD201303-02150.TIF -- Injector magnet III. Photograph taken September 14, 1962. Bevatron-2962.
XBD201303-02151.TIF -- Bevatron alteration progress. Photograph taken September 14, 1962. Bevatron-2970.
XBD201303-02152.TIF -- Bevatron alteration progress. Photograph taken September 14, 1962. Bevatron-2972.
XBD201303-02153.TIF -- Bevatron alteration progress. Photograph taken September 14, 1962. Bevatron-2973.
XBD201303-02154.TIF -- Bevatron alteration progress. Photograph taken September 14, 1962. Bevatron-2975.
XBD201303-02155.TIF -- Concrete pouring in the northeast quadrant at Bevatron, first cap slab. Photograph taken September 14, 1962. Bevatron-2976.
XBD201303-02156.TIF -- Bevatron linac II removal from Building 64. Photograph taken September 19, 1962. Bevatron-2978.
XBD201303-02157.TIF -- Bevatron linac II removal from Building 64. Photograph taken September 19, 1962. Bevatron-2930.
XBD201303-02158.TIF -- Bevatron linac II removal from Building 64. Photograph taken September 19, 1962. Bevatron-2981.
XBD201303-02159.TIF -- Bevatron linac II removal from Building 64. Photograph taken September 19, 1962. Bevatron-2982.
XBD201303-02160.TIF -- Bevatron linac II removal from Building 64. Photograph taken September 19, 1962. Bevatron-2983.
XBD201303-02161.TIF -- Bevatron linac II installation. Photograph taken September 19, 1962. Bevatron-2992.
XBD201303-02162.TIF -- Bevatron linac II end plates. For color see Bev.-2997-C. Photograph taken September 19, 1962. Bevatron-2996.
XBD201303-02163.TIF -- Linac II installation. Photograph taken September 21, 1962. Bevatron-

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
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| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

3005.
XBD201303-02164.TIF -- Bevatron alteration progress. Photograph taken September 21, 1962. Bevatron-3007.
XBD201303-02165.TIF -- Bevatron alteration progress. Photograph taken September 21, 1962. Bevatron-3011.
XBD201303-02166.TIF -- Bevatron alteration progress. Photograph taken September 21, 1962. Bevatron-3014.
XBD201303-02167.TIF -- Modification of RF room. Photograph taken September 24, 1962. Bevatron-3015.
XBD201303-02185.TIF -- Modification of RF room. Photograph taken September 21, 1962. Bevatron-3016.
XBD201303-02186.TIF -- View under the west outside platform of the Bevatron, showing shielding. Photograph taken September 24, 1962. Bevatron-3020.
XBD201303-02187.TIF -- Linac II installation. Photograph taken September 25, 1962. Bevatron-3025.
XBD201303-02188.TIF -- Linac II installation. Photograph taken October 1, 1962. Bevatron-3028.
XBD201303-02189.TIF -- Bevatron alteration progress. Photograph taken October 1, 1962. Bevatron-3032.
XBD201303-02190.TIF -- Bevatron alteration progress. Photograph taken October 1, 1962. Bevatron-3034.
XBD201303-02191.TIF -- Bevatron linac II installation. Photograph taken October 5, 1962. Bevatron-3037.
XBD201303-02192.TIF -- Bevatron alteration progress. Photograph taken October 5, 1962. Bevatron-3041.
XBD201303-02193.TIF -- Bevatron alteration progress. Photograph taken October 5, 1962. Bevatron-3043.
XBD201303-02194.TIF -- Bevatron alteration progress. Photograph taken October 12, 1962. Bevatron-3047.
XBD201303-02195.TIF -- Bevatron alteration progress. Photograph taken October 12, 1962. Bevatron-3050.
XBD201303-02197.TIF -- Bevatron alteration progress. Photograph taken October 12, 1962. Bevatron-3058.
XBD201303-02198.TIF -- Bevatron shielding supports. Loren Dodds examining faults in igloo pour. Photograph taken October 18, 1962. Bevatron-3061.
XBD201303-02199.TIF -- Bevatron shielding supports, faults in igloo pour. Photograph taken October 18, 1962. Bevatron-3066.
XBD201303-02200.TIF -- Diffusion pump floor drain study. Photograph taken October 18, 1962. Bevatron-3069.
XBD201303-02201.TIF -- Bevatron alteration progress. Photograph taken October 19, 1962. Bevatron-3074.
XBD201303-02202.TIF -- Bevatron alteration progress. Photograph taken October 19, 1962. Bevatron-3077.
XBD201303-02203.TIF -- Linac drift tube alignment gear, Glen White. Photograph taken October 23, 1962. Bevatron-3078.
XBD201303-02204.TIF -- Linac ion gun exit vacuum system, Glen White. Photograph taken October 23, 1962. Bevatron-3079.
XBD201303-02205.TIF -- Bevatron alteration progress. Photograph taken October 26, 1962.

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| Division | Department | Filing Code |
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| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

Bevatron-3082.
XBD201303-02206.TIF -- Bevatron alteration progress. Photograph taken October 26, 1962. Bevatron-3083.
XBD201303-02207.TIF -- Bevatron alteration progress. Photograph taken October 26, 1962. Bevatron-3084.
XBD201303-02208.TIF -- Bevatron alteration progress. Photograph taken October 26, 1962. Bevatron-3087.
XBD201303-02209.TIF -- Bevatron alteration progress. Photograph taken October 26, 1962. Bevatron-3093.
XBD201303-02210.TIF -- Bevatron alteration progress. Photograph taken November 2, 1962. Bevatron-3095.
XBD201303-02211.TIF -- Bevatron alteration progress. Photograph taken November 2, 1962. Bevatron-3098.
XBD201303-02212.TIF -- Bevatron alteration progress. Photograph taken November 2, 1962. Bevatron-3099.
XBD201303-02213.TIF -- Bevatron external proton beam 3A magnet coil assembly. Photograph taken November 8, 1962. Bevatron-3101.
XBD201303-02214.TIF -- Transit stand for linac alignment. Photograph taken November 8, 1962. Bevatron-3102.
XBD201303-02215.TIF -- Progress shot. Bevatron alteration. Photograph taken November 12, 1962. Bevatron-3105.
XBD201303-02216.TIF -- Progress shot. Bevatron alteration. Photograph taken November 12, 1962. Bevatron-3107.

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| Division | Department | Filing Code |
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**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

Box 2 Photos:

XBD201303-02217.TIF -- Progress shot. Bevatron alteration. Photograph taken November 12, 1962. Bevatron-3108.
XBD201303-02218.TIF -- Progress shot. Bevatron alteration. Photograph taken November 12, 1962. Bevatron-3110.
XBD201303-02219.TIF -- Progress shot. Bevatron alteration. Photograph taken November 12, 1962. Bevatron-3113.
XBD201303-02220.TIF -- Bevatron external proton beam, internal beam deflection Q-2 and M-2 magnet assembly for south tangent tank. Photograph taken November 15, 1962. Bevatron-3117.
XBD201303-02221.TIF -- Full view of linac II, includes Glen White, Foss Crosby, and Bob Richter. Color version: Bev.-3138-C. Photograph taken November 15, 1962. Bevatron-3121.
XBD201303-02222.TIF -- Full view of linac II. Color version: Bev.-3140-C. Photograph taken November 15, 1962. Bevatron-3124.
XBD201303-02223.TIF -- Progress shot. Bevatron alteration. Photograph taken November 16, 1962. Bevatron-3125.
XBD201303-02224.TIF -- Progress shot. Bevatron alteration. Photograph taken November 16, 1962. Bevatron-3126.
XBD201303-02225.TIF -- Progress shot. Bevatron alteration. Photograph taken November 16, 1962. Bevatron-3135.
XBD201303-02226.TIF -- Progress shot. Bevatron alteration. Photograph taken November 16, 1962. Bevatron-3136.
XBD201303-02227.TIF -- Progress shot. Bevatron alteration. Photograph taken November 26, 1962. Bevatron-3147.
XBD201303-02228.TIF -- Vacuum checking extension tank, quadrant II, 89-degree area, includes Otto Draeger, right. Photograph taken December 5, 1962. Bevatron-3148.
XBD201303-02229.TIF -- Bevatron vacuum checking extension tank, quadrant II, 89-degree area, includes Abe Glicksman, center, and Otto Draeger, right. Photograph taken December 5, 1962. Bevatron-3149.
XBD201303-02230.TIF -- Bevatron, external. Photograph taken December 5, 1962. Bevatron-3150.
XBD201303-02231.TIF -- Injector inflector in east tangent tank. Photograph taken December 7, 1962. Bevatron-3151.
XBD201303-02232.TIF -- External proton beam magnet in east tangent tank. Photograph taken December 7, 1962. Bevatron-3153.
XBD201303-02233.TIF -- External proton beam magnet in south tangent tank. Photograph taken December 7, 1962. Bevatron-3154.
XBD201303-02234.TIF -- Bevatron linac II installation. Photograph taken December 7, 1962. Bevatron-3156.
XBD201303-02235.TIF -- Bevatron linac II installation. Photograph taken December 7, 1962. Bevatron-3157.
XBD201303-02236.TIF -- Progress shot. Bevatron alteration. Photograph taken December 7, 1962. Bevatron-3163.
XBD201303-02237.TIF -- Progress shot. Bevatron alteration. Photograph taken December 17, 1962. Bevatron-3170.
XBD201303-02238.TIF -- Progress shot. Bevatron alteration. Photograph taken December 17, 1962. Bevatron-3171.
XBD201303-02239.TIF -- Progress shot. Bevatron alteration. Photograph taken December 17, 1962. Bevatron-3174.

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
|---|---|---|
| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201303-02240.TIF -- Gap mounted traveling flip target tank installation, exterior view. Photograph taken December 18, 1962. Bevatron-3183.
XBD201303-02241.TIF -- Gap mounted traveling flip target tank installation, interior view. Photograph taken December 18, 1962. Bevatron-3186.
XBD201303-02242.TIF -- Leg bold pump. Photograph taken December 20, 1962. Bevatron-3191.
XBD201304-02248.TIF -- Oscilloscope screen. Top frame: top sweep-south sum electrode; bottom sweep-photo multiplier on outer west platform. Detailed speed information on card. Photograph taken May 1, 1956. Bevatron-1064.
XBD201304-02249.TIF -- Top sweep-drift tube RF; bottom sweep-photomultiplier on west outside platform; sweep speed: 500 microseconds/cm, trigger 24+90 ms. Photograph taken May 1, 1956. Bevatron-1065.
XBD201304-02250.TIF -- Top frame: RF drift tube; bottom frame: photomultiplier. Card contains speed information. Photograph taken May 1, 1956. Bevatron-1066.
XBD201304-02251.TIF -- Top trace-photomultiplier on outer west platform; bottom trace-magnet current 10a/cm at 2.5 Ka trigger I 24; sweep speed: 2 ms/cm. Photograph taken May 1, 1956. Bevatron-1067.
XBD201304-02252.TIF -- Top frame: injected beam, which is not accepted as RF, is turned on. Sweep speed 200 microseconds/cm. Trigger at injection on; bottom frame: injected beam profile as seen by ion robe at 583-inches, without acceleration transistor amplifier used to sense signal; sweep speed: 200 microseconds/cm. Trigger at injection on. Photograph taken May 1, 1956. Bevatron-1068.
XBD201304-02253.TIF -- Injected beam profile as seen by ion probe at 583 inches, without acceleration. Transistor amplifier used to sense signal; sweep speed: 200 microseconds/cm, trigger at injection on. Photograph taken May 1, 1956. Bevatron-1069.
XBD201304-02254.TIF -- Top sweep: south sum induction electrode; bottom sweep: photomultiplier on platform. Detailed speed information on card. Photograph taken May 1, 1956. Bevatron-1070.
XBD201304-02255.TIF -- Top trace: sum induction electrode in south tank; bottom trace: west outside scintillator. Beam spill by RF droop, trigger-I24; sweep speed:10ms/cm. Photograph taken May 1, 1956. Bevatron-1071.
XBD201304-02256.TIF -- Top frame: output of frequency meter; bottom frame: sum induction electrode. Detailed speed and other information on card. Photograph taken May 1, 1956. Bevatron-1072.
XBD201304-02257.TIF -- Top trace: south sum induction electrode; bottom trace: photomultiplier output, P.M. output from west outside platform. 0.1 mil rubber HCL target, trigger I 24; sweep speed: 20ms/cm. Photograph taken May 1, 1956. Bevatron-1073.
XBD201304-02258.TIF -- Top trace: RF voltage on drift tube; bottom trace: beam induction electrode via video amplifier; sweep speed: 200 seconds/cm; sweep trigger: I-24 + 89ms. Photograph taken May 1, 1956. Bevatron-1074.
XBD201304-02259.TIF -- Top trace: output phototube at UIIN 1/2-inch xlxl 1/4-inch Ta target; bottom trace: south induction electrode; trigger I 24; sweep speed: 10 ms/cm. Photograph taken May 1, 1956. Bevatron-1075.
XBD201304-02260.TIF -- Top frame: photomultiplier, magnet current; bottom frame: output phototube, south induction electrode. Photograph taken May 1, 1956. Bevatron-1076.
XBD201304-02261.TIF -- Rubber HCl (hydrocloride) target. Photograph taken May 28, 1956. Bevatron-1080.
XBD201304-02262.TIF -- Effect of ripple-correction circuit on the magnitude of the magnetic-field ripple at injection. Photograph taken June 1, 1956. Bevatron-1081.
XBD201304-02263.TIF -- Effect of ripple-correction circuit on the magnitude of the magnetic-field

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| Division | Department | Filing Code |
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| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

ripple at the start of magnet excitation. Photograph taken June 1, 1956. Bevatron-1082.
XBD201304-02264.TIF -- Effect of ripple-correction circuit on the magnitude of the magnetic-field ripple at 15, 500 gauss. Photograph taken June 1, 1956. Bevatron-1083.
XBD201304-02265.TIF -- Bevatron control room panels. Photograph taken July 19, 1956. Bevatron-1116.
XBD201304-02266.TIF -- Bevatron control room panels. Photograph taken July 19, 1956. Bevatron-1120.
XBD201304-02267.TIF -- Bevatron control room panels. Photograph taken July 19, 1956. Bevatron-1121.
XBD201304-02268.TIF -- Bevatron control room panels, patent clearance. Photograph taken July 19, 1956. Bevatron-1122.
XBD201304-02269.TIF -- Bevatron control room panels. Photograph taken July 19, 1956. Bevatron-1125.
XBD201304-02270.TIF -- North inside tangent tank, high level platform-manifold. Patent clearance. Photograph taken July 17, 1956. Bevatron-1126.
XBD201304-02271.TIF -- Anti-neutron, negative proton experiment. Photograph taken August 8, 1956. Bevatron-1133.
XBD201304-02273.TIF -- Anti-neutron, negative proton experiment. Photograph taken August 8, 1956. Bevatron-1134.
XBD201304-02274.TIF -- Anti-neutron, negative proton experiment. Photograph taken August 8, 1956. Bevatron-1135.
XBD201304-02275.TIF -- Counters for hydrogen target. Photograph taken August 29, 1956. Bevatron-1136.
XBD201304-02276.TIF -- Hydrogen target, with H. Smith. Photograph taken August 29, 1956. Bevatron-1138.
XBD201304-02277.TIF -- Attenuator wafers. Photograph taken September 12, 1956. Bevatron-1140.
XBD201304-02278.TIF -- Bucket, keg, and barrel scintillation counter. Photograph taken September 12, 1956. Bevatron-1141.
XBD201304-02279.TIF -- Bucket scintillation counter. Photograph taken September 12, 1956. Bevatron-1142.
XBD201304-02280.TIF -- 62-inch liquid hydrogen target. Photograph taken September 12, 1956. Bevatron-1144.
XBD201304-02281.TIF -- Perkins power supply. Photograph taken September 12, 1956. Bevatron-1145.
XBD201304-02282.TIF -- Perkins power supply. Photograph taken September 12, 1956. Bevatron-1146.
XBD201304-02284.TIF -- Perkins power supply. Photograph taken September 12, 1956. Bevatron-1147.
XBD201304-02285.TIF -- 8-inch quadrapole focusing magnet. Photograph taken August 6, 1956. Bevatron-1149.
XBD201304-02286.TIF -- 8-inch quadrapole focusing magnet. Photograph taken August 6, 1956. Bevatron-1151.
XBD201304-02287.TIF -- 8-inch quadrapole focusing magnet. Photograph taken August 6, 1956. Bevatron-1152.
XBD201304-02288.TIF -- Anti-neutron discovery team. From left: Bruce Cork, Oreste Piccioni, Glen Lambertson, and William Wenzel. Photograph taken September 21, 1956. Bevatron-1153.
XBD201304-02289.TIF -- Corrosion on conductors, 4-inch quadrapole magnet. Patent release

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
|---|---|---|
| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

11/14/1958. Photograph taken September 26, 1956. Bevatron-1157.
XBD201304-02290.TIF -- Analyzer magnet #1, showing corrosion. Photograph taken October 3, 1956. Bevatron-1159.
XBD201304-02291.TIF -- Analyzer magnet hose nipple erosion. Patent release 11/14/1958. Photograph taken October 5, 1956. Bevatron-1160.
XBD201304-02292.TIF -- Auxiliary magnet trimming shunt. Photograph taken October 8, 1956. Bevatron-1162.
XBD201304-02293.TIF -- P-N cross section device associated with Emilio Segre, with H. Smith. Photograph taken October 18, 1956. Bevatron-1167.
XBD201304-02294.TIF -- X-rays from meson pi-atoms associated with Emilio Segre, with H. Smith. Photograph taken October 18, 1956. Bevatron-1168.
XBD201304-02295.TIF -- X-rays from meson pi-atoms associated with Emilio Segre, with H. Smith. Photograph taken October 18, 1956. Bevatron-1170.
XBD201304-02296.TIF -- P-N cross section device associated with Emilio Segre, with H. Smith. Photograph taken October 18, 1956. Bevatron-1171.
XBD201304-02297.TIF -- P-N cross section device associated with Emilio Segre, with H. Smith. Photograph taken October 18, 1956. Bevatron-1172.
XBD201304-02298.TIF -- P-N cross section device associated with Emilio Segre, with H. Smith. Photograph taken October 18, 1956. Bevatron-1174.
XBD201304-02299.TIF -- Wide band driver with unidentified individual. Photograph taken November 11, 1956. Bevatron-1179.
XBD201304-02300.TIF -- 1,000 amp power supply. Photograph taken November 11, 1956. Bevatron-1184.
XBD201304-02301.TIF -- Condensing unit pump room. Photograph taken November 14, 1956. Bevatron-1186.
XBD201304-02302.TIF -- West inside south probe, with Emory Zajec. Photograph taken November 15, 1956. Bevatron-1189.
XBD201304-02303.TIF -- Ignitron anode seal. Photograph taken November 15, 1956. Bevatron-1190.
XBD201304-02304.TIF -- P-N cross section device, associated with Emilio Segre, Tom Elioff in background. Photograph taken November 29, 1956. Bevatron-1192.
XBD201304-02305.TIF -- P-N cross section device, associated with Emilio Segre. Photograph taken November 29, 1956. Bevatron-1193.
XBD201304-02306.TIF -- P-N cross section device, associated with Emilio Segre. Photograph taken November 29, 1956. Bevatron-1195.
XBD201304-02307.TIF -- P-N cross section device, associated with Emilio Segre. Photograph taken November 29, 1956. Bevatron-1197.
XBD201304-02308.TIF -- P-N cross section device, associated with Emilio Segre. Photograph taken November 29, 1956. Bevatron-1198.
XBD201304-02309.TIF -- P-N cross section device, associated with Emilio Segre. Photograph taken November 29, 1956. Bevatron-1200.
XBD201304-02310.TIF -- Pump room, with Warren Chupp in the background. Patent clearance 6/25/1959. Photograph taken November 11, 1956. Bevatron-1206.
XBD201304-02311.TIF -- Ignitron parts, tube #C44. Photograph taken December 14, 1956. Bevatron-1209.
XBD201304-02312.TIF -- Ignitron parts, tube #C44. Photograph taken December 14, 1956. Bevatron-1211.

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
|---|---|---|
| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201304-02313.TIF -- Vacuum system, Ross Nemetz. Photograph taken December 17, 1956. Bevatron-1214.
XBD201304-02314.TIF -- 8-inch X 60-inch liquid hydrogen target. Photograph taken December 19, 1956. Bevatron-1215.
XBD201304-02315.TIF -- Damaged motor generator #6. Photograph taken December 18, 1956. Bevatron-1217.
XBD201304-02318.TIF -- Motor generator #6 breakdown. Photograph taken December 20, 1956. Bevatron-1219.
XBD201304-02319.TIF -- Motor generator #6 breakdown. Photograph taken December 20, 1956. Bevatron-1220.
XBD201304-02320.TIF -- Theta angle decay, H. Smith. Associated with Moyer and Osher. Photograph taken January 10, 1957. Bevatron-1222.
XBD201304-02321.TIF -- Theta angle experiment associated with Powell and Fowler. Photograph taken January 10, 1957. Bevatron-1224.
XBD201304-02322.TIF -- Final amplifier power supply. Photograph taken January 24, 1957. Bevatron-1225.
XBD201304-02323.TIF -- Bevatron motor generator oil pump lubricating system. Photograph taken January 18, 1957. Bevatron-1227.
XBD201304-02324.TIF -- Breakdown progress. Photograph taken February 15, 1957. Bevatron-1229.
XBD201304-02325.TIF -- Breakdown progress. Photograph taken February 15, 1957. Bevatron-1230.
XBD201304-02326.TIF -- Breakdown progress. Photograph taken February 15, 1957. Bevatron-1231.
XBD201304-02327.TIF -- Breakdown progress. Photograph taken February 15, 1957. Bevatron-1232.
XBD201304-02328.TIF -- Breakdown progress. Photograph taken February 15, 1957. Bevatron-1233.
XBD201304-02329.TIF -- Breakdown progress. Photograph taken February 15, 1957. Bevatron-1236.
XBD201304-02330.TIF -- Eddy current correcting coil. Photograph taken February 15, 1957. Bevatron-1238.
XBD201304-02331.TIF -- Shielding foundation. Photograph taken February 15, 1957. Bevatron-1241.
XBD201304-02332.TIF -- Shielding foundation progress. Photograph taken March 5, 1957. Bevatron-1245.
XBD201304-02333.TIF -- Shielding foundation progress. Photograph taken March 5, 1957. Bevatron-1246.
XBD201304-02334.TIF -- Final amplifier 2332 tube. Photograph taken March 5, 1957. Bevatron-1247.
XBD201304-02335.TIF -- Linac main pulse line. Photograph taken March 5, 1957. Bevatron-1248.
XBD201304-02337.TIF -- Foundation for shielding. Photograph taken March 19, 1957. Bevatron-1252.
XBD201304-02338.TIF -- Foundation for shielding. Photograph taken March 19, 1957. Bevatron-1253.
XBD201304-02339.TIF -- Foundation for shielding. Photograph taken March 19, 1957. Bevatron-1254.

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
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| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201304-02340.TIF -- Main coil re-support, exit quadrant II, outside radius. Photograph taken March 21, 1957. Bevatron-1256.
XBD201304-02341.TIF -- Progress on new platform at north tangent tank. Photograph taken April 4, 1957. Bevatron-1269.
XBD201304-02342.TIF -- Progress on west tank, Ollie Olson. Photograph taken April 4, 1957. Bevatron-1271.
XBD201304-02343.TIF -- Progress on magnet repair. Photograph taken April 4, 1957. Bevatron-1273.
XBD201304-02344.TIF -- Progress on magnet repair. Photograph taken April 4, 1957. Bevatron-1280.
XBD201304-02345.TIF -- Shielding foundation for east tank. Photograph taken April 4, 1957. Bevatron-1283.
XBD201304-02346.TIF -- Shielding foundation. Patent clearance 6/25/1959. Photograph taken April 4, 1957. Bevatron-1284.
XBD201304-02347.TIF -- Shielding foundation. Photograph taken April 5, 1957. Bevatron-1288.
XBD201304-02348.TIF -- Bevatron coil end-winding support structure upper coil box. Support beam overload and testing. Photograph taken April 8, 1957. Bevatron-1290.
XBD201304-02349.TIF -- High voltage lines at north tank. Photograph taken April 12, 1957. Bevatron-1297.
XBD201304-02350.TIF -- Inside vacuum tank. Photograph taken April 12, 1957. Bevatron-1299.
XBD201304-02351.TIF -- Gap-mounted flip-up target for vacuum bearing test. Photograph taken April 16, 1957. Bevatron-1303.
XBD201304-02352.TIF -- Bevatron magnet core, three-sector stanchion proof test setup. Photograph taken April 18, 1957. Bevatron-1305.
XBD201304-02353.TIF -- Bevatron magnet core, three-sector stanchion proof test setup. Photograph taken April 18, 1957. Bevatron-1306.
XBD201304-02354.TIF -- Gap mounted flip-up target vacuum bearing test. Photograph taken April 16, 1957. Bevatron-1307.
XBD201304-02355.TIF -- Three-section stanchion. Photograph taken April 24, 1957. Bevatron-1308.
XBD201304-02356.TIF -- Vacuum snout in North target area with Robert Richter. Photograph taken April 25, 1957. Bevatron-1311.
XBD201304-02357.TIF -- Northwest target area, four-sector stanchion position. Photograph taken May 1, 1957. Bevatron-1313.
XBD201304-02358.TIF -- Four-sector stanchion proof test setup. Photograph taken May 3, 1957. Bevatron-1315.
XBD201304-02359.TIF -- Four-sector stanchion with Bob Richter. Photograph taken May 8, 1957. Bevatron-1320.
XBD201303-02360.TIF -- Four-section stanchion with H. Smith and Bob Pratt. Photograph taken May 8, 1957. Bevatron-1321.
XBD201304-02361.TIF -- Final radio frequency reactor house. Photograph taken May 14, 1957. Bevatron-1325.
XBD201304-02362.TIF -- Mark VI and Mark VII gap-mounted flip-up targets. Photograph taken May 14, 1957. Bevatron-1329.
XBD201304-02363.TIF -- Cooling and electrical pipes for four-sector stanchion. Photograph taken May 15, 1957. Bevatron-1331.
XBD201304-02364.TIF -- Mark VII flip-up target. Photograph taken May 24, 1957. Bevatron-1334.

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
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| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201304-02365.TIF -- Three-sector stanchion in position. Patent clearance 6/25/1959. Photograph taken May 28, 1957. Bevatron-1337.
XBD201304-02366.TIF -- Four-sector stanchion in position. Photograph taken May 28, 1957. Bevatron-1339.
XBD201304-02367.TIF -- Air tunnel shielding support bents. Photograph taken May 29, 1957. Bevatron-1340.
XBD201304-02368.TIF -- West overhead coil support. Photograph taken May 29, 1957. Bevatron-1342.
XBD201304-02369.TIF -- West thin window beam outlet. Photograph taken May 29, 1957. Bevatron-1343.
XBD201304-02370.TIF -- Stanchion air cooling manifold. Photograph taken May 29, 1957. Bevatron-1346.
XBD201304-02371.TIF -- Cockroft-Walton column to stack voltage gradient tubes. Photograph taken May 29, 1957. Bevatron-1347.
XBD201304-02372.TIF -- K-beam setup. Photograph taken July 19, 1957. Bevatron-1350.
XBD201304-02373.TIF -- Stork setup. Photograph taken August 2, 1957. Bevatron-1358.
XBD201304-02374.TIF -- Ku2 parity experiment, side view. Photograph taken August 27, 1957. Bevatron-1360.
XBD201304-02375.TIF -- Scintillator stack. Photograph taken August 30, 1957. Bevatron-1363.
XBD201304-02376.TIF -- Propane bubble chamber setup. Photograph taken September 3, 1957. Bevatron-1364.
XBD201304-02377.TIF -- Propane bubble chamber removed from heat shield. Photograph taken August 29, 1956. CC-371.
XBD201304-02378.TIF -- Propane bubble chamber setup. Photograph taken September 3, 1957. Bevatron-1366.
XBD201304-02382.TIF -- Injection energy-MEV vs frequency-ratio graph-various factors vs injection energy. Drawing associated with the 1/4 scale bevatron working model. Drawing created November 11, 1947. Bevatron Model-7.
XBD201304-02383.TIF -- Bevatron model magnet #1 for the 1/4 scale bevatron working model. Photo taken March 16, 1948. Bevatron Model-15. Requested by Dr. Duane Sewell. Briefly referred to as the Cyclodrome.
XBD201304-02384.TIF -- Bevatron model magnet test DC-6 for the 1/4 scale bevatron working model. Photo taken June 15, 1948. Bevatron Model-36. Requested by Dr. Duane Sewell. Referred to as B-51. Briefly referred to as the Cyclodrome.
XBD201304-02385.TIF -- Evacuation and foundation for housing the 1/4 scale bevatron working model. Photo taken October 19, 1948. Bevatron Model-56. Referred to as B-51. Briefly referred to as the Cyclodrome.
XBD201304-02386.TIF -- Evacuation and foundation for housing the 1/4 scale bevatron working model. Photo taken October 19, 1948. Bevatron Model-59. Referred to as B-51. Briefly referred to as the Cyclodrome.
XBD201304-02387.TIF -- Bevatron operating model building for housing the 1/4 scale bevatron working model. Photo taken November 10, 1948. Bevatron Model-64. Referred to as B-51. Briefly referred to as the Cyclodrome.
XBD201304-02388.TIF -- Bevatron 1/4 scale operating model building showing ring. Photo taken November 18, 1948. Bevatron Model-65. Referred to as B-51. Briefly referred to as the Cyclodrome.
XBD201304-02389.TIF -- Exterior of 1/4 scale bevatron operating model building with 184-inch cyclotron dome in background. Photo taken November 18, 1948.Requested by William Brobeck.

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
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| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

Bevatron Model-73. Referred to as B-51. Briefly referred to as the Cyclodrome.
XBD201304-02390.TIF -- Bevatron building interior showing 1/4 scale bevatron magnet and crane. Photo taken November 26, 1948.Requested by Ernest Lawrence. Bevatron Model-81. Referred to as B-51. Briefly referred to as the Cyclodrome.
XBD201304-02391.TIF -- Magnet construction for 1/4 scale bevatron with Cedric Larson Photo taken December 2, 1948. Requested by William Brobeck. Bevatron Model-85. Briefly referred to as the Cyclodrome.
XBD201304-02392.TIF -- 1/4 scale model bevatron testing. Faces on 18-inch cyclotron with conductor strips. Photo taken December 15, 1948. Requested by William Brobeck. Bevatron Model-92. Briefly referred to as the Cyclodrome.
XBD201304-02393.TIF -- 1/4 scale model bevatron. General view of magnet. Photo taken December 20, 1948. Requested by William Brobeck. Bevatron Model-107. Briefly referred to as the Cyclodrome.
XBD201304-02394.TIF -- 1/4 scale model bevatron. General view of model showing all diffusion pumps with unidentified individual. Photo taken March 27, 1949. Bevatron Model-180. Briefly referred to as the Cyclodrome.
XBD201304-02395.TIF -- Dee for 20-inch cyclotron for 1/4 scale model bevatron/4 injection. Photo taken March 30, 1949. Bevatron Model-183. Briefly referred to as the Cyclodrome.
XBD201304-02396.TIF -- 1/4 scale model bevatron control room. Photo taken May 22, 1949. Bevatron Model-252. Briefly referred to as the Cyclodrome.
XBD201304-02397.TIF -- Cyclotron for 1/4 scale model bevatron. Photo taken August 19, 1949. Requested by Ed Lofgren. Bevatron Model-290. Briefly referred to as the Cyclodrome.
XBD201304-02398.TIF -- William Brobeck and Dr. Ed Lofgren at east tank of 1/4 scale model bevatron (Beva/4.) Photo taken October 20, 1949. Requested by Dan Wilkes. Bevatron Model-329. Briefly referred to as the Cyclodrome.
XBD201304-02399.TIF -- General view of 1/4 scale model bevatron (Beva/4) with Dr. Ed Lofgren (foreground) and Robert Richter. Photo taken October 20, 1949. Requested by Dan Wilkes. Bevatron Model-330. Briefly referred to as the Cyclodrome.
XBD201304-02400.TIF -- Dismantling and moving the 1/4 scale model bevatron (Beva/4.) Photo taken March 10, 1950. Bevatron Model-367. Briefly referred to as the Cyclodrome.
XBD201304-02401.TIF -- Dismantling and moving the 1/4 scale model bevatron (Beva/4.) Photo taken March 10, 1950. Bevatron Model-368. Briefly referred to as the Cyclodrome.
XBD201304-02402.TIF -- Letter associated with 1/4 scale model bevatron; Beva/4; Cyclodrome. To Poliman from W. B. Reynolds. Subject: Construction Directive. Dated July 29, 1948.
XBD201304-02403.TIF -- Letter associated with 1/4 scale model bevatron; Beva/4; Cyclodrome. To: J.H. Corley from: W. B. Reynolds. Subject: Approval of Building to House. Letter contains specifications and costs. Dated July 27, 1948.
XBD201304-02404.TIF -- Letter associated with 1/4 scale model bevatron; Beva/4; Cyclodrome. To: W.B. Reynold, from: A.P. Pollman, Atomic Energy Commission, Subject: Funding approval. Dated August 16, 1948.
XBD201304-02405.TIF -- Letter associated with 1/4 scale model bevatron; Beva/4; Cyclodrome. To: Priestley, from: R.A. Weaver , U.C. Regents, Subject: Funding approval. Dated August 6, 1948.
XBD201304-02406.TIF -- Letter associated with 1/4 scale model bevatron; Beva/4; Cyclodrome. To: W.B. Reynolds, from: J.S. Norton, Subject: cost estimate for portable cyclotron. Dated January 14, 1949.
XBD201304-02407.TIF -- Letter associated with 1/4 scale model bevatron; Beva/4; Cyclodrome. To: Donald Cooksey, from: Howard L. Schultz, Sloane Physics Laboratory, Yale University, Subject:

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
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| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

Request for information about positive ion source. Dated January 24, 1949.
XBD201304-02408.TIF -- Letter associated with 1/4 scale model bevatron; Beva/4; Cyclodrome. To: W.B. Reynolds, from: R.F. Bacher, California Institute of Technology, Pasadena, Subject: Responding to offer of bevatron equipment. Dated July 9, 1951. Page 1 of 2
XBD201304-02409.TIF -- Letter associated with 1/4 scale model bevatron; Beva/4; Cyclodrome. To: W.B. Reynolds, from: R.F. Bacher, California Institute of Technology, Pasadena, Subject: Responding to offer of bevatron equipment. Dated July 9, 1951. Page 2 of 2
XBD201304-02436.TIF -- Beam kicker. Photograph taken September 20, 1957. Bevatron-1369.
XBD201304-02437.TIF -- Beam kicker. Photograph taken September 20, 1957. Bevatron-1370.
XBD201304-02438.TIF -- Beam kicker. Photograph taken September 20, 1957. Bevatron-1371.
XBD201304-02439.TIF -- East tank tangential brace area. Photograph taken September 20, 1957. Bevatron-1376.
XBD201304-02440.TIF -- East tank tangential brace area. Photograph taken September 20, 1957. Bevatron-1378.
XBD201304-02441.TIF -- Beam kicker breakdown. Photograph taken September 27, 1957. Bevatron-1382.
XBD201304-02442.TIF -- Duel Mark VII slip target. Photograph taken September 27, 1957. Bevatron-1386.
XBD201304-02443.TIF -- Silver and copper plated heat exchanger end bells, part of the Bevatron lube-oil circulation system. Photograph taken October 10, 1957. Bevatron-1389.
XBD201304-02444.TIF -- Silver and copper plated heat exchanger end bells, part of the Bevatron lube-oil circulation system. Photograph taken October 10, 1957. Bevatron-1392.
XBD201304-02445.TIF -- Adjusted cullimator, west tangent tank, side view. Photograph taken October 23, 1957. Bevatron-1393.
XBD201304-02446.TIF -- Adjusted cullimator, west tangent tank, close up. Photograph taken October 23, 1957. Bevatron-1396.
XBD201304-02447.TIF -- Bob Fitzpatrick making adjustment to velocity spectrometer. Patent clearance 6/25/1959. Photograph taken October 29, 1957. Bevatron-1397.
XBD201304-02448.TIF -- Mark VI fixed target drive. Photograph taken November 9, 1966. Bevatron-1400A.
XBD201304-02449.TIF -- Murray's coaxial electromagnetic beam separator. Photograph taken November 14, 1957. Bevatron-1405.
XBD201304-02450.TIF -- Cork's parallel plate beam separator. Photograph taken November 14, 1957. Bevatron-1407.
XBD201304-02451.TIF -- Quick release probe plunger head. Photograph taken November 19, 1957. Bevatron-1408.
XBD201304-02452.TIF -- East generator shafter torsion calibration pickup. Photograph taken December 2, 1957. Bevatron-1411.
XBD201304-02453.TIF -- Single return path magnet, 13 X 24 pole. Patent release 10/28/1958. Photograph taken December 2, 1957. Bevatron-1413.
XBD201304-02454.TIF -- Double return path magnet, 18 X 36 poles. Photograph taken December 2, 1957. Bevatron-1414.
XBD201304-02455.TIF -- Single return path magnet, 13 X 24 pole. Photograph taken December 2, 1957. Bevatron-1415.
XBD201304-02456.TIF -- Double return path magnet, 18 X 36 pole. Patent clearance 6/25/1959. Photograph taken December 2, 1957. Bevatron-1416.
XBD201304-02458.TIF -- Decay set up. Photograph taken December 18, 1957. Bevatron-1423.

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
|---|---|---|
| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201304-02459.TIF -- Ignitron anode bushing. Photograph taken January 15, 1958. Bevatron-1432.
XBD201304-02460.TIF -- Segre set up. Photograph taken January 17, 1958. Bevatron-1436.
XBD201304-02461.TIF -- Helium bubble chamber. Photograph taken January 31, 1958. Bevatron-1442.z
XBD201304-02462.TIF -- Spectrometer for 15-inch bubble chamber. Photograph taken January 31, 1958. Bevatron-1443.
XBD201304-02463.TIF -- Scintillator counter. Photograph taken February 5, 1958. Bevatron-1447.
XBD201304-02464.TIF -- C-magnet. Photograph taken February 7, 1958. Bevatron-1449.
XBD201304-02465.TIF -- C-magnet, close up. Patent clearance 6/25/1959. Photograph taken February 7, 1958. Bevatron-1450.
XBD201304-02466.TIF -- Orbit expander chassis. Photograph taken February 13, 1958. Bevatron-1454.
XBD201304-02467.TIF -- Drawing of flip-up target. Photograph taken February 1958. Bevatron-1455.
XBD201304-02468.TIF -- Flip-up targets at north outlet. Photograph taken February 27, 1958. Bevatron-1474.
XBD201304-02469.TIF -- Big scintillation counter (after burner). Photograph taken February 11, 1958. Bevatron-1456.
XBD201304-02470.TIF -- 12-inch long liquid hydrogen target. Photograph taken February 11, 1958. Bevatron-1458.
XBD201304-02471.TIF -- Equipment used for Segre-Powell antiproton experiment. Photograph taken February 21, 1958. Bevatron-1459.
XBD201304-02472.TIF -- Segre-Powell antiproton counting area with Tom Elioff. Photograph taken February 21, 1958. Bevatron-1460.
XBD201304-02473.TIF -- Non-magnetic motor for flip target. Photograph taken February 21, 1958. Bevatron-1463.
XBD201304-02474.TIF -- Torque test non-magnetic motor for flip target. Photograph taken February 21, 1958. Bevatron-1464.
XBD201304-02475.TIF -- Magnetic field compensator at quad 3-90-degrees. Photograph taken February 25, 1958. Bevatron-1465.
XBD201304-02476.TIF -- Rapid beam ejector. Photograph taken February 24, 1958. Bevatron-1468.
XBD201304-02477.TIF -- Rapid beam ejector. Photograph taken February 24, 1958. Bevatron-1469.
XBD201304-02478.TIF -- Flip-up targets at north outlet. Photograph taken February 27, 1958. Bevatron-1473.
XBD201304-02479.TIF -- Bevatron ignitron anode, jig and wrench. Photograph taken March 15, 1958. Bevatron-1478.
XBD201304-02480.TIF -- Bevatron ignitron anode, jig and wrench. Photograph taken March 15, 1958. Bevatron-1480.
XBD201304-02481.TIF -- Bevatron ignitron anode, jig and wrench. Photograph taken March 15, 1958. Bevatron-1481.
XBD201304-02482.TIF -- Machine shop alteration, Ray Jeffre in background. Photograph taken March 14, 1958. Bevatron-1482.
XBD201304-02483.TIF -- Bubble chamber set up. Photograph taken March 14, 1958. Bevatron-1485.
XBD201304-02484.TIF -- Bubble chamber set up. Photograph taken March 14, 1958. Bevatron-1486.

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
|---|---|---|
| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201304-02485.TIF -- Bubble chamber set up. Photograph taken March 14, 1958. Bevatron-1489.
XBD201304-02486.TIF -- H-53 panel. Photograph taken March 20, 1958. Bevatron-1491.
XBD201304-02487.TIF -- HX cross connector close up. Photograph taken March 20, 1958. Bevatron-1493.
XBD201304-02488.TIF -- Drawing of flip-up target area. Photograph taken April 1958. Bevatron-1496.
XBD201304-02489.TIF -- Antiproton set up, Bruce Cork (left), and Glenn Lambertson. Photograph taken April 10, 1958. Bevatron-1515.
XBD201304-02490.TIF -- Antiproton setup. Photograph taken April 10, 1958. Bevatron-1516.
XBD201304-02491.TIF -- Water tower pipes. Photograph taken May 5, 1958. Bevatron-1527.
XBD201304-02492.TIF -- Beam-kicker magnet. Photograph taken May 1958. Bevatron-1544A.
XBD201304-02493.TIF -- Quadrant 3, 28-degree beam aperture. Photograph taken May 21, 1958. Bevatron-1553.
XBD201304-02494.TIF -- New leg slab in position, sector 85 in position. Photograph taken May 21, 1958. Bevatron-1556.
XBD201304-02495.TIF -- Final amplifier reactor boxes. Photograph taken June 13, 1958. Bevatron-1560.
XBD201304-02496.TIF -- Reactor oil system reservoir. Photograph taken June 13, 1958. Bevatron-1561.
XBD201304-02497.TIF -- K-plus meson experiment. Photograph taken June 13, 1958. Bevatron-1565.
XBD201304-02498.TIF -- Bevatron cool experiment. Photograph taken June 13, 1958. Bevatron-1567.
XBD201304-02499.TIF -- West experimental area. Photograph taken June 13, 1958. Bevatron-1570.
XBD201304-02500.TIF -- Ignitron pump 1A, one year after service. Photograph taken June 19, 1958. Bevatron-1572.
XBD201304-02501.TIF -- Beam induction electrode signal during deceleration. Photograph taken July 1958. Bevatron-1574.
XBD201304-02502.TIF -- Indexing head. Photograph taken July 2, 1958. Bevatron-1575.
XBD201304-02503.TIF -- Bevatron generator coil being moved on truck. Photograph taken July 1, 1958. Bevatron-1579.
XBD201304-02504.TIF -- Bevatron generator coil being moved on truck, near the east side of the Bevatron. Patent clearance 6/25/1959. Photograph taken July 1, 1958. Bevatron-1580.
XBD201304-02505.TIF -- Salient pole retaining wedges. Photograph taken July 11, 1958. Bevatron-1581.

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| Division | Department | Filing Code |
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| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

Box 1 Photos:

XBD201304-02506.TIF -- West generator revised lower coil support belts with Bill Salzig. Photograph taken July 29, 1958. Bevatron-1582.
XBD201304-02518.TIF -- Hyperon parity experiment. Photograph taken August 7, 1958. Bevatron-1583.
XBD201304-02519.TIF -- Hyperon parity experiment. Photograph taken August 7, 1958. Bevatron-1584.
XBD201304-02520.TIF -- K meson scattering. Patent release 10/24/1958. Photograph taken August 26, 1958. Bevatron-1587.
XBD201304-02521.TIF -- K meson scattering. Patent release 10/24/1958. Photograph taken August 26, 1958. Bevatron-1588.
XBD201304-02522.TIF -- K meson scattering. Patent release 10/24/1958. Photograph taken August 26, 1958. Bevatron-1591.
XBD201304-02523.TIF -- Val Fitch plunging target. Photograph taken August 26, 1958. Bevatron-1595.
XBD201304-02524.TIF -- Assembly of new leg slab sector 86, Ed Stewart (left). Photograph taken September 17, 1958. Bevatron-1601.
XBD201304-02525.TIF -- Assembly of new leg slab sector 86. Photograph taken September 17, 1958. Bevatron-1602.
XBD201304-02526.TIF -- Moyer's experiment. Photograph taken September 19, 1958. Bevatron-1603.
XBD201304-02527.TIF -- Moyer's experiment. Photograph taken September 19, 1958. Bevatron-1605.
XBD201304-02528.TIF -- Moyer's experiment. Photograph taken September 19, 1958. Bevatron-1606.
XBD201304-02529.TIF -- Brookhaven bending magnet, Bill Salzig. Patent release 10/28/1958. Photograph taken September 26, 1958. Bevatron-1608.
XBD201304-02530.TIF -- Leg slab. Photograph taken October 15, 1958. Bevatron-1609.
XBD201304-02531.TIF -- Leg slab, Abe Glicksman. Photograph taken October 15, 1958. Bevatron-1610.
XBD201304-02532.TIF -- Motor generator room. Color version Bev.-1612C. Photograph taken October 17, 1958. Bevatron-1612.
XBD201304-02533.TIF -- Bevatron building, wide shot looking south, view from building 90 area. Photograph taken October 15, 1958. Bevatron-1614.
XBD201304-02534.TIF -- Survey instrument outside the Bevatron. Photograph taken October 20, 1958. Bevatron-1615.
XBD201304-02535.TIF -- Elmer Silva installing thin window. Photograph taken October 20, 1958. Bevatron-1617.
XBD201304-02536.TIF -- Elmer Silva installing thin window. Photograph taken October 20, 1958. Bevatron-1618.
XBD201304-02537.TIF -- Elmer Silva installing thin window. Photograph taken October 20, 1958. Bevatron-1619.
XBD201304-02538.TIF -- Sheldon Myer and Elmer Silva (right) installing thin window. Photograph taken October 20, 1958. Bevatron-1621.
XBD201304-02539.TIF -- Elmer Silva (right) installing thin window. Photograph taken October 20, 1958. Bevatron-1623.
XBD201304-02540.TIF -- Sheldon Myer and Elmer Silva (right) installing thin window. Photograph

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
|---|---|---|
| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

taken October 21, 1958. Bevatron-1625.
XBD201304-02541.TIF -- Left to right: Sheldon Myer, Pat Callahan, and Elmer Silva Installing thin window. Photograph taken October 21, 1958. Bevatron-1628.
XBD201304-02542.TIF -- Curve marker system peaking transformer. Photograph taken October 21, 1958. Bevatron-1633.
XBD201304-02543.TIF -- Torque wrench, left to right: Hal Vogel and Ken Lou. Photograph taken October 21, 1958. Bevatron-1634.
XBD201304-02544.TIF -- Torque wrench, Ken Lou. Photograph taken October 21, 1958. Bevatron-1635.
XBD201304-02545.TIF -- Bay 3 hydrogen vent. Photograph taken October 22, 1958. Bevatron-1637.
XBD201304-02546.TIF -- Leg slab in position. Patent clearance 6/25/1959. Photograph taken October 22, 1958. Bevatron-1641.
XBD201304-02547.TIF -- Thin window installation. Photograph taken October 22, 1958. Bevatron-1642.
XBD201304-02548.TIF -- Diffusion pump piping at Cockcroft-Walton. Photograph taken October 24, 1958. Bevatron-1644.
XBD201304-02549.TIF -- Diffusion pump plumbing at linac. Photograph taken October 24, 1958. Bevatron-1645.
XBD201304-02550.TIF -- Leg slab. Photograph taken October 24, 1958. Bevatron-1651.
XBD201304-02551.TIF -- Leg slab. Photograph taken October 24, 1958. Bevatron-1652.
XBD201305-02552.TIF -- Curve-proton energy vs radius of magnet, drawing. November 4, 1947. Bevatron Model-3. Model briefly referred to as the Cyclodrome.
XBD201305-02553.TIF -- Bevatron model magnet. February 26, 1948. Associated individuals: Jim Hulse and Duane Sewell. Bevatron Model-14. Model briefly to as the Cyclodrome.
XBD201305-02554.TIF -- Bevatron model magnet #3. February 27, 1948. Associated individual: Duane Sewell. Bevatron Model-16. Model briefly referred to as the Cyclodrome.
XBD201305-02555.TIF -- Bevatron model magnet #4. April 7, 1948. Associated individual: Duane Sewell. Bevatron Model-17. Model briefly referred to as the Cyclodrome.
XBD201305-02556.TIF -- Bevatron model magnet AC-5. May 10, 1948. Associated individual: Duane Sewell. Bevatron Model-22. Model briefly to as the Cyclodrome.
XBD201305-02557.TIF -- Bevatron model magnet DC 3-5. May 10, 1948. Associated individual: Duane Sewell. Bevatron Model-23. Model briefly referred to as the Cyclodrome.
XBD201305-02558.TIF -- Power supply for bevatron AC model magnet with Duane Sewell. May 13, 1948. Bevatron Model-26. Model briefly referred to as the Cyclodrome.
XBD201305-02559.TIF -- Saturable reactor associated with the bevatron model. May 21, 1948. Bevatron Model-26. Model briefly referred to as the Cyclodrome.
XBD201305-02560.TIF -- Bevatron model magnet DC-6. Associated individual: Duane Sewell. June 4, 1948. Bevatron Model-32. Model briefly referred to as the Cyclodrome.
XBD201305-02561.TIF -- Bevatron model magnet DC-6. Associated individual: Duane Sewell. June 4, 1948. Bevatron Model-33 Model briefly referred to as the Cyclodrome.
XBD201305-02562.TIF -- Bevatron model magnet. Associated individual: Duane Sewell. June 10, 1948. Bevatron Model-35 Model briefly referred to as the Cyclodrome.
XBD201305-02563.TIF -- 1/4 scale bevatron magnet yoke. August 31, 1948. Bevatron Model-41. Model briefly referred to as the Cyclodrome.
XBD201305-02564.TIF -- 1/4 scale bevatron magnet with Cedric Larsen. September 14, 1948. Bevatron Model-44. Associated individual: Duane Sewell. Model briefly referred to as the Cyclodrome.

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| Division | Department | Filing Code |
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**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201305-02567.TIF -- 1/4 scale bevatron magnet with Cedric Larsen. September 14, 1948. Bevatron Model-45. Associated individual: Duane Sewell. Model briefly referred to as the Cyclodrome.
XBD201305-02568.TIF -- Van De Graaff generator ion source (revision #3). September 10, 1948. Bevatron Model-46. Model briefly referred to as the Cyclodrome.
XBD201305-02569.TIF -- 1/4 scale bevatron magnet. September 17, 1948. Bevatron Model-49. Associated individual: Duane Sewell. Model briefly referred to as the Cyclodrome.
XBD201305-02570.TIF -- 1/4 scale bevatron magnet with Cedric Larson. September 17, 1948. Bevatron Model-50. Associated individual: Duane Sewell. Model briefly referred to as the Cyclodrome.
XBD201305-02571.TIF -- 1/4 scale-20 degree section bevatron model magnet with Cedric Larson. September 20, 1948. Bevatron Model-51. Associated individual: Duane Sewell. Model briefly referred to as the Cyclodrome.
XBD201305-02572.TIF -- 1/4 scale-20 degree section bevatron model magnet. September 20, 1948. Bevatron Model-52. Associated individual: Duane Sewell. Model briefly referred to as the Cyclodrome.
XBD201305-02573.TIF -- 1/4 scale-20 degree section bevatron model magnet. September 22, 1948. Bevatron Model-54. Model briefly referred to as the Cyclodrome.
XBD201305-02574.TIF -- Excavation for 1/4 scale bevatron operating model building. October 5, 1948. Bevatron Model-58. Model briefly referred to as the Cyclodrome.
XBD201305-02575.TIF -- Building for 1/4 scale bevatron operating model showing the ring. October 29, 1948. Associated individual: William Brobeck. Bevatron Model-60. Model briefly referred to as the Cyclodrome.
XBD201305-02576.TIF -- Thin window installation. Photograph taken October 29, 1958. Bevatron-1655.
XBD201305-02577.TIF -- Leg slab installed. Photograph taken October 29, 1958. Bevatron-1656.
XBD201305-02578.TIF -- Leg slab installed. Photograph taken October 29, 1958. Bevatron-1657.
XBD201305-02579.TIF -- Interior of the Cockroft-Walton accelerator that fed protons to an Alvarez linac for injection into the Bevatron at 10 MeV. Photograph taken October 30, 1958. Bevatron-1658.
XBD201305-02580.TIF -- Plastic bag in leg slab. Photograph taken October 30, 1958. Bevatron-1661.
XBD201305-02581.TIF -- High energy K-beam setup. Photograph taken November 7, 1958. Bevatron-1663.
XBD201305-02582.TIF -- Special spring bars sector 86. Photograph taken November 1, 1958. Bevatron-1675.
XBD201305-02583.TIF -- 300-kv SAMES generator control panel. Patent release 12/1/1958. Photograph taken November 12, 1958. Bevatron-1678.
XBD201305-02584.TIF -- 300-kv SAMES generator control panel. Patent release 12/1/1958. Photograph taken November 12, 1958. Bevatron-1679.
XBD201305-02585.TIF -- 300-kv SAMES generator control panel. Patent release 12/1/1958. Photograph taken November 12, 1958. Bevatron-1682.
XBD201305-02586.TIF -- C-W ion source. Photograph taken December 5, 1958. Bevatron-1685.
XBD201305-02587.TIF -- Ticho's set up in the Bevatron. Photograph taken December 9, 1958. Bevatron-1691.
XBD201305-02588.TIF -- Ticho's set up in the Bevatron. Photograph taken December 9, 1958. Bevatron-1692.
XBD201305-02589.TIF -- Ticho's set up in the Bevatron. Photograph taken December 9, 1958.

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
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| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

Bevatron-1694.
XBD201305-02590.TIF -- Ticho's set up in the Bevatron. Photograph taken December 9, 1958. Bevatron-1695.
XBD201305-02591.TIF -- General view of Building 51A. Photograph taken December 9, 1958. Bevatron-1696.
XBD201305-02592.TIF -- Vertical probe, Ollie Olson and Bob Kilpatrick. Photograph taken December 9, 1958. Bevatron-1698.
XBD201305-02593.TIF -- 4-inch bore quadrupole magnet with MK-III interlocks. Photograph taken December 12, 1958. Bevatron-1699.
XBD201305-02594.TIF -- Generator damage. Photograph taken December 15, 1958. Bevatron-1702.
XBD201305-02595.TIF -- Pole face winding terminations west tank. Photograph taken December 19, 1958. Bevatron-1723.
XBD201305-02596.TIF -- Inside radius of the lower coil throat of west tangent tank. Photograph taken December 19, 1958. Bevatron-1724.
XBD201305-02597.TIF -- Bevatron generator repair. Photograph taken December 24, 1958. Bevatron-1728.
XBD201305-02598.TIF -- Bevatron generator repair. Photograph taken December 24, 1958. Bevatron-1730.
XBD201305-02599.TIF -- 1,000-amp power supply. Photograph taken January 19, 1959. Bevatron-1738.
XBD201305-02600.TIF -- Coil rework, 9 X 12 "C" magnet. Photograph taken January 21, 1959. Bevatron-1741.
XBD201305-02601.TIF -- Coil rework, 13 X 26 "C" magnet. Photograph taken January 21, 1959. Bevatron-1743.
XBD201305-02602.TIF -- Bevatron ion source. Photograph taken January 23, 1959. Bevatron-1747.
XBD201305-02612.TIF -- Mark VIII flip-up target. Photograph taken February 13, 1959. Bevatron-1748.
XBD201305-02613.TIF -- Mark VIII flip target with parts labeled. Photograph taken February 13, 1959. Bevatron-1748A.
XBD201305-02614.TIF -- Bevatron injector: Crockroft-Walton rectifier SeO2 type. Photograph taken February 17, 1959. Bevatron-1752.
XBD201305-02615.TIF -- 30,000-1 speed reduction turning gear. Photograph taken February 19, 1959. Bevatron-1753.
XBD201305-02617.TIF -- Proposed 100-KV power supply for injector. Photograph taken February 25, 1959. Bevatron-1757.
XBD201305-02618.TIF -- Building for 1/4 scale bevatron operating model showing the ring. October 29, 1948. Associated individual: William Brobeck. Bevatron Model-61. Model briefly referred to as the Cyclodrome.
XBD201305-02619.TIF -- Building for 1/4 scale bevatron operating model showing the ring. November 10, 1948. Bevatron Model-62. Model briefly referred to as the Cyclodrome.
XBD201305-02620.TIF -- Building for1/4 scale bevatron operating model showing the ring. November 12, 1948. Associated individual: William Brobeck. Bevatron Model-63. Model briefly referred to as the Cyclodrome.
XBD201305-02621.TIF -- 18-inch cyclotron dee support assembly associated with 1/4 scale bevatron operating model. Associated individual: William Brobeck. November 11, 1948. Bevatron Model-67. Model briefly referred to as the Cyclodrome.
XBD201305-02622.TIF -- Building for 1/4 scale bevatron operating model showing the ring.

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# Records Transmittal

| Division | Department | Filing Code |
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**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

Associated individual: William Brobeck. November 12, 1948. Bevatron Model-71. Model briefly referred to as the Cyclodrome.
XBD201305-02623.TIF -- Dee test associated with 1/4 scale bevatron operating model. Associated individual: William Brobeck. November 17, 1948. Bevatron Model-72. Model briefly referred to as the Cyclodrome.
XBD201305-02624.TIF -- 1/4 scale bevatron operating model building interior. Associated individual: William Brobeck. November 18, 1948. Bevatron Model-74. Model briefly referred to as the Cyclodrome.
XBD201305-02625.TIF -- Magnet construction (coil) for 1/4 scale bevatron operating model. Associated individual: William Brobeck. November 22, 1948. Bevatron Model-75. Model briefly referred to as the Cyclodrome.
XBD201305-02626.TIF -- 1/4 scale bevatron operating model building interior showing cement work and crane. Associated individual: William Brobeck. November 22, 1948. Bevatron Model-77. Model briefly referred to as the Cyclodrome.
XBD201305-02627.TIF -- Van De Graaff generator ion source (revision #3) assembly associated with the 1/4 scale bevatron operating model. Associated individual: William Brobeck. November 22, 1948. Bevatron Model-79. Model briefly referred to as the Cyclodrome.
XBD201305-02628.TIF -- Magnet construction for the 1/4 scale bevatron operating model. Associated individual: William Brobeck. December 2, 1948. Bevatron Model-84. Model briefly referred to as the Cyclodrome.
XBD201305-02629.TIF -- Magnet, hoist, gaps, coils associated with the 1/4 scale bevatron operating model. Associated individual: William Brobeck. December 2, 1948. Bevatron Model-88. Model briefly referred to as the Cyclodrome.
XBD201305-02630.TIF -- General interior view of 1/4 scale bevatron operating model showing progress on magnet. Associated individual: William Brobeck. December 11, 1948. Bevatron Model-89. Model briefly referred to as the Cyclodrome.
XBD201305-02631.TIF -- Van De Graaff (rear view) injector for the 1/4 scale bevatron operating model. Associated individual: Virginia McClain. December 13, 1948. Bevatron Model-90. Model briefly referred to as the Cyclodrome.
XBD201305-02632.TIF -- 18-inch cyclotron testing equipment for the 1/4 scale bevatron operating model. Associated individual: William Brobeck. December 15, 1948. Bevatron Model-93. Model briefly referred to as the Cyclodrome.
XBD201305-02633.TIF -- Injector for the 1/4 scale bevatron operating model. Double dee for tests with 18-inch cyclotron. Associated individual: William Brobeck. December 15, 1948. Bevatron Model-95. Model briefly referred to as the Cyclodrome.
XBD201305-02634.TIF -- 1/4 scale bevatron operating model. Chassis support assembly for injector ion gun. Associated individual: William Brobeck. December 16, 1948. Bevatron Model-96. Model briefly referred to as the Cyclodrome.
XBD201305-02635.TIF -- 1/4 scale bevatron operating model pulse selector. December 21, 1948. Bevatron Model-102. Model briefly referred to as the Cyclodrome.
XBD201305-02636.TIF -- 1/4 scale bevatron operating model. End view of magnet at gap showing magnet slabs and power lines. December 20, 1948. Associated individual: William Brobeck. Bevatron Model-105. Model briefly referred to as the Cyclodrome.
XBD201305-02637.TIF -- 1/4 scale bevatron operating model. End view of magnet at gap showing interior. December 20, 1948. Bevatron Model-106. Model briefly referred to as the Cyclodrome.
XBD201305-02638.TIF -- Partially completed magnet for 1/4 scale bevatron operating model. December 28, 1948. Bevatron Model-115. Model briefly referred to as the Cyclodrome.

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# Records Transmittal

| Division | Department | Filing Code |
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| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201305-02639.TIF -- 1/4 scale bevatron operating model. KVA dual insulator transformer (injector ion gun.) January 5, 1949. Bevatron Model-116. Model briefly referred to as the Cyclodrome.
XBD201305-02640.TIF -- 1/4 scale bevatron operating model. KVA dual insulator transformer (injector ion gun.) January 3, 1949. Bevatron Model-117. Model briefly referred to as the Cyclodrome.
XBD201305-02641.TIF -- 1/4 scale bevatron operating model. 18-inch cyclotron ion injection testing, dee and deflector.January 12, 1949. Bevatron Model-135. Model briefly referred to as the Cyclodrome.
XBD201305-02642.TIF -- 1/4 scale bevatron operating model. 18-inch cyclotron ion injection testing, dee and deflector.January 12, 1949. Bevatron Model-136. Model briefly referred to as the Cyclodrome.
XBD201305-02643.TIF -- 1/4 scale bevatron operating model. Injector deflector tangential drive miter gear. January 12, 1949. Bevatron Model-137. Model briefly referred to as the Cyclodrome.
XBD201305-02644.TIF -- 1/4 scale bevatron operating model. Diffusion tangent tank, 1/2 quadrant of vacuum tank. January 21, 1949. Bevatron Model-139. Model briefly referred to as the Cyclodrome.
XBD201305-02645.TIF -- 1/4 scale bevatron operating model. Diffusion tangent tank, 1/2 quadrant of vacuum tank. January 21, 1949. Bevatron Model-140. Model briefly referred to as the Cyclodrome.
XBD201305-02646.TIF -- 1/4 scale bevatron operating model tangential drive. January 26, 1949. Bevatron Model-142. Model briefly referred to as the Cyclodrome.
XBD201305-02647.TIF -- 1/4 scale bevatron operating model injector tests. Injector cyclotron beam focusing magnet. January 26, 1949. Bevatron Model-143. Model briefly referred to as the Cyclodrome.
XBD201305-02648.TIF -- 1/4 scale bevatron operating model injector tests. Injector cyclotron beam focusing magnet. January 26, 1949. Bevatron Model-144. Model briefly referred to as the Cyclodrome.
XBD201305-02649.TIF -- 1/4 scale bevatron operating model injector tests vacuum system. February 7, 1949. Bevatron Model-145. Model briefly referred to as the Cyclodrome.
XBD201305-02650.TIF -- 1/4 scale bevatron operating model injector tests vacuum system. February 7, 1949. Bevatron Model-147. Model briefly referred to as the Cyclodrome.
XBD201305-02651.TIF -- 1/4 scale bevatron operating model. Installation of diffusion pumps. February 14, 1949. Bevatron Model-148. Model briefly referred to as the Cyclodrome.
XBD201305-02652.TIF -- 1/4 scale bevatron operating model with quadrants installed. February 14, 1949. Bevatron Model-149. Model briefly referred to as the Cyclodrome.
XBD201305-02653.TIF -- 1/4 scale bevatron operating model magnet testing. Associated individual: Wayne Sewell. February 8, 1949. Bevatron Model-151. Model briefly referred to as the Cyclodrome.
XBD201305-02654.TIF -- 1/4 scale bevatron operating model magnet with coils. February 18, 1949. Bevatron Model-154. Model briefly referred to as the Cyclodrome.
XBD201305-02655.TIF -- 1/4 scale bevatron operating model liquid air trap. March 4, 1949. Bevatron Model-159. Model briefly referred to as the Cyclodrome.
XBD201305-02659.TIF -- Magnet and tank for 1/4 scale bevatron operating model. March 4, 1949. Bevatron Model-160. Model briefly referred to as the Cyclodrome.
XBD201305-02660.TIF -- 1/4 scale bevatron operating model. Interior view showing quadrant tanks, diffusion pumps, and magnet. March 8, 1949. Bevatron Model-162. Model briefly referred to as the Cyclodrome.

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| Division | Department | Filing Code |
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**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201305-02661.TIF -- 1/4 scale bevatron operating model, progress shot with unidentified individuals. March 8, 1949. Bevatron Model-163. Model briefly referred to as the Cyclodrome.
XBD201305-02662.TIF -- D-stem oscillator for pulsed cyclotron to be used as the injector for the 1/4 scale bevatron operating model. March 15, 1949. Bevatron Model-164. Model briefly referred to as the Cyclodrome.
XBD201305-02663.TIF -- D-stem oscillator for pulsed cyclotron to be used as the injector for the 1/4 scale bevatron operating model. March 15, 1949. Bevatron Model-166. Model briefly referred to as the Cyclodrome.
XBD201305-02664.TIF -- 1/4 scale bevatron operating model. Equipment for experiments with the use of permeable material in magnetic field to develop frequency that changes with field changes. March 15, 1949. Bevatron Model-168. Model briefly referred to as the Cyclodrome.
XBD201305-02665.TIF -- 1/4 scale bevatron operating model. Equipment for experiments with the use of permeable material in magnetic field to develop frequency that changes with field changes. March 15, 1949. Bevatron Model-169. Model briefly referred to as the Cyclodrome.
XBD201305-02666.TIF -- 1/4 scale bevatron operating model injector deflector radial truck. March 15, 1949. Bevatron Model-170. Model briefly referred to as the Cyclodrome.
XBD201305-02667.TIF -- 1/4 scale bevatron operating model injector deflector electrode platform. March 14, 1949. Bevatron Model-171. Model briefly referred to as the Cyclodrome.
XBD201305-02668.TIF -- 1/4 scale bevatron operating model with quadrant tank and insulating boards. March 18, 1949. Bevatron Model-172. Model briefly referred to as the Cyclodrome.
XBD201305-02669.TIF -- 1/4 scale bevatron operating model. Lower magnet, magnet coils, top quadrant, tank insulation, top magnet slabs. March 27, 1949. Bevatron Model-173. Model briefly referred to as the Cyclodrome.
XBD201305-02670.TIF -- Pumps and cooling systems for the 1/4 scale bevatron operating model. March 27, 1949. Bevatron Model-178. Model briefly referred to as the Cyclodrome.
XBD201305-02671.TIF -- Braces for the tanks on the 1/4 scale bevatron operating model magnet. Associated individual: James Hodges. March 27, 1949. Bevatron Model-181. Model briefly referred to as the Cyclodrome.
XBD201305-02672.TIF -- 1/4 scale bevatron operating model. Interior of quadrant tanks at junction of diffusion pumps. March 27, 1949. Bevatron Model-182. Model briefly referred to as the Cyclodrome.
XBD201305-02673.TIF -- 1/4 scale bevatron operating model. Beva/4 cyclotron injector. March 30, 1949. Bevatron Model-185. Model briefly referred to as the Cyclodrome.
XBD201305-02674.TIF -- 1/4 scale bevatron operating model. Beva/4 cyclotron injector. March 30, 1949. Bevatron Model-187. Model briefly referred to as the Cyclodrome.
XBD201305-02675.TIF -- 1/4 scale bevatron operating model. Peaking power supply. Associated individual: C.S. Presenz. March 28, 1949. Bevatron Model-191. Model briefly referred to as the Cyclodrome.
XBD201305-02676.TIF -- 1/4 scale bevatron operating model. Beva/4 20-inch cyclotron pulse R.F. chassis. Associated individual: C.S. Presenz. March 31, 1949. Bevatron Model-194. Model briefly referred to as the Cyclodrome.
XBD201305-02677.TIF -- 1/4 scale bevatron operating model. Beva/4 20-inch cyclotron pulse R.F. chassis. Associated individual: C.S. Presenz. March 31, 1949. Bevatron Model-196. Model briefly referred to as the Cyclodrome.
XBD201305-02678.TIF -- 1/4 scale bevatron operating model. General view of Beva/4. Associated individual: Andresson. March 30, 1949. Bevatron Model-198. Model briefly referred to as the Cyclodrome.

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**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201305-02679.TIF -- 1/4 scale bevatron operating model. General progress view of Beva/4. Associated individual: Wayne Sewell. April 7, 1949. Bevatron Model-199. Model briefly referred to as the Cyclodrome.
XBD201305-02680.TIF -- 1/4 scale bevatron operating model. Beva/4 injector. April 6, 1949. Bevatron Model-200. Model briefly referred to as the Cyclodrome.
XBD201305-02681.TIF -- 1/4 scale bevatron operating model. Beva/4 injector deflector. April 6, 1949. Bevatron Model-201. Model briefly referred to as the Cyclodrome.
XBD201305-02682.TIF -- 1/4 scale bevatron operating model. Controls on vacuum for tank for injector deflector. April 6, 1949. Bevatron Model-202. Model briefly referred to as the Cyclodrome.
XBD201305-02683.TIF -- 1/4 scale bevatron operating model. General progress view of Beva/4. April 7, 1949. Bevatron Model-203. Model briefly referred to as the Cyclodrome.
XBD201305-02684.TIF -- 1/4 scale bevatron operating model. 20-inch cyclotron beam focusing magnet for Beva/4 injection. April 8, 1949. Bevatron Model-206. Model briefly referred to as the Cyclodrome.
XBD201305-02685.TIF -- 1/4 scale bevatron operating model. 20-inch cyclotron beam focusing magnet. April 8, 1949. Bevatron Model-208. Model briefly referred to as the Cyclodrome.
XBD201305-02686.TIF -- 1/4 scale bevatron operating model. Extension tank showing magnetic channel inside. April 13, 1949. Bevatron Model-212. Model briefly referred to as the Cyclodrome.
XBD201305-02687.TIF -- The four diffusion of the 1/4 scale bevatron operating model. April 13, 1949. Bevatron Model-214. Model briefly referred to as the Cyclodrome.
XBD201305-02688.TIF -- 1/4 scale bevatron operating model. View of two magnet sections, diffusion pump. April 13, 1949. Bevatron Model-215. Model briefly referred to as the Cyclodrome.
XBD201305-02689.TIF -- 1/4 scale bevatron operating model. Log ion gauge power supply front panel. Associated individual: C.S. Presenz. April 20, 1949. Bevatron Model-219. Model briefly referred to as the Cyclodrome.
XBD201305-02690.TIF -- 1/4 scale bevatron operating DC model showing coil flex linkage measurement. April 26, 1949. Bevatron Model-222. Model briefly referred to as the Cyclodrome.
XBD201305-02691.TIF -- 1/4 scale bevatron operating model. Transformer for 20-inch cyclotron injector pulse R.F. chassis. April 29, 1949. Bevatron Model-228. Model briefly referred to as the Cyclodrome.
XBD201305-02692.TIF -- 1/4 scale bevatron operating model. Focusing magnet between cyclotron and bevatron showing beam outlet of cyclotron, entrance to bevatron (overhead view.) May 2, 1949. Bevatron Model-230. Model briefly referred to as the Cyclodrome.
XBD201305-02693.TIF -- 1/4 scale bevatron operating model. Focusing magnet between cyclotron and bevatron showing beam outlet of cyclotron, entrance to bevatron. May 2, 1949. Bevatron Model-231. Model briefly referred to as the Cyclodrome.
XBD201305-02694.TIF -- 1/4 scale bevatron operating model. Beam clippers. May 3, 1949. Bevatron Model-235. Model briefly referred to as the Cyclodrome.
XBD201305-02695.TIF -- Coil linkage for 1/4 scale bevatron operating model. May 10, 1949. Bevatron Model-240. Model briefly referred to as the Cyclodrome.
XBD201305-02696.TIF -- 1/4 scale bevatron operating model. R.F. pulse line 5 section Z 300 ohm. Associated individual: C.S. Presenz. May 17, 1949. Bevatron Model-242. Model briefly referred to as the Cyclodrome.
XBD201305-02697.TIF -- 1/4 scale bevatron operating model. Probe pre-amp. Associated individual: C.S. Presenz. May 25, 1949. Bevatron Model-247. Model briefly referred to as the Cyclodrome.
XBD201305-02698.TIF -- 1/4 scale bevatron operating model control room. Associated individual:

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**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

Duane Sewell. May 22, 1949. Bevatron Model-251. Model briefly referred to as the Cyclodrome.
XBD201305-02699.TIF -- 1/4 scale bevatron operating model inflector supply. May 22, 1949. Bevatron Model-253. Model briefly referred to as the Cyclodrome.
XBD201305-02700.TIF -- 1/4 scale bevatron operating model magnet. First turn beam, accelerated beam. July 21, 1949. Bevatron Model-265. Model briefly referred to as the Cyclodrome.
XBD201305-02701.TIF -- 1/4 scale bevatron operating model magnet. First turn beam, accelerated beam. July 21, 1949. Bevatron Model-266. Model briefly referred to as the Cyclodrome.
XBD201305-02702.TIF -- 1/4 scale bevatron operating model magnet. First turn beam, accelerated beam. July 21, 1949. Bevatron Model-269. Model briefly referred to as the Cyclodrome.
XBD201305-02703.TIF -- 1/4 scale bevatron operating model magnet. First turn beam. July 21, 1949. Bevatron Model-271. Model briefly referred to as the Cyclodrome.
XBD201305-02704.TIF -- Overhead view of 1/4 scale bevatron operating model. Associated individuals: Duane Sewell and Ed Lofgren. July 21, 1949. Bevatron Model-272. Model briefly referred to as the Cyclodrome.
XBD201305-02705.TIF -- Overhead view of 1/4 scale bevatron operating model. Associated individuals: Duane Sewell and Ed Lofgren. July 21, 1949. Bevatron Model-273. Model briefly referred to as the Cyclodrome.
XBD201305-02706.TIF -- 1/4 scale bevatron operating model probe head. August 5, 1949. Bevatron Model-283. Model briefly referred to as the Cyclodrome.
XBD201305-02707.TIF -- 1/4 scale bevatron operating model. Cyclotron injector R.F. oscillator. August 9, 1949. Bevatron Model-286. Model briefly referred to as the Cyclodrome.
XBD201305-02708.TIF -- 1/4 scale bevatron operating model. Oscilloscope trace of bevatron beam. Associated individual: Ed Lofgren. August 17, 1949. Bevatron Model-287. Model briefly referred to as the Cyclodrome.
XBD201305-02709.TIF -- 1/4 scale bevatron operating model. Probe in position on Beva/4 model. August 5, 1949. Bevatron Model-288. Model briefly referred to as the Cyclodrome.
XBD201305-02710.TIF -- 1/4 scale bevatron operating model. Beva/4 vacuum pump controls pumping system. August 5, 1949. Bevatron Model-289. Model briefly referred to as the Cyclodrome.
XBD201305-02711.TIF -- 1/4 scale bevatron operating model. Beva/4 vacuum tank section. Associated individual: William Brobeck. August 19, 1949. Bevatron Model-292. Model briefly referred to as the Cyclodrome.
XBD201305-02712.TIF -- 1/4 scale bevatron operating model injector ion gun. Associated individual: William Brobeck. August 19, 1949. Bevatron Model-293. Model briefly referred to as the Cyclodrome.
XBD201305-02713.TIF -- Drawing of sector assemblies on magnet core for 1/4 scale bevatron operating model injector. Associated individual: William Brobeck. August 24, 1949. Bevatron Model-295. Model briefly referred to as the Cyclodrome.
XBD201305-02714.TIF -- Drawing of injector ion gun assembly for 1/4 scale bevatron operating model. Associated individual: William Brobeck. August 24, 1949. Bevatron Model-296. Model briefly referred to as the Cyclodrome.
XBD201305-02715.TIF -- Drawing of accelerating electrode for 1/4 scale bevatron operating model. Associated individual: William Brobeck. August 24, 1949. Bevatron Model-297. Model briefly referred to as the Cyclodrome.
XBD201305-02716.TIF -- Drawing of general assembly for 1/4 scale bevatron operating model. Associated individual: William Brobeck. August 24, 1949. Bevatron Model-298. Model briefly referred to as the Cyclodrome.
XBD201305-02717.TIF -- Drawing of dee and deflector assembly on injection cyclotron for 1/4

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scale bevatron operating model. Associated individual: William Brobeck. August 24, 1949. Bevatron Model-299. Model briefly referred to as the Cyclodrome.
XBD201305-02718.TIF -- 1/4 scale bevatron operating model. Fractionating D.P.I. jet for 32-inch diffusion pump (bottom view.) August 30, 1949. Bevatron Model-300. Model briefly referred to as the Cyclodrome.
XBD201305-02719.TIF -- 1/4 scale bevatron operating model. Fractionating D.P.I. jet for 32-inch diffusion pump. August 30, 1949. Bevatron Model-301. Model briefly referred to as the Cyclodrome.
XBD201305-02720.TIF -- 1/4 scale bevatron operating model. Fractionating D.P.I. jet for 8-inch diffusion pump. August 30, 1949. Bevatron Model-304. Model briefly referred to as the Cyclodrome.
XBD201305-02721.TIF -- Drawing of electrical system for 1/4 scale bevatron operating model. September 6, 1949. Bevatron Model-306. Model briefly referred to as the Cyclodrome.
XBD201305-02722.TIF -- Drawing of scintillation probe for 1/4 scale bevatron operating model. September 13, 1949. Bevatron Model-307. Model briefly referred to as the Cyclodrome.
XBD201305-02723.TIF -- 1/4 scale bevatron operating model. West tangent tanks showing probe lock, vertical vane adjustments. September 14, 1949. Bevatron Model-308. Model briefly referred to as the Cyclodrome.
XBD201305-02724.TIF -- Temperature regulator amplifier 1/4 scale bevatron operating model. Associated individual: C.S. Presenz. October 18, 1949. Bevatron Model-320. Model briefly referred to as the Cyclodrome.
XBD201305-02725.TIF -- 1/4 scale bevatron operating model power supply. Associated individual: C.S. Presenz. October 18, 1949. Bevatron Model-325. Model briefly referred to as the Cyclodrome.
XBD201305-02726.TIF -- Duane Sewell at south diffusion pump of the 1/4 scale bevatron operating model. October 20, 1949. Bevatron Model-327. Model briefly referred to as the Cyclodrome.
XBD201305-02727.TIF -- D. Neilson at south pump of the 1/4 scale bevatron operating model. October 20, 1949. Bevatron Model-328. Model briefly referred to as the Cyclodrome.
XBD201305-02728.TIF -- General view of the 1/4 scale bevatron operating model. October 26, 1949. Bevatron Model-331. Model briefly referred to as the Cyclodrome.
XBD201305-02729.TIF -- General view of the 1/4 scale bevatron operating model. October 26, 1949. Bevatron Model-332. Model briefly referred to as the Cyclodrome.
XBD201305-02730.TIF -- 1/4 scale bevatron operating model. Magnet core internal pole tip test-pole tip assembly. Associated individuals: Duane Sewell and William Brobeck.November 9, 1949. Bevatron Model-335. Model briefly referred to as the Cyclodrome.
XBD201305-02731.TIF -- 1/4 scale bevatron operating model. Test setup-cascade rectifier for bevatron ion gun. Associated individual: William Brobeck. November 14, 1949. Bevatron Model-336. Model briefly referred to as the Cyclodrome.
XBD201305-02732.TIF -- 1/4 scale bevatron operating model. 50 kv R.F. doubler. Associated individual: C.S. Presenz. November 15, 1949. Bevatron Model-337. Model briefly referred to as the Cyclodrome.
XBD201305-02733.TIF -- Diagram of 1/4 scale bevatron operating model (part.) December 6, 1949. Bevatron Model-340. Model briefly referred to as the Cyclodrome.
XBD201305-02734.TIF -- Magnet section diagram of 1/4 scale bevatron operating model. Associated individual: Ed Lofgren. December 6, 1949. Bevatron Model-341. Model briefly referred to as the Cyclodrome.
XBD201305-02735.TIF -- 1/4 scale bevatron operating model. Frequency meter, oil solenoid power supply. December 9, 1949. Bevatron Model-342. Model briefly referred to as the Cyclodrome.
XBD201305-02736.TIF -- 1/4 scale bevatron operating model. High speed scaler scale of eight. Associated individual: C.S. Presenz. December 7, 1949. Bevatron Model-344. Model briefly referred

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to as the Cyclodrome.
XBD201305-02737.TIF -- 1/4 scale bevatron operating model. Signal generating R.F. saturable reactor for quarter-scale bevatron R.F. system. Associated individual: Q.K. Kerns. December 20, 1949. Bevatron Model-348. Model briefly referred to as the Cyclodrome.
XBD201305-02738.TIF -- 1/4 scale bevatron operating model. Ion source magnet, T.C. gauge. Associated individual: C.S. Presenz. December 27, 1949. Bevatron Model-350. Model briefly referred to as the Cyclodrome.
XBD201305-02739.TIF -- 1/4 scale bevatron operating model. Pig ion source pulser. Associated individual: C.S. Presenz. January 18, 1950. Bevatron Model-353. Model briefly referred to as the Cyclodrome.
XBD201305-02740.TIF -- 1/4 scale bevatron operating model. Injector ion gun focusing power supply. Associated individual: C.S. Presenz. January 24, 1950. Bevatron Model-362. Model briefly referred to as the Cyclodrome.
XBD201305-02741.TIF -- Dismantling and removal of the 1/4 scale bevatron operating model. March 9, 1950. Bevatron Model-363. Model briefly referred to as the Cyclodrome.
XBD201305-02742.TIF -- Dismantling and removal of the 1/4 scale bevatron operating model. March 9, 1950. Bevatron Model-364. Model briefly referred to as the Cyclodrome.
XBD201305-02743.TIF -- Dismantling the 1/4 scale bevatron operating model. March 9, 1950. Bevatron Model-366. Model briefly referred to as the Cyclodrome.
XBD201305-02744.TIF -- Water-cooled rheostat. Photograph taken February 25, 1959. Bevatron-1761.
XBD201305-02745.TIF -- Ion gun with Crockroft-Walton rectifier, SeO2 type. Photograph taken February 27, 1959. Bevatron-1765.
XBD201305-02746.TIF -- Segre set up in the Bevatron. Photograph taken February 27, 1959. Bevatron-1766.
XBD201305-02747.TIF -- Segre set up in the Bevatron. Photograph taken February 27, 1959. Bevatron-1767.
XBD201305-02748.TIF -- West generator shaft. Photograph taken March 4, 1959. Bevatron-1770.
XBD201305-02749.TIF -- Cooling tower #5 pipes. Photograph taken March 14, 1959. Bevatron-1775.
XBD201305-02750.TIF -- Cooling tower #5 pipes. Photograph taken March 14, 1959. Bevatron-1776.
XBD201305-02751.TIF -- Segre's anti-proton experiment. Photograph taken March 17, 1959. Bevatron-1779.
XBD201305-02752.TIF -- Segre's anti-proton experiment, target area. Photograph taken March 17, 1959. Bevatron-1780.
XBD201305-02754.TIF -- Segre's anti-proton experiment, target area. Photograph taken April 17, 1959. Bevatron-1781.
XBD201305-02755.TIF -- Segre's anti-proton experiment, target area. Photograph taken April 17, 1959. Bevatron-1782.
XBD201305-02756.TIF -- Segre's anti-proton experiment, counting area, Tom Elioff. Photograph taken April 17, 1959. Bevatron-1783.
XBD201305-02757.TIF -- Core drill for generator shaft sample. Photograph taken April 23, 1959. Bevatron-1786.
XBD201305-02758.TIF -- Propane set up. Photograph taken April 30, 1959. Bevatron-1788.
XBD201305-02759.TIF -- Shielding for neutrons. Photograph taken April 30, 1959. Bevatron-1790.
XBD201305-02760.TIF -- New beam. Photograph taken May 11, 1959. Bevatron-1796.

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XBD201305-02761.TIF -- Shielding for neutrons. Photograph taken May 11, 1959. Bevatron-1798.
XBD201305-02762.TIF -- Von Ardenne ion source. Photograph taken May 11, 1959. Bevatron-1799.

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Box 2 Photos:

XBD201305-02763.TIF -- Von Ardenne ion source. Photograph taken May 11, 1959. Bevatron-1800.
XBD201305-02764.TIF -- Von Ardenne ion source. Photograph taken May 11, 1959. Bevatron-1801.
XBD201305-02765.TIF -- Parallel plate spectrometer. Photograph taken May 19, 1959. Bevatron-1806.
XBD201305-02766.TIF -- External proton beam port. Photograph taken June 1, 1959. Bevatron-1810.
XBD201305-02767.TIF -- Stevenson experiment. Photograph taken June 1, 1959. Bevatron-1811.
XBD201305-02768.TIF -- Modification in ion source. Photograph taken June 1, 1959. Bevatron-1815.
XBD201305-02769.TIF -- Modification in ion source. Patent release 5/12/1960.Photograph taken June 2, 1959. Bevatron-1816.
XBD201305-02770.TIF -- Modification in ion source. Photograph taken June 2, 1959. Bevatron-1817.
XBD201305-02771.TIF -- Bevatron control room. Fred Lathrop at control panel. Photograph taken June 2, 1959. Bevatron-1819.
XBD201305-02772.TIF -- New scopes in control room. Photograph taken June 9, 1959. Bevatron-1821.
XBD201305-02773.TIF -- Cork's anti-proton setup. Photograph taken June 22, 1959. Bevatron-1824.
XBD201305-02774.TIF -- Hydrogen target setup. Photograph taken June 23, 1959. Bevatron-1828.
XBD201305-02775.TIF -- Hydrogen target set up. Photograph taken June 23, 1959. Bevatron-1829.
XBD201305-02776.TIF -- Hydrogen target set up. Photograph taken June 23, 1959. Bevatron-1830.
XBD201305-02777.TIF -- Modular divider. Photograph taken June 19, 1959. Bevatron-1852.
XBD201305-02778.TIF -- Modular divider. Photograph taken June 19, 1959. Bevatron-1853.
XBD201305-02779.TIF -- Anti-proton set up. Photograph taken July 13, 1959. Bevatron-1854.
XBD201305-02780.TIF -- Eleven-turn loop rapid beam ejector. Photograph taken August 6, 1959. Bevatron-1866.
XBD201305-02781.TIF -- Fitch target. Dr. V. Fitch, Princeton University. Photograph taken August 6, 1959. Bevatron-1868.
XBD201305-02782.TIF -- High voltage reversing instrument. Photograph taken August 24, 1959. Bevatron-1872.
XBD201305-02783.TIF -- High voltage reversing station. Photograph taken August 26, 1959. Bevatron-1876.
XBD201305-02784.TIF -- Experimental ion source use of glass epoxy tubes. Photograph taken August 26, 1959. Bevatron-1879.
XBD201305-02785.TIF -- 240-KV power supply, with Frank Garnier. Photograph taken September 3, 1959. Bevatron-1880.
XBD201305-02786.TIF -- 7 X 7.5 transition area airlock. Photograph taken September 16, 1959. Bevatron-1887.
XBD201305-02787.TIF -- 7 X 7.5  transition area airlock. Photograph taken September 16, 1959. Bevatron-1888.
XBD201305-02788.TIF -- 72-inch bubble chamber set up, Bevatron extension. Photograph taken October 13, 1959. Bevatron-1895.
XBD201305-02789.TIF -- Xenon bubble chamber K-plus experiment. Photograph taken October 13, 1959. Bevatron-1898.
XBD201305-02790.TIF -- Xenon bubble chamber K-plus experiment. Photograph taken October 13, 1959. Bevatron-1899.

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XBD201305-02791.TIF -- Xenon bubble chamber K-plus experiment. Photograph taken October 13, 1959. Bevatron-1900.
XBD201305-02792.TIF -- Xenon bubble chamber K-plus experiment. Photograph taken October 13, 1959. Bevatron-1903.
XBD201305-02794.TIF -- Bevatron 11 1/4 degree clipper. Photograph taken October 14, 1959. Bevatron-1905.
XBD201305-02795.TIF -- Bevatron injector: 80-KV power supply. Photograph taken October 19, 1959. Bevatron-1908.
XBD201305-02796.TIF -- Corrosion in Bevatron magnet. Photograph taken November 5, 1959. Bevatron-1913.
XBD201305-02797.TIF -- Quadrapole focusing magnet showing plastic water tube connections and impregnation of main coil. Photograph taken November 6, 1959. Bevatron-1915.
XBD201305-02798.TIF -- Traveling target assembly for the Bevatron. Photograph taken November 6, 1959. Bevatron-1917.
XBD201305-02799.TIF -- Goldhaber set up. Photograph taken November 10, 1959. Bevatron-1921.
XBD201305-02800.TIF -- Corona ball (unfinished). Photograph taken November 23, 1959. Bevatron-1923.
XBD201305-02801.TIF -- Corona ball (unfinished). Photograph taken November 23, 1959. Bevatron-1924.
XBD201305-02802.TIF -- Interior of generator room. Photograph taken November 23, 1959. Bevatron-1926.
XBD201305-02803.TIF -- Interior of generator room. Photograph taken November 24, 1959. Bevatron-1930.
XBD201305-02804.TIF -- Interior of generator room. Photograph taken November 24, 1959. Bevatron-1931.
XBD201305-02805.TIF -- Scintillation chamber. Photograph taken December 1, 1959. Bevatron-1933.
XBD201305-02806.TIF -- Scintillation chamber. Photograph taken December 1, 1959. Bevatron-1935.
XBD201305-02807.TIF -- Spectrometer Mark IV electrode #2. Photograph taken December 10, 1959. Bevatron-1940.
XBD201305-02808.TIF -- Transformers. Photograph taken December 22, 1959. Bevatron-1957.
XBD201305-02809.TIF -- High power 8-inch quadrapole magnet. Photograph taken January 12, 1960. Bevatron-1965.
XBD201305-02810.TIF -- High power 8-inch quadrapole magnet. Photograph taken January 12, 1960. Bevatron-1967.
XBD201305-02811.TIF -- Mu meson scattering experiment. Photograph taken January 18, 1960. Bevatron-1969.
XBD201305-02812.TIF -- Mu meson scattering experiment. Patent release 5/12/1960. Photograph taken January 18, 1960. Bevatron-1971.
XBD201305-02813.TIF -- Mu meson scattering experiment. Photograph taken January 18, 1960. Bevatron-1972.
XBD201305-02814.TIF -- Mu meson scattering experiment. Photograph taken January 18, 1960. Bevatron-1973.
XBD201305-02815.TIF -- 8-inch quadrapole magnet, Bevatron II, Mark II. Photograph taken January 22, 1960. Bevatron-1975.
XBD201305-02816.TIF -- 8-inch quadrapole magnet, Bevatron II, Mark II. Photograph taken

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January 22, 1960. Bevatron-1977.
XBD201305-02817.TIF -- 10-foot parallel plate spectrometer, Mark IV, upper plate weld breaks. Photograph taken February 5, 1960. Bevatron-1991.
XBD201305-02818.TIF -- 10-foot parallel plate spectrometer, Mark IV, upper plate weld breaks. Photograph taken February 5, 1960. Bevatron-1992.
XBD201305-02819.TIF -- 300 psi Cerenkov counter. Photograph taken February 8, 1960. Bevatron-1993.
XBD201305-02820.TIF -- 300 psi Cerenkov counter. Photograph taken February 8, 1960. Bevatron-1994.
XBD201305-02821.TIF -- 300 psi Cerenkov counter. Photograph taken February 8, 1960. Bevatron-1995.
XBD201305-02822.TIF -- 2,000 psi Cerenkov counter. Photograph taken February 8, 1960. Bevatron-1996.
XBD201305-02823.TIF -- 2,000 psi Cerenkov counter. Photograph taken February 8, 1960. Bevatron-1997.
XBD201305-02824.TIF -- 2,000 psi Cerenkov counter. Photograph taken February 11, 1960. Bevatron-2004.
XBD201305-02825.TIF -- Ion source test, with Jim Turner. Photograph taken February 18, 1960. Bevatron-2005.
XBD201305-02826.TIF -- 28-degree slide control door panel. Photograph taken February 26, 1960. Bevatron-2006.
XBD201305-02827.TIF -- 28-degree slide control door panel. Photograph taken February 26, 1960. Bevatron-2007.
XBD201305-02828.TIF -- Pearl setup. Photograph taken April 1, 1960. Bevatron-2014.
XBD201305-02835.TIF -- Anti-proton setup at the bevatron with Emelio Segre and Ed Lofgren. Photo taken October 6, 1955. Bevatron-942.
XBD201305-02836.TIF -- Segre's setup in the Bevatron. Photograph taken April 1, 1960. Bevatron-2015.
XBD201305-02837.TIF -- Segre's setup in the Bevatron. Photograph taken April 1, 1960. Bevatron-2018.
XBD201305-02838.TIF -- Wilson Powell's setup in the Bevatron. Photograph taken April 1, 1960. Bevatron-2019.
XBD201305-02839.TIF -- New shielding over west tank. Photograph taken April 1, 1960. Bevatron-2022.
XBD201305-02840.TIF -- New shielding over west tank. Photograph taken April 1, 1960. Bevatron-2023.
XBD201305-02841.TIF -- Traveling target Mark VIII-T, with Ken Stone. Photograph taken April 1, 1960. Bevatron-2027.
XBD201305-02842.TIF -- Traveling target Mark VIII-T. Photograph taken April 19, 1960. Bevatron-2028.
XBD201304-02843.TIF -- Traveling target Mark VIII-T. Patent release 5/12/1960. Photograph taken April 19, 1960. Bevatron-2031.
XBD201305-02844.TIF -- Traveling target Mark VIII-T, with Bob Edwards. Photograph taken April 19, 1960. Bevatron-2032.
XBD201305-02845.TIF -- Traveling target Mark VIII-T. Photograph taken April 19, 1960. Bevatron-2034.
XBD201305-02846.TIF -- Segre's Bevatron setup. Photograph taken April 19, 1960. Bevatron-2036.

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XBD201305-02847.TIF -- Segre's Bevatron setup. Photograph taken April 19, 1960. Bevatron-2038.
XBD201305-02848.TIF -- Segre's Bevatron setup. Photograph taken April 19, 1960. Bevatron-2039.
XBD201305-02849.TIF -- Glass electrode for parallel spectrometer. Photograph taken April 21, 1960. Bevatron-2049.
XBD201305-02850.TIF -- Clyde Weigand and his Bevatron set up. Photograph taken April 27, 1960. Bevatron-2051.
XBD201305-02851.TIF -- Alvarez's setup. Photograph taken April 26, 1960. Bevatron-2053.
XBD201305-02852.TIF -- Moyer's setup. Photograph taken June 14, 1960. Bevatron-2064.
XBD201305-02853.TIF -- Sector 108 leg slab. Photograph taken July 14, 1960. Bevatron-2077.
XBD201305-02854.TIF -- Vacuum extension tank quadrant III, 89-degrees, Dan Morris and Herman Grunder. Photograph taken July 21, 1960. Bevatron-2081.
XBD201305-02855.TIF -- Cutting hole through vacuum wall, extension tank quadrant III, 89-degrees. Photograph taken July 26, 1960. Bevatron-2083.
XBD201305-02856.TIF -- Photomicrography on generator flywheel. Photograph taken July 27, 1960. Bevatron-2084.
XBD201305-02858.TIF -- Typical images obtained from the spark chamber in the bevatron. Photograph taken August 12, 1960. Bevatron-2114.
XBD201305-02859.TIF -- Momentum channel, associated with Crowe and Chamberlain, Zipf-K-negative. Photograph taken October 6, 1960. Bevatron-2134.
XBD201305-02860.TIF -- Momentum channel, associated with Crowe and Chamberlain, Zipf-K-negative. Photograph taken October 6, 1960. Bevatron-2135.
XBD201305-02861.TIF -- Momentum channel, associated with Crowe and Chamberlain, Zipf-K-negative. Photograph taken October 6, 1960. Bevatron-2136.
XBD201305-02862.TIF -- Wide-angle shot of the bevatron. Patent release 2/22/1962. Photograph taken February 1960. Bevatron-2139-A. Color image: Bevatron-2139-C.
XBD201305-02863.TIF -- Wide-angle shot of the Bevatron. Patent release 6/6/1962. Photograph taken February 1960. Bevatron-2140-A. Color image: Bevatron-2140-C.
XBD201305-02864.TIF -- 600-KV gas-filled HV supply. Photograph taken October 12, 1960. Bevatron-2141.
XBD201305-02865.TIF -- Spark gap. Photograph taken October 12, 1960. Bevatron-2142.
XBD201305-02866.TIF -- Equipment for testing spark damage in vacuum. Photograph taken October 12, 1960. Bevatron-2143. Color image: Bevatron-2143-C.
XBD201305-02867.TIF -- Internal deflecting magnet experimental setup. Photograph taken October 19, 1960. Bevatron-2145.
XBD201305-02868.TIF -- Method of bearing loading cage. Photograph taken October 19, 1960. Bevatron-2146.
XBD201305-02869.TIF -- Driving gear for generator. Photograph taken October 25, 1960. Bevatron-2156.
XBD201305-02870.TIF -- Hal Vogel and Herman Grunder with the driving gear for generator. Photograph taken October 25, 1960. Bevatron-2157.
XBD201305-02871.TIF -- 13 X 24 "C" magnet. Photograph taken November 2, 1960. Bevatron-2159.
XBD201305-02872.TIF -- Resistor with corona ball. Photograph taken December 1, 1960. Bevatron-2165.
XBD201305-02873.TIF -- Cleaning cart for diffusion pump and magnets. Photograph taken December 15, 1960. Bevatron-2168.
XBD201302-02874.TIF -- Hal Vogel and Herman Grunder with motor generator drill jig.

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Photograph taken December 27, 1960. Bevatron-2170.
XBD201305-02875.TIF -- 16 X 36 "C" magnet. Photograph taken January 26, 1961. Bevatron-2195.
XBD201305-02876.TIF -- Flywheel stress analysis with Howie Smith. Photograph taken February 14, 1961. Bevatron-2200.
XBD201305-02877.TIF -- Bevatron injector II, linac test drift tube installation with Foss Crosby. Photograph taken February 22, 1961. Bevatron-2204.
XBD201305-02878.TIF -- Segre's bevatron setup. Photograph taken March 3, 1961. Bevatron-2218.
XBD201305-02879.TIF -- Segre's bevatron setup. Photograph taken March 3, 1961. Bevatron-2216.
XBD201305-02880.TIF -- Injector II, linac drift tubes with Don Blackman. Photograph taken April 12, 1961. Bevatron-2232.
XBD201305-02881.TIF -- Drift tube magnets,  injector II. Photograph taken April 20, 1961. Bevatron-2238.
XBD201305-02882.TIF -- Injector II pole piece. Photograph taken May 19, 1961. Bevatron-2243.
XBD201305-02883.TIF -- Lofgren set up. Photograph taken June 23, 1961. Bevatron-2251.
XBD201305-02884.TIF -- Lofgren set up. Photograph taken June 23, 1961. Bevatron-2252.
XBD201305-02885.TIF -- Ken Crowe set up. Photograph taken June 23, 1961. Bevatron-2256.
XBD201305-02886.TIF -- Model of new Bevatron shielding. Photograph taken June 29, 1961. Bevatron-2260. Color version: Bevatron-2260-C.
XBD201305-02887.TIF -- Model of new Bevatron shielding, Hans Krapf. Photograph taken June 29, 1961. Bevatron-2261.
XBD201305-02888.TIF -- Pulse line coil. Photograph taken July 24, 1961. Bevatron-2271.
XBD201305-02889.TIF -- Induction electrode Mark Il. Photograph taken July 26, 1961. Bevatron-2280.
XBD201305-02890.TIF -- Model of Bevatron with Russ Ellis and Hans Krapf. Photograph taken July 27, 1961. Bevatron-2288. Color version: 2288-C.
XBD201305-02891.TIF -- Bevatron pole magnet. Photograph taken July 28, 1961. Bevatron-2289.
XBD201305-02892.TIF -- Traveling target. Photograph taken August 4, 1961. Bevatron-2292.
XBD201305-02893.TIF -- Traveling target. Photograph taken August 4, 1961. Bevatron-2294.
XBD201305-02894.TIF -- Damaged traveling target solenoid. Photograph taken August 4, 1961. Bevatron-2295.
XBD201305-02895.TIF -- Motor generator flywheel. Photograph taken August 18, 1961. Bevatron-2311.
XBD201305-02896.TIF -- Quadrapole magnet analyzer, Bevatron injector II. Photograph taken August 18, 1961. Bevatron-2318.
XBD201305-02897.TIF -- 2-inch triple quadrapole, Bevatron injector II. Photograph taken August 22, 1961. Bevatron-2319.
XBD201305-02898.TIF -- Magnet assembly in group IV drift tube, Bevatron injector II, Otto Kruger. Photograph taken August 29, 1961. Bevatron-2320.
XBD201305-02899.TIF -- Soldering bellows on stem of group V drift tube, injector II. Photograph taken August 29, 1961. Bevatron-2322.
XBD201305-02900.TIF -- Ion source test stand. Photograph taken September 7, 1961. Bevatron-2326.
XBD201305-02901.TIF -- Ion source test stand. Photograph taken September 7, 1961. Bevatron-2327.
XBD201305-02907.TIF -- M2 magnet with Adair Roberts. Photograph taken October 4, 1961. Bevatron-2336.
XBD201305-02908.TIF -- Assembly of transformer core in drift tube, injector II. Photograph taken

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
|---|---|---|
| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

September 27, 1961. Bevatron-2338.
XBD201305-02909.TIF -- Transporting flywheel to Bevatron, on flatbed truck. Photograph taken September 26, 1961. Bevatron-2341.
XBD201305-02910.TIF -- Transporting flywheel to Bevatron, on flatbed truck, entering Blackberry Gate. Photograph taken September 26, 1961. Bevatron-2343.
XBD201305-02911.TIF -- Flywheel on flatbed truck at Bevatron. Photograph taken September 26, 1961. Bevatron-2346.
XBD201305-02912.TIF -- Flywheel being removed from flatbed truck at Bevatron. Photograph taken September 26, 1961. Bevatron-2350.
XBD201305-02913.TIF -- Rapid beam ejector III main coil. Photograph taken October 9, 1961. Bevatron-2357.
XBD201305-02914.TIF -- Rapid beam ejector III main coil. Photograph taken October 9, 1961. Bevatron-2359.
XBD201305-02915.TIF -- Progress shot-removal of old flywheel from Bevatron. Photograph taken October 9, 1961. Bevatron-2360.
XBD201305-02916.TIF -- Ion gun, high voltage terminal, Mark II. Ted Bowers in background. Photograph taken October 2, 1961. Bevatron-2366.
XBD201305-02917.TIF -- Ion gun house, Mark II. Emory Zajec and Glen White, center. Photograph taken October 2, 1961. Bevatron-2369.
XBD201305-02918.TIF -- Main pulse power supply (large), pre-pulse power supply (small). Photograph taken October 4, 1961. Bevatron-2372.
XBD201305-02919.TIF -- New linac tank. Photograph taken October 11, 1961. Bevatron-2374.
XBD201305-02920.TIF -- New linac tank. Photograph taken October 10, 1961. Bevatron-2375.
XBD201305-02921.TIF -- New linac tank. Photograph taken October 10, 1961. Bevatron-2376.
XBD201305-02922.TIF -- New linac tank. Photograph taken October 10, 1961. Bevatron-2380.
XBD201305-02923.TIF -- Bevatron shielding block transfer rig. Photograph taken January 2, 1963. Bevatron-3207.
XBD201305-02924.TIF -- Bevatron roof shielding key positioning jig. Photograph taken January 2, 1963. Bevatron-3212.
XBD201305-02925.TIF -- Progress shot. Bevatron alteration. Photograph taken January 4, 1963. Bevatron-3213.
XBD201305-02926.TIF -- Progress shot. Bevatron alteration. Photograph taken January 4, 1963. Bevatron-3220.
XBD201305-02927.TIF -- Shielding block transporter vehicle. Photograph taken January 8, 1963. Bevatron-3226.
XBD201305-02931.TIF -- Progress shot. Bevatron alteration. Photograph taken January 11, 1963. Bevatron-3236.
XBD201305-02932.TIF -- Progress shot. Bevatron alteration. Photograph taken January 11, 1963. Bevatron-3239.
XBD201305-02933.TIF -- Electrostatic inflector ground plane. Photograph taken January 14, 1963. Bevatron-3244. Color version: Bev.-3247-C.
XBD201305-02934.TIF -- Electrostatic inflector ground plane. Photograph taken January 14, 1963. Bevatron-3245. Color version: Bev.-3246-C.
XBD201305-02935.TIF -- Bevatron roof shielding key positioning jig. Photograph taken January 14, 1963. Bevatron-3251.
XBD201305-02936.TIF -- Bevatron magnet plunging actuator. Photograph taken January 18, 1963. Bevatron-3254.

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# Records Transmittal

| Division | Department | Filing Code |
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| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201305-02937.TIF -- Bevatron magnet plunging actuator. Photograph taken January 18, 1963. Bevatron-3255.
XBD201305-02938.TIF -- Bevatron magnet plunging actuator. Photograph taken January 18, 1963. Bevatron-3256.
XBD201305-02939.TIF -- Bevatron magnet plunging actuator. Photograph taken January 18, 1963. Bevatron-3257.
XBD201305-02940.TIF -- Bevatron magnet plunging actuator. Photograph taken January 18, 1963. Bevatron-3260.
XBD201305-02941.TIF -- Progress shot. Bevatron alteration. Photograph taken January 18, 1963. Bevatron-3262.
XBD201305-02942.TIF -- Bevatron construction, epon compound on cement floor. Photograph taken January 18, 1963. Bevatron-3268.
XBD201305-02943.TIF -- Bevatron construction. Workers spreading epon compound on cement floor. Photograph taken January 18, 1963. Bevatron-3269.
XBD201305-02944.TIF -- Progress shot. Bevatron alteration. . Photograph taken January 25, 1963. Bevatron-3278.
XBD201305-02945.TIF -- Progress shot. Bevatron alteration. Photograph taken January 25, 1963. Bevatron-3279.
XBD201305-02946.TIF -- Bevatron injector II inflector, beam scanning slits. Photograph taken January 29, 1963. Bevatron-3281.
XBD201305-02947.TIF -- Bevatron injector II inflector, beam scanning slits. Photograph taken January 29, 1963. Bevatron-3283.
XBD201305-02948.TIF -- Progress shot. Bevatron alteration. Photograph taken January 31, 1963. Bevatron-3291.
XBD201305-02949.TIF -- Roof shielding key. Photograph taken January 13, 1963. Bevatron-3293.
XBD201305-02950.TIF -- Bevatron alteration complete. Photograph taken February 4, 1963. Bevatron-3294.
XBD201305-02951.TIF -- Bevatron alteration complete. Photograph taken February 4, 1963. Bevatron-3295.
XBD201305-02952.TIF -- Bevatron alteration complete. Photograph taken February 4, 1963. Bevatron-3297.
XBD201305-02953.TIF -- Bevatron alteration complete. Photograph taken February 4, 1963. Bevatron-3302.
XBD201305-02954.TIF -- Bevatron alteration complete. Photograph taken February 4, 1963. Bevatron-3304.
XBD201305-02955.TIF -- Bevatron alteration complete. Photograph taken February 4, 1963. Bevatron-3305.
XBD201305-02956.TIF -- Bevatron alteration complete. Photograph taken February 4, 1963. Bevatron-3308.
XBD201305-02957.TIF -- Bevatron alteration complete. Photograph taken February 4, 1963. Bevatron-3309.
XBD201305-02958.TIF -- Bevatron alteration complete. Photograph taken February 4, 1963. Bevatron-3311.
XBD201305-02959.TIF -- Bevatron alteration complete. Photograph taken February 4, 1963. Bevatron-3312.
XBD201305-02960.TIF -- Bevatron alteration complete. Photograph taken February 4, 1963. Bevatron-3307.

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
|---|---|---|
| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201305-02961.TIF -- Progress shot. Bevatron alteration. Ollie Olson and Pat Callahan on crates. Photograph taken January 31, 1963. Bevatron-3286. Color version: Bev.-3315-C, Composite version: XBB752-1282.
XBD201305-02962.TIF -- Wide angle shot of completed Bevatron. Photograph taken February 18, 1963. Bevatron-3316.
XBD201305-02963.TIF -- 10-foot parallel plate velocity spectrometer, 6-inch vacuum system. Photograph taken February 11, 1963. Bevatron-3319.
XBD201305-02964.TIF -- External proton beam, internal beam deflection magnet plunging actuator, and automatic probe tube oiler. Photograph taken February 25, 1963. Bevatron-3321.
XBD201305-02971.TIF -- M-3 magnet for external proton beam. Photograph taken February 25, 1963. Bevatron-3323.
XBD201305-02972.TIF -- M-3 magnet for external proton beam. Photograph taken February 25, 1963. Bevatron-3324.
XBD201305-02973.TIF -- Qz magnet. Photograph taken February 15, 1963. Bevatron-3326.
XBD201305-02974.TIF -- Inflector exit cup and defining slits, located east outside south transition port. Photograph taken February 21, 1963. Bevatron-3330.
XBD201305-02975.TIF -- Inflector exit cup and defining slits, located east outside south transition port. Photograph taken February 21, 1963. Bevatron-3327.
XBD201305-02976.TIF -- Inflector exit cup and defining slits, located east outside south transition port. Photograph taken February 21, 1963. Bevatron-3328.
XBD201305-02977.TIF -- Velocity spectrometer. Photograph taken March 12, 1963. Bevatron-3334.
XBD201305-02978.TIF -- Q-3 magnet thermal interlock assembly. Photograph taken March 13, 1963. Bevatron-3337.
XBD201305-02979.TIF -- Magnet measuring equipment. Photograph taken March 15, 1963. Bevatron-3339.
XBD201305-02980.TIF -- Magnet measuring equipment. Photograph taken March 15, 1963. Bevatron-3340.
XBD201305-02981.TIF -- Magnet measuring equipment. Photograph taken March 15, 1963. Bevatron-3341.
XBD201305-02982.TIF -- Magnet measuring equipment. Photograph taken March 15, 1963. Bevatron-3343.
XBD201305-02983.TIF -- Magnet measuring equipment. Photograph taken March 15, 1963. Bevatron-3345.
XBD201305-02984.TIF -- Magnet measuring equipment. Photograph taken March 15, 1963. Bevatron-3344.
XBD201305-02985.TIF -- High-voltage terminal platform and winch. Photograph taken March 25, 1963. Bevatron-3352.
XBD201305-02986.TIF -- High-voltage terminal platform and winch. Photograph taken March 25, 1963. Bevatron-3355.
XBD201305-02987.TIF -- High-voltage terminal platform and winch. Photograph taken March 25, 1963. Bevatron-3356.
XBD201305-02988.TIF -- High-voltage terminal platform and winch. Photograph taken March 25, 1963. Bevatron-3360.
XBD201305-02989.TIF -- Peaking transformer II, insulated conduit assembly. Photograph taken March 21, 1963. Bevatron-3362. Color version: Bev.-3363-C.
XBD201305-02990.TIF -- Peaking transformer II. Photograph taken March 29, 1963. Bevatron-3364.

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
|---|---|---|
| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201305-02991.TIF -- External proton beam set up. Q3B, Q3A, M3 magnets. Photograph taken April 4, 1963. Bevatron-3366.
XBD201305-02992.TIF -- External proton beam set up. Q3B, Q3A, M-3 magnets. Photograph taken April 4, 1963. Bevatron-3368.
XBD201305-02993.TIF -- Alvarez set up at the Bevatron. Photograph taken April 4, 1963. Bevatron-3369.
XBD201305-02994.TIF -- Wilson Powell set up at the Bevatron. Photograph taken April 4, 1963. Bevatron-3372.
XBD201305-02995.TIF -- Lofgren set up at the Bevatron. Photograph taken April 4, 1963. Bevatron-3373.
XBD201305-02996.TIF -- Lofgren set up at the Bevatron. Photograph taken April 4, 1963. Bevatron-3375.
XBD201305-02997.TIF -- Remote-controlled probe positioner. Photograph taken April 4, 1963. Bevatron-3377.
XBD201305-02998.TIF -- 600-KV power supply. Photograph taken April 19, 1963. Bevatron-3381.
XBD201305-02999.TIF -- 600-KV power supply. Photograph taken April 19, 1963. Bevatron-3382.
XBD201305-03000.TIF -- 600-KV power supply. Photograph taken April 19, 1963. Bevatron-3378.
XBD201305-03001.TIF -- Bevatron 16 X 6 C-magnet, Perez-Mendes. Photograph taken April 24, 1963. Bevatron-3384.
XBD201305-03002.TIF -- Bevatron 16 X 36 C-magnet, Perez-Mendes. Photograph taken April 24, 1963. Bevatron-3385.
XBD201305-03003.TIF -- Bevatron 16 X 36 C-magnet, Perez-Mendes. Photograph taken April 24, 1963. Bevatron-3386.
XBD201305-03004.TIF -- External proton beam: 6-BeV emerging from the Bevatron. Photograph taken July 8, 1963. Bevatron-3390.
XBD201305-03005.TIF -- External proton beam: 6-BeV ahead at Q2. Photograph taken July 8, 1963. Bevatron-3391.
XBD201305-03006.TIF -- External proton beam: 6-BeV ahead of M1. Photograph taken July 8, 1963. Bevatron-3392.
XBD201305-03007.TIF -- Quadpole magnet Q3A. Photograph taken June 28, 1963. Bevatron-3395.
XBD201305-03008.TIF -- Quadpole magnet Q3A. Photograph taken June 28, 1963. Bevatron-3396.
XBD201305-03009.TIF -- Quadpole magnet Q3A. Photograph taken June 28, 1963. Bevatron-3397.
XBD201305-03010.TIF -- Glen Lambertson's polaroid print. Photograph taken July 12, 1963. Bevatron-3398.
XBD201305-03011.TIF -- Traveling target air lock in the Bevatron. Photograph taken July 22, 1963. Bevatron-3402.
XBD201305-03012.TIF -- Traveling target air lock in the Bevatron, Dave Vanecek. Photograph taken July 22, 1963. Bevatron-3403.
XBD201305-03013.TIF -- Traveling target air lock in the Bevatron, Ken Stone and Ed Stewart. Photograph taken July 22, 1963. Bevatron-3406.
XBD201305-03014.TIF -- Extension proton beam. Photograph taken August 28, 1963. Bevatron-3414.
XBD201305-03015.TIF -- Extension proton beam. Photograph taken August 28, 1963. Bevatron-3415.
XBD201305-03016.TIF -- Extension proton beam. Photograph taken August 28, 1963. Bevatron-3416.
XBD201305-03017.TIF -- Magnet testing in Sagane magnet with rapid mapper. Photograph taken

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
|---|---|---|
| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

August 28, 1963. Bevatron-3419.
XBD201305-03018.TIF -- Magnet testing in Sagane magnet with rapid mapper. Photograph taken August 28, 1963. Bevatron-3417.

**Container** 5 **Of** 5

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
|---|---|---|
| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

Box 1 Photos:

XBD201305-03019.TIF -- Magnet testing in Sagane magnet with rapid mapper. Photograph taken August 28, 1963. Bevatron-3421.
XBD201305-03020.TIF -- External proton beam magnet. M-3, Q-3A, Q-3B. Photograph taken September 4, 1963. Bevatron-3424.
XBD201305-03021.TIF -- External beam proton experiment. Photograph taken September 7, 1963. Bevatron-3427.
XBD201305-03022.TIF -- External proton experimental set up, image includes Jerry Schnurmacher and Bruce Cork. Photograph taken September 9, 1963. Bevatron-3431.
XBD201305-03023.TIF -- Experimental set up external proton. Photograph taken September 9, 1963. Bevatron-3433.
XBD201305-03024.TIF -- Experimental set up external proton. Photograph taken September 9, 1963. Bevatron-3435.
XBD201305-03025.TIF -- Coil H magnet. Photograph taken September 24, 1963. Bevatron-3438.
XBD201305-03026.TIF -- Coil H magnet. Photograph taken September 24, 1963. Bevatron-3439.
XBD201305-03027.TIF -- M-4 magnet core for external proton beam. Photograph taken September 24, 1963. Bevatron-3445.
XBD201305-03028.TIF -- M-4 magnet core for external proton beam. Photograph taken September 24, 1963. Bevatron-3447.
XBD201306-03031.TIF -- M-4 magnet core for external proton beam. Photograph taken September 24, 1963. Bevatron-3448.
XBD201306-03032.TIF -- Mark VIII traveling target solenoid lock. Photograph taken October 30, 1963. Bevatron-3451. color version Bev.-3452-C.
XBD201306-03033.TIF -- Mark VIII traveling target azimuthol indicator. Photograph taken October 30, 1963. Bevatron-3454. Color version Bev.-3455-C.
XBD201306-03034.TIF -- Mark VIII traveling target. Photograph taken October 30, 1963. Bevatron-3456.
XBD201306-03035.TIF -- Beam from Bevatron to Bubble Chamber. Photograph taken October 28, 1963. Bevatron-3462. Color version Bev.-3463-C.
XBD201306-03036.TIF -- Bevatron tunnel. Photograph taken October 30, 1963. Bevatron-3466.
XBD201306-03037.TIF -- 8-inch search coil. Photograph taken November 22, 1963. Bevatron-3473.
XBD201306-03038.TIF -- Magnet measurements rotating probe to investigate multiple moments of quadrupole. Photograph taken November 12, 1963. Bevatron-3475.
XBD201306-03039.TIF -- 10-foot velocity spectrometer, Mark V. Photograph taken February 5, 1964. Bevatron-3477.
XBD201307-03040.TIF -- 10-foot velocity spectrometer, Mark V. Photograph taken February 5, 1964. Bevatron-3479.
XBD201306-03041.TIF -- 10-foot velocity spectrometer, Mark V. Photograph taken February 5, 1964. Bevatron-3478.
XBD201306-03042.TIF -- Trilling-Goldhaber experiment equipment. Photograph taken February 6, 1964. Bevatron-3480.
XBD201306-03043.TIF -- Trilling-Goldhaber experiment equipment. Photograph taken February 6, 1964. Bevatron-3481.
XBD201306-03044.TIF -- Trilling-Goldhaber experiment equipment. Gerson Goldhaber on left. Photograph taken February 6, 1964. Bevatron-3484.
XBD201306-03045.TIF -- Trilling-Goldhaber experiment equipment. Gerson Goldhaber on right. Photograph taken February 6, 1964. Bevatron-3485.

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
|---|---|---|
| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201306-03047.TIF -- Meaker transformer. Photograph taken February 20, 1964. Bevatron-3486. Color version Bev.-3487-C.
XBD201306-03048.TIF -- 8 QB, 16-inch and 32-inch experimental Bevatron magnets. Photograph taken February 27, 1964. Bevatron-3489.
XBD201306-03049.TIF -- 8 QB, 16-inch and 32-inch experimental Bevatron magnets. Photograph taken February 27, 1964. Bevatron-3490.
XBD201306-03050.TIF -- 8 QB, 16-inch and 32-inch experimental Bevatron magnets. Photograph taken February 27, 1964. Bevatron-3492.
XBD201306-03051.TIF -- 8 QB, 16-inch and 32-inch experimental Bevatron magnets. Photograph taken February 27, 1964. Bevatron-3494.
XBD201306-03052.TIF -- 12 QB magnets and long cradle for the Bevatron. Photograph taken March 24, 1964. Bevatron-3506.
XBD201306-03053.TIF -- 12 QB magnets and long cradle for the Bevatron. Photograph taken March 24, 1964. Bevatron-3509.
XBD201306-03054.TIF -- 12 QB magnets and long cradle for the Bevatron. Photograph taken March 24, 1964. Bevatron-3510.
XBD201306-03055.TIF -- 12 QB magnets and long cradle for the Bevatron. Photograph taken March 24, 1964. Bevatron-3512. Color version Bev.-3513-C.
XBD201306-03056.TIF -- 12 QB 24 magnet for the Bevatron. Photograph taken April 2, 1964. Bevatron-3515. Color version Bev.-3515-C.
XBD201306-03057.TIF -- 12 QB 24 magnet for the Bevatron. Photograph taken April 17, 1964. Bevatron-3526. Color version Bev.-3527-C.
XBD201306-03058.TIF -- 12 QB magnet for the Bevatron. Photograph taken April 17, 1964. Bevatron-3534. Color version Bev.-3535-C.
XBD201306-03059.TIF -- 12 QB 48 magnet for the Bevatron. Photograph taken April 17, 1964. Bevatron-3536. Color version Bev.-3537-C.
XBD201306-03060.TIF -- 12 QB 48 magnet for the Bevatron. Photograph taken April 17, 1964. Bevatron-3538. Color version Bev.-3539-C.
XBD201306-03061.TIF -- 12 QB triplet assembly. Photograph taken April 17, 1964. Bevatron-3544.
XBD201306-03062.TIF -- Gap-mounted flip target Mark VIII-T. Photograph taken April 22, 1964. Bevatron-3546.
XBD201306-03063.TIF -- Gap-mounted flip target Mark VIII-T target and coil base assembly. Photograph taken April 22, 1964. Bevatron-3548.
XBD201306-03064.TIF -- Traveling target assembly. Photograph taken April 22, 1964. Bevatron-3551.
XBD201306-03065.TIF -- Lock solenoid assembly. Photograph taken April 22, 1964. Bevatron-3552.
XBD201306-03066.TIF -- Lock solenoid assembly. Photograph taken April 22, 1964. Bevatron-3553.
XBD201306-03067.TIF -- Lock solenoid assembly. Photograph taken April 22, 1964. Bevatron-3554.
XBD201306-03068.TIF -- Bevatron 10-mev linac. Photograph taken May 22, 1964. Bevatron-3558.
XBD201306-03069.TIF -- Bevatron 10-Mev linac. Photograph taken May 22, 1964. Bevatron-3559.
XBD201306-03070.TIF -- Bevatron 10-Mv linac. Photograph taken May 22, 1964. Bevatron-3560.
XBD201306-03071.TIF -- External proton beam magnets M-40. Photograph taken June 3, 1964. Bevatron-3571.
XBD201306-03072.TIF -- External proton beam magnets M-40. Photograph taken June 3, 1964.

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
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| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

Bevatron-3572.
XBD201306-03073.TIF -- Bevatron auxiliary magnet coils M-5. Photograph taken June 25, 1964. Bevatron-3573.
XBD201306-03074.TIF -- Bevatron auxiliary magnet coils M-5. Photograph taken June 25, 1964. Bevatron-3575.
XBD201306-03075.TIF -- Bevatron M-5 magnet coil vacuum pumping equipment. Note epoxy "sight glass" at left. Photograph taken May 22, 1964. Bevatron-3576.
XBD201306-03076.TIF -- Normal display with sweep speeds: (a) sweep speed 0.1 m-sec/cm; (b) sweep speed 0.2 m-sec/cm. Photograph taken August 19, 1964. Bevatron-3612.
XBD201306-03077.TIF -- Normal display; sweep speed 0.5 micro-seconds/cm: (a) trigger: 0.1 m-sec after start of rf; (b) trigger: 1. m-sec after start of rf; (c) trigger: 2. m-sec after start of rf. Photograph taken August 19, 1964. Bevatron-3613.
XBD201306-03078.TIF -- Dual-axis time display: 0.5 m-sec/cm horizontal; 6 cm vertical for 1 m-sec. Photograph taken August 19, 1964. Bevatron-3614.
XBD201306-03079.TIF -- Dual-axis time display: 0.5 m-sec/cm horizontal; 6 cm vertical for 1.5 m-sec. Photograph taken August 19, 1964. Bevatron-3615.
XBD201306-03080.TIF -- Dual-axis time display showing beam loss: 0.5 m-sec/cm horizontal; 6 cm vertical for 2 m-sec. Photograph taken August 19, 1964. Bevatron-3616
XBD201306-03081.TIF -- Dual-axis time display showing beam loss: 0.5 m-sec/cm horizontal; 6 cm vertical for 2 m-sec. Photograph taken August 19, 1964. Bevatron-3616A.
XBD201306-03082.TIF -- Dual-axis time display: 0.5 m-sec/cm horizontal; 6 cm vertical for 2 m-sec. Sweep delay "dead time" about 30 micro-seconds. Photograph taken August 19, 1964. Bevatron-3617
XBD201306-03083.TIF -- Dual-axis time display: 0.5 m-sec/cm horizontal; 6 cm vertical for 2 m-sec. Sweep delay "dead time" about 60 micro-seconds. Photograph taken August 19, 1964. Bevatron-3618.
XBD201306-03084.TIF -- IM3 magnet test set up. Photograph taken August 7, 1964. Bevatron-3619.
XBD201306-03085.TIF -- IM3 magnet test set up. Photograph taken August 7, 1964. Bevatron-3621.
XBD201308-03086.TIF -- IM3 magnet test set up. Photograph taken August 7, 1964. Bevatron-3624.
XBD201306-03096.TIF -- Mark VI velocity spectrometer. Photograph taken August 18, 1964. Bevatron-3626.
XBD201306-03097.TIF -- Mark VI velocity spectrometer. Photograph taken August 25, 1964. Bevatron-3633.
XBD201306-03098.TIF -- Mark VI velocity spectrometer. Photograph taken August 25, 1964. Bevatron-3629.
XBD201306-03099.TIF -- Mark VI velocity spectrometer. Photograph taken August 25, 1964. Bevatron-3635.
XBD201306-03100.TIF -- M-P scattering experiment, Cedric Larson. Photograph taken September 3, 1964. Bevatron-3636.
XBD201306-03101.TIF -- Annex experimental facilities; Trilling-Goldhaber experiments. Photograph taken September 3, 1964. Bevatron-3638.
XBD201306-03102.TIF -- Inflector magnet Mark I, IM3. Photograph taken September 17, 1964. Bevatron-3645. Color version: Bev.-3644-C
XBD201306-03103.TIF -- Inflector magnet Mark I, IM3. Photograph taken September 17, 1964. Bevatron-3647. Color version: Bev.-3646-C
XBD201306-03104.TIF -- IM3 magnet in position inside east tangent tank. Photograph taken September 28, 1964. Bevatron-3652.

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
|---|---|---|
| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201306-03105.TIF -- 600-KV power supply model 3. Photograph taken October 8, 1964. Bevatron-3665.
XBD201306-03106.TIF -- 600-KV power supply model 3. Photograph taken October 8, 1964. Bevatron-3667.
XBD201306-03107.TIF -- 600-KV power supply model 3. Photograph taken October 28, 1964. Bevatron-3668.
XBD201306-03108.TIF -- 600-KV power supply model 3. Photograph taken October 28, 1964. Bevatron-3669.
XBD201306-03109.TIF -- Damaged 18x36 high power H-magnet. Photograph taken November 9, 1964. Bevatron-3671.
XBD201306-03110.TIF -- Spark chamber event. Photograph taken December 2, 1964. Bevatron-3675.
XBD201306-03111.TIF -- Ed Lofgren P-P (proton-proton) interaction experiment. Photograph taken December 2, 1964. Bevatron-3677.
XBD201306-03112.TIF -- Ed Lofgren P-P (proton-proton) interaction experiment. Photograph taken December 2, 1964. Bevatron-3679.
XBD201306-03113.TIF -- Ed Lofgren P-P (proton-proton) interaction experiment. Photograph taken December 2, 1964. Bevatron-3681.
XBD201306-03114.TIF -- Oscillator reactor box. Photograph taken December 16, 1964. Bevatron-3687.
XBD201306-03115.TIF -- Radiation safety gate and Bevatron control panel for safety gate. Photograph taken January 5, 1965. Bevatron-3693.
XBD201306-03116.TIF -- Radiation safety gate, TV camera, and Bevatron control panel for safety gate. Photograph taken January 5, 1965. Bevatron-3694.
XBD201306-03117.TIF -- Radiation safety gate and Bevatron control panel for safety gate. Photograph taken January 5, 1965. Bevatron-3695.
XBD201306-03118.TIF -- Ollie Olson in the modular experimental house within the Bevatron experimental facility. Photograph taken January 11, 1965. Bevatron-3698.
XBD201306-03127.TIF -- 196 Kilowatt DC magnet power supply. Photograph taken January 11, 1965. Bevatron-3703.
XBD201306-03128.TIF -- Experimental set up between Bevatron and the bubble chamber. Photograph taken January 12, 1965. Bevatron-3706.
XBD201306-03129.TIF -- Rapid emittance equipment for linac exit section. Photograph taken January 14, 1965. Bevatron-3712.
XBD201306-03130.TIF -- Rapid emittance equipment for linac exit section. Photograph taken January 14, 1965. Bevatron-3713.
XBD201306-03131.TIF -- Rapid emittance equipment for linac exit section. Photograph taken January 14, 1965. Bevatron-3714.
XBD201306-03132.TIF -- Rapid emittance equipment for linac exit section. Photograph taken January 14, 1965. Bevatron-3715.
XBD201306-03133.TIF -- Rapid emittance equipment for linac exit section. Photograph taken January 14, 1965. Bevatron-3716.
XBD201306-03134.TIF -- Pouring lead into beam stop block for external proton beam. Photograph taken January 27, 1965. Bevatron-3721.
XBD201306-03135.TIF -- Bevatron linear accelerator drift tube and end plate. Photograph taken February 1, 1965. Bevatron-3722.
XBD201306-03136.TIF -- Bevatron linear accelerator drift tube and end plate. Photograph taken

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
|---|---|---|
| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

February 1, 1965. Bevatron-3728.
XBD201306-03137.TIF -- Ion house platform sequence with Foss Crosby. Photograph taken February 1, 1965. Bevatron-3730.
XBD201306-03138.TIF -- Ion house platform sequence with Foss Crosby. Photograph taken February 1, 1965. Bevatron-3734
XBD201306-03139.TIF -- Ion house platform sequence with Foss Crosby. Photograph taken February 1, 1965. Bevatron-3738.
XBD201306-03140.TIF -- K+ nucleon interaction set up, Trilling-Goldhaber. Photograph taken February 16, 1965. Bevatron-3744
XBD201306-03141.TIF -- K+ nucleon interaction set up, Trilling-Goldhaber. Photograph taken February 16, 1965. Bevatron-3746
XBD201306-03142.TIF -- Bevatron M 4 V magnet. Photograph taken March 4, 1965. Bevatron-3750.
XBD201306-03143.TIF -- External proton beam M 4 V magnet with D. Coyle. Photograph taken March 8, 1965. Bevatron-3751.
XBD201306-03144.TIF -- Spark gap-capacitor bank. Photograph taken March 9, 1965. Bevatron-3753.
XBD201306-03145.TIF -- Semi-cylindrical spark chamber. Photograph taken March 9, 1965. Bevatron-3755.
XBD201306-03146.TIF -- Cold cap for diffusion pump. Photograph taken March 18, 1965. Bevatron-3756.
XBD201306-03147.TIF -- Four-gap track in hydrogen showing the difference in individual gap spark intensities. Photograph taken March 23, 1965. Bevatron-3759.
XBD201306-03148.TIF -- 12 QB coil potting forms. Photograph taken April 6, 1965. Bevatron-3761.
XBD201306-03149.TIF -- Hyperbolic track image in semi-cylindrical spark chamber. Photograph taken March 31, 1965. Bevatron-3764.
XBD201306-03150.TIF -- Star in semi-cylindrical spark chamber. Photograph taken March 31, 1965. Bevatron-3765.
XBD201306-03151.TIF -- Star in semi-cylindrical spark chamber. Photograph taken March 31, 1965. Bevatron-3766.
XBD201306-03152.TIF -- Bevatron control room. Photograph taken April 1, 1965. Bevatron-3767.
XBD201306-03153.TIF -- Ed Lofgren EPB experiment, winter 1964, with Abe Glicksman, left. Photograph taken April 14, 1965. Bevatron-3774.
XBD201306-03154.TIF -- Ed Lofgren EPB experiment, Winter 1964. Photograph taken April 14, 1965. Bevatron-3775.
XBD201306-03155.TIF -- Alvarez-Ticho EPB experiment, May 1965. Photograph taken April 14, 1965. Bevatron-3778.
XBD201306-03156.TIF -- Alvarez-Ticho EPB experiment, May 1965. Photograph taken April 14, 1965. Bevatron-3780.
XBD201306-03157.TIF -- Alvarez-Ticho EPB experiment, May, 1965. Photograph taken April 14, 1965. Bevatron-3783.
XBD201306-03158.TIF -- Bevatron R.B.E. ignitron rack. Photograph taken April 26, 1965. Bevatron-3784.
XBD201306-03159.TIF -- Bevatron R.B.E. ignitron rack. Photograph taken April 26, 1965. Bevatron-3786.
XBD201306-03160.TIF -- Bevatron R.B.E. ignitron rack. Photograph taken April 26, 1965.

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
|---|---|---|
| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

Bevatron-3790.
XBD201306-03161.TIF -- 280 KV power supply new house in the Bevatron. Photograph taken April 14, 1965. Bevatron-3792.
XBD201306-03162.TIF -- Induction electrodes linac exit. Photograph taken May 11, 1965. Bevatron-3794.
XBD201306-03163.TIF -- Linac steering magnets  exit end. Photograph taken May 11, 1965. Bevatron-3796.
XBD201306-03164.TIF -- Ed Lofgren experiment air pad leak. Photograph taken May 17, 1965. Bevatron-3798.
XBD201306-03165.TIF -- Bevatron trench pipes at 2B and 1B bay, with Nick Borsoff. Photograph taken May 21, 1965. Bevatron-3802.
XBD201306-03166.TIF -- Collimator flag. Photograph taken June 2, 1965. Bevatron-3804.
XBD201306-03167.TIF -- M1-Q1 magnet assembly. Photograph taken June 3, 1965. Bevatron-3807.
XBD201306-03168.TIF -- M1-Q1 magnet assembly. Photograph taken June 3, 1965. Bevatron-3809.
XBD201306-03169.TIF -- M1-Q1 magnet assembly. Photograph taken June 3, 1965. Bevatron-3811.
XBD201306-03170.TIF -- Bevatron interior of east tangent tank. Photograph taken June 1, 1965. Bevatron-3818.
XBD201306-03171.TIF -- Bevatron interior of east tangent tank. Photograph taken June 1, 1965. Bevatron-3821.
XBD201306-03176.TIF -- Bevatron interior of east tangent tank. Photograph taken June 1, 1965. Bevatron-3822.
XBD201306-03177.TIF -- M1-Q1 magnet mount. Photograph taken June 10, 1965. Bevatron-3824.
XBD201306-03178.TIF -- M1-Q1 magnet mount. Photograph taken June 10, 1965. Bevatron-3825.
XBD201306-03179.TIF -- East tangent tank "clam shell" for M1-Q1 magnet. Photograph taken June 10, 1965. Bevatron-3829.
XBD201306-03180.TIF -- East tangent tank "clam shell" for M1-Q1 magnet. Photograph taken June 10, 1965. Bevatron-3830.
XBD201306-03181.TIF -- East tangent tank "clam shell" for M1-Q1 magnet. Photograph taken June 10, 1965. Bevatron-3831.
XBD201306-03182.TIF -- East tangent tank "clam shell" for M1-Q1 magnet. Photograph taken June 10, 1965. Bevatron-3836.
XBD201306-03183.TIF -- M1-Q1 magnet and mount. Photograph taken June 11, 1965. Bevatron-3837.
XBD201306-03184.TIF -- M1-Q1 magnet and mount. Photograph taken June 11, 1965. Bevatron-3841.
XBD201306-03185.TIF -- North outside east Faraday cup. Photograph taken June 14, 1965. Bevatron-3845.
XBD201306-03186.TIF -- North outside east Faraday cup. Photograph taken June 14, 1965. Bevatron-3846.
XBD201306-03187.TIF -- Retrieval mule for traveling target Mark VIII. Photograph taken June 14, 1965. Bevatron-3847.
XBD201306-03188.TIF -- Retrieval mule for traveling target Mark VIII. Photograph taken June 14, 1965. Bevatron-3849.
XBD201306-03189.TIF -- M1-Q1 magnet assembly east tank. Photograph taken June 16, 1965. Bevatron-3854.
XBD201306-03190.TIF -- M1-Q1 magnet assembly east tank. Photograph taken June 16, 1965. Bevatron-3857.

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
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| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201306-03191.TIF -- M1-Q1 magnet assembly east tank. Photograph taken June 16, 1965. Bevatron-3858.
XBD201306-03192.TIF -- Spark chamber event. Photograph taken July 2, 1965. Bevatron-3859.
XBD201306-03193.TIF -- Segre, Chamberlain, and Piccioni experimental setup. Photograph taken June 30, 1965. Bevatron-3867.
XBD201306-03194.TIF -- Segre, Chamberlain, and Piccioni experimental setup. Photograph taken June 30, 1965. Bevatron-3870.
XBD201306-03195.TIF -- Segre, Chamberlain, and Piccioni experimental setup. Photograph taken June 30, 1965. Bevatron-3875.
XBD201306-03196.TIF -- Segre, Chamberlain, and Piccioni experimental setup. Photograph taken June 30, 1965. Bevatron-3877.
XBD201306-03197.TIF -- Segre, Chamberlain, and Piccioni experimental setup. Photograph taken June 30, 1965. Bevatron-3878.
XBD201306-03199.TIF -- Segre, Chamberlain, and Piccioni experimental setup. Photograph taken June 30, 1965. Bevatron-3880.
XBD201306-03200.TIF -- Bevatron experimental facilities motorized jack stand. Photograph taken July 6, 1965. Bevatron-3888.
XBD201306-03201.TIF -- Bevatron experimental facilities motorized jack stand. Photograph taken July 6, 1965. Bevatron-3890.
XBD201306-03202.TIF -- Bevatron experimental facilities motorized jack stand. Photograph taken July 6, 1965. Bevatron-3892.
XBD201306-03203.TIF -- Bevatron experimental facilities layout. Photograph taken July 12, 1965. Bevatron-3893.
XBD201306-03204.TIF -- Bevatron external proton beam EPB 2nd focus target (Segre-Steining). Photograph taken August 10, 1965. Bevatron-3899.
XBD201306-03210.TIF -- External proton beam experiment, EPB 2nd focus target Bevatron (Segre-Steining). Photograph taken August 10, 1965. Bevatron-3901.
XBD201306-03211.TIF -- Bevatron experiment. William Wenzel's external proton beam setup. Photograph taken August 10, 1965. Bevatron-3905.
XBD201306-03213.TIF -- Bevatron experiment. William Wenzel's external proton beam setup. Photograph taken August 10, 1965. Bevatron-3907.
XBD201306-03214.TIF -- Bevatron experiment. William Wenzel's external proton beam setup. Photograph taken August 10, 1965. Bevatron-3909.
XBD201306-03215.TIF -- Spontaneous longitudinal bunching and vertical motion of the coasting beam after injection. The ordinate is the difference signal from upper and lower electrodes. The injected current is 17 ma and the RF has been left off. Photograph taken September 2, 19
XBD201306-03216.TIF -- Top trace is detector output. Bottom trace is Cerenkov counter signal. Photograph taken September 7, 1965. Bevatron-3925
XBD201306-03217.TIF -- Dual flip target drive for Bevatron dual target holders. Photograph taken September 27, 1965. Bevatron-3930.
XBD201306-03218.TIF -- Dual flip target drive for Bevatron dual target holders. Photograph taken September 27, 1965. Bevatron-3932.
XBD201306-03219.TIF -- Pia magnet for chamberlain blue magnet with aluminum support. Photograph taken September 27, 1965. Bevatron-3938.
XBD201306-03220.TIF -- Magnetic measurements of M-S using rapid mapper. Photograph taken October 6, 1965. Bevatron-3942.
XBD201306-03221.TIF -- Magnetic measurements of M-S using rapid mapper. Photograph taken

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
|---|---|---|
| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

October 6, 1965. Bevatron-3944.
XBD201306-03276.TIF -- Magnetic measurements of M-S using rapid mapper. Photograph taken October 6, 1965. Bevatron-3945.
XBD201306-03277.TIF -- Groove cutting with the beam position electrode. Photograph taken October 12, 1965. Bevatron-3949.
XBD201306-03278.TIF -- Bevatron experimental area layout board. Photograph taken October 20, 1965. Bevatron-3957.
XBD201306-03279.TIF -- Q II-89-degree bellows radiation damage outside west platform. Photograph taken November 2, 1965. Bevatron-3960.
XBD201306-03280.TIF -- High vacuum leak test fluid sealer. Photograph taken November 16, 1965. Bevatron-3968.
XBD201306-03281.TIF -- Photo-spark chambers and data lights, image of typical event. Photograph taken April 13, 1966. Bevatron-3970.
XBD201306-03282.TIF -- Bevatron substation. Photograph taken December 1, 1965. Bevatron-3972.
XBD201306-03283.TIF -- M-5 magnet with Lina Galtieri. Photograph taken December 15, 1965. Bevatron-3975.
XBD201306-03284.TIF -- M-5 magnet with Fred Goozen and Dan George. Photograph taken December 15, 1965. Bevatron-3976.
XBD201306-03285.TIF -- Gap-mounted flip target tow mule. Photograph taken December 17, 1965. Bevatron-3978.
XBD201306-03286.TIF -- Gap-mounted flip target tow mule. Photograph taken December 17, 1965. Bevatron-3980.
XBD201306-03287.TIF -- Gap-mounted flip target tow mule. Photograph taken December 17, 1965. Bevatron-3981.
XBD201306-03288.TIF -- Gap-mounted flip target tow mule. Photograph taken December 17, 1965. Bevatron-3983.
XBD201306-03289.TIF -- Gap-mounted flip target tow mule. Photograph taken December 17, 1965. Bevatron-3985.
XBD201307-03296.TIF -- Gap-mounted flip target tow mule. Photograph taken December 17, 1965. Bevatron-3987.
XBD201307-03297.TIF -- Astrodome Mach 2. Photograph taken December 28, 1965. Bevatron-3991.
XBD201307-03298.TIF -- Tow mule Bevatron experiment facility gap-mounted flip target. Photograph taken December 29, 1965. Bevatron-3996.
XBD201307-03299.TIF -- Tow mule Bevatron experiment facility gap-mounted flip target. Photograph taken December 29, 1965. Bevatron-3997.
XBD201307-03300.TIF -- Tow mule Bevatron experiment facility gap-mounted flip target. Photograph taken December 29, 1965. Bevatron-3998.
XBD201307-03301.TIF -- Tow mule Bevatron experiment facility gap-mounted flip target. Photograph taken December 29, 1965. Bevatron-3999.
XBD201307-03302.TIF -- Bevatron MG 1 X 2 motor secondary modified Kramer control system. Photograph taken January 17, 1966. Bevatron-4004.
XBD201307-03303.TIF -- Bevatron MG 2 X 2 motor secondary modified Kramer control system. Photograph taken January 17, 1966. Bevatron-4005.
XBD201307-03304.TIF -- Bevatron injector II induction electrode test set up. Photograph taken February 23, 1966. Bevatron-4007.
XBD201307-03305.TIF -- DiBoson experiment, Lofgren Group. Photograph taken March 7, 1966.

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
|---|---|---|
| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

Bevatron-4008.
XBD201307-03306.TIF -- DiBoson experiment, Lofgren Group. Photograph taken March 7, 1966. Bevatron-4009.
XBD201307-03307.TIF -- DiBoson experiment, Lofgren Group. Photograph taken March 7, 1966. Bevatron-4012.
XBD201307-03308.TIF -- DiBoson experiment, Lofgren Group. Photograph taken March 7, 1966. Bevatron-4016.
XBD201307-03309.TIF -- 12 X 24 sextupole magnet. Photograph taken March 10, 1966. Bevatron-4019.
XBD201307-03310.TIF -- Model of external beam crane, with Tom Richmond. Photograph taken March 14, 1966. Bevatron-4022.
XBD201307-03311.TIF -- Radial motion target. Photograph taken November 9, 1966. Bevatron-4024A.
XBD201307-03312.TIF -- Radial target. Photograph taken March 21, 1966. Bevatron-4024.
XBD201307-03313.TIF -- Radial target. Photograph taken March 21, 1966. Bevatron-4025.
XBD201307-03314.TIF -- Optical distortion associated with spark chamber events. Photograph taken January 26, 1966. Bevatron-4027.
XBD201307-03315.TIF -- MII magnet coils installed in potting mold. Photograph taken March 23, 1966. Bevatron-4029.
XBD201307-03316.TIF -- EPB M1 magnet. Photograph taken March 28, 1966. Bevatron-4031.
XBD201307-03317.TIF -- Radiation damage to Quad II, 89-degree area chlorobutyl rubber gasket. Photograph taken April 12, 1966. Bevatron-4034.
XBD201307-03318.TIF -- Sextupole magnet with magnet measuring equipment. Photograph taken April 18, 1966. Bevatron-4036.
XBD201307-03319.TIF -- Beam position electrode simulator. Photograph taken April 18, 1966. Bevatron-4037.
XBD201307-03320.TIF -- Damaged M2 magnet. Photograph taken April 22, 1966. Bevatron-4040.
XBD201307-03321.TIF -- Comparison of Kramer control with open-loop time control. Photograph taken June 9, 1966. Bevatron-4041.
XBD201307-03325.TIF -- Bevatron normal pulse. Photograph taken June 21, 1966. Bevatron-4047.
XBD201307-03326.TIF -- A Bevatron mezzanine and flat-top pulse. Photograph taken June 21, 1966. Bevatron-4048.
XBD201307-03327.TIF -- Bevatron experiment layout board. Photograph taken June 28, 1966. Bevatron-4052.
XBD201307-03328.TIF -- Composite picture of Bevatron from National Geographic. Photograph taken July 20, 1966. Bevatron-4057.
XBD201307-03329.TIF -- Bevatron injector II, induction electrodes test main assembly. Photograph taken August 1, 1966. Bevatron-4060.
XBD201307-03330.TIF -- Bevatron injector II, induction electrodes test main assembly. Photograph taken August 1, 1966. Bevatron-4061.
XBD201307-03331.TIF -- Emmitance measuring device. Photograph taken August 1, 1966. Bevatron-4062.
XBD201307-03332.TIF -- Emmitance measuring device. Photograph taken August 1, 1966. Bevatron-4063.
XBD201307-03333.TIF -- Emmitance measuring device. Photograph taken August 1, 1966. Bevatron-4064.
XBD201307-03334.TIF -- Emmitance measuring device. Photograph taken August 1, 1966.

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
|---|---|---|
| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

Bevatron-4065.
XBD201307-03335.TIF -- Emmitance measuring device. Photograph taken August 1, 1966. Bevatron-4066.
XBD201307-03336.TIF -- Steering magnets and positron electrodes. Photograph taken August 1, 1966. Bevatron-4068.
XBD201307-03337.TIF -- Steering magnets and positron electrodes. Photograph taken August 1, 1966. Bevatron-4069.
XBD201307-03338.TIF -- Ion source test stand. Photograph taken August 1, 1966. Bevatron-4070.
XBD201307-03339.TIF -- Ion source test stand. Photograph taken August 1, 1966. Bevatron-4072.
XBD201307-03340.TIF -- Ion source test stand. Photograph taken August 1, 1966. Bevatron-4073.
XBD201307-03341.TIF -- Ion source test stand. Photograph taken August 1, 1966. Bevatron-4074.
XBD201307-03342.TIF -- Ion source test stand. Photograph taken August 1, 1966. Bevatron-4077.
XBD201307-03343.TIF -- West inside south port, showing radiation damage. Photograph taken August 1, 1966. Bevatron-4082.
XBD201307-03344.TIF -- Wear and tear on the tube and sheel heat exchanger behind the Bevatron. Photograph taken September 2, 1966. Bevatron-4089.
XBD201307-03345.TIF -- 36-inch scatter chamber. Photograph taken September 15, 1966. Bevatron-4094.
XBD201307-03346.TIF -- 36-inch scatter chamber. Photograph taken September 15, 1966. Bevatron-4095.
XBD201307-03347.TIF -- Decay of parameter of E-degree, University of Washington experiment, Williams/Davis. Photograph taken September 19, 1966. Bevatron-4100.
XBD201307-03348.TIF -- Decay of parameter of E-degree, University of Washington experiment, Williams/Davis. Photograph taken September 19, 1966. Bevatron-4101.
XBD201307-03349.TIF -- Cascade magnetic moment, University of Washington experiment, Williams/Masek. Photograph taken September 19, 1966. Bevatron-4106.
XBD201307-03350.TIF -- Test coil for kicker magnet. Photograph taken October 11, 1966. Bevatron-4117.
XBD201307-03351.TIF -- Test coil for kicker magnet. Photograph taken October 11, 1966. Bevatron-4118.

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
|---|---|---|
| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

Box 2 Photos:

XBD201307-03352.TIF -- High voltage cable, 600kv power supply, showing electrical breakdown. Photograph taken October 11, 1966. Bevatron-4125.
XBD201307-03353.TIF -- Bevatron lower pole tip with Bob Edwards. Photograph taken November 9, 1966. Bevatron-4126.
XBD201307-03355.TIF -- EPB F1 area inside the Bevatron. Photograph taken November 21, 1966. Bevatron-4134.
XBD201307-03357.TIF -- Bevatron external proton beam Q-4 magnet. Photograph taken December 20, 1966. Bevatron-4142.
XBD201307-03358.TIF -- Bevatron external proton beam Q-4 magnet. Photograph taken December 20, 1966. Bevatron-4145.
XBD201307-03359.TIF -- Bevatron external proton beam Q-4 magnet. Photograph taken December 20, 1966. Bevatron-4148.
XBD201307-03360.TIF -- Bevatron external proton beam Q-4 magnet. Photograph taken December 20, 1966. Bevatron-4149.
XBD201310-03946.TIF -- Bevatron model magnet AC8 gap view. Photograph taken May 23, 1952. Bevatron-459.
XBD201310-03947.TIF -- Bevatron interbank springs. Photograph taken May 15, 1952. Bevatron-461.
XBD201310-03948.TIF -- Bevatron coil winding in vertical bend. Photograph taken June 16, 1952. Bevatron-468.
XBD201310-03949.TIF -- Quadrant #4- shunt house and terminal lead housing to gap. Photograph taken August 5, 1952. Bevatron-473.
XBD201310-03950.TIF -- Magnet control area, center of bevatron magnet. Photograph taken August 5, 1952. Bevatron-474.
XBD201310-03951.TIF -- Magnet test setup at gap between quadrants #2 and #3. Photograph taken September 10, 1952. Bevatron-477.
XBD201310-03952.TIF -- Magnet test setup at gap between quadrants #2 and #3 showing terminal lead-ins, cooling ducts. Photograph taken September 10, 1952. Bevatron-478.
XBD201310-03953.TIF -- Geiger Torsiograph installed on generator of West m-g set. Photograph taken September 28, 1952. Bevatron-481.
XBD201310-03954.TIF -- Moving curved tank to top of quadrant #4 for storage. Photograph taken October 21, 1952. Bevatron-486.
XBD201310-03955.TIF -- Moving curved tank to top of quadrant #4 for storage. Photograph taken October 21, 1952. Bevatron-489.
XBD201310-03956.TIF -- Moving curved tank to top of quadrant #4 for storage. Photograph taken October 21, 1952. Bevatron-491.
XBD201310-03957.TIF -- Moving curved tank to top of quadrant #4 for storage. Associated individuals: Jack Kelso and Bob Pratt. Photograph taken October 21, 1952. Bevatron-492.
XBD201310-03958.TIF -- Ion gun components-pig iron source pulser. Photograph taken November 5, 1952. Bevatron-493.
XBD201310-03959.TIF -- Ion gun components-pig iron source pulser. Photograph taken November 5, 1952. Bevatron-494.
XBD201310-03960.TIF -- Ion gun components-pig iron source pulser. Photograph taken November 5, 1952. Bevatron-495.
XBD201310-03961.TIF -- Curve tank construction-operation of drilling side sheet. Photograph taken December 4, 1952. Bevatron-510.

# Ernest Orlando Lawrence Berkeley National Laboratory
# Records Transmittal

| Division | Department | Filing Code |
|---|---|---|
| Directorate | Public Affairs | ARO-6745 |

**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201310-03962.TIF -- Bevatron linac, 1/2 million volt ion gun, west side. Photograph taken December 8, 1952. Bevatron-513.
XBD201310-03963.TIF -- Bevatron curve tank in assembly position. Photograph taken December 8, 1952. Bevatron-516.
XBD201310-03964.TIF -- Moving curve tank into magnet for storage. Photograph taken December 17, 1952. Bevatron-518.
XBD201310-03965.TIF -- Tangent tank, east side. Photograph taken January 15, 1953. Bevatron-527.
XBD201310-03966.TIF -- Ion gun cascade rectifier. Photograph taken July 10, 1953. Bevatron-529.
XBD201310-03967.TIF -- East quadrant pole base. Photograph taken March 2, 1953. Bevatron-530.
XBD201310-03968.TIF -- Alignment jig for pole pieces. Photograph taken February 24, 1953. Bevatron-534.
XBD201310-03969.TIF -- Pole tip and base-whole stand. Photograph taken March 18, 1953. Bevatron-537.
XBD201310-03970.TIF -- Pole tip and base varnish dipping. Photograph taken March 18, 1953. Bevatron-539.
XBD201310-03971.TIF -- Curved tank under construction. Photograph taken March 26, 1953. Bevatron-548.
XBD201310-03972.TIF -- General view of linear accelerator. Photograph taken March 26, 1953. Bevatron-549.
XBD201310-03973.TIF -- Overall view of ion gun. Photograph taken March 26, 1953. Bevatron-551. ZN-981.
XBD201310-03974.TIF -- Close-up, side of ion gun. Photograph taken March 26, 1953. Bevatron-553. ZN-982.
XBD201310-03975.TIF -- Side of ion gun with cover off. Photograph taken March 26, 1953. Bevatron-554.
XBD201310-03976.TIF -- Putting side sheet on curved tank. Photograph taken April 21, 1953. Bevatron-556.
XBD201310-03977.TIF -- Pole tip assembly. Photograph taken May 6, 1953. Bevatron-560.
XBD201310-03978.TIF -- Bevatron inflector transformer. Photograph taken June 13, 1953. Bevatron-563.
XBD201310-03979.TIF -- Grid bushings for ignitron tanks. Photograph taken June 18, 1953. Bevatron-566.
XBD201310-03980.TIF -- Ignitron tanks. Photograph taken June 18, 1953. Bevatron-568.
XBD201310-03981.TIF -- Grid bushings for ignitron tanks. Photograph taken June 18, 1953. Bevatron-570.
XBD201310-03982.TIF -- Pole tip. Photograph taken July 2, 1953. Bevatron-579.
XBD201310-03983.TIF -- Quadrant pole tip installation. Photograph taken July 6, 1953. Bevatron-580.
XBD201310-03984.TIF -- Pole tip curve tank installation. Photograph taken July 14, 1953. Bevatron-581.
XBD201310-03985.TIF -- Beam's eye view of the bevatron magnet showing pole tips which are 1/4-inch thick steel plates. Insulation for eddy currents is porcelain glaze. Photograph taken July 14, 1953. Bevatron-582.
XBD201310-03986.TIF -- Filler frame tunnel. Photograph taken July 14, 1953. Bevatron-583.
XBD201310-03987.TIF -- Bevatron shielding. Photograph taken July 14, 1953. Bevatron-584.
XBD201310-03988.TIF -- Ignitron spark plug. Photograph taken July 15, 1953. Bevatron-588.

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| Division | Department | Filing Code |
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**Group** Creative Services Offices (CSO)/PhotoLab

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Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201310-03989.TIF -- Access slot. Photograph taken July 15, 1953. Bevatron-595.
XBD201310-03990.TIF -- Five-turn peaking transformer. Photograph taken July 29, 1953. Bevatron-600.
XBD201310-03991.TIF -- RF marker gate chassis. Photograph taken August 11, 1953. Bevatron-601.
XBD201310-03992.TIF -- Diffusion pumps North tan tank. Photograph taken August 20, 1953. Bevatron-603.
XBD201310-03993.TIF -- Outer radius general view. Photograph taken August 20, 1953. Bevatron-604.
XBD201310-03994.TIF -- North tan tank gate valves outer radius. Photograph taken August 20, 1953. Bevatron-607.
XBD201310-03995.TIF -- Entrance end of North tan tank. Photograph taken August 20, 1953. Bevatron-608.
XBD201310-03996.TIF -- Pole tip and vacuum chamber grounding terminal strips. Photograph taken August 20, 1953. Bevatron-609.
XBD201310-03997.TIF -- Third quad covered curve tank installation. Photograph taken August 26, 1953. Bevatron-614.
XBD201310-03998.TIF -- Proton-proton scattering apparatus. Photograph taken September 21, 1953. Bevatron-618. ZN-773
XBD201310-03999.TIF -- Injector. Photograph taken October 20, 1953. Bevatron-626.
XBD201310-04000.TIF -- Injector inflector. Photograph taken December 9, 1953. Bevatron-630.
XBD201310-04001.TIF -- Injector inflector. Photograph taken December 9, 1953. Bevatron-632.
XBD201310-04002.TIF -- Injector inflector. Photograph taken December 9, 1953. Bevatron-634.
XBD201310-04003.TIF -- East tangent tank inner radius. Photograph taken December 14 1953. Bevatron-635.
XBD201310-04004.TIF -- Construction of water-fall. Photograph taken December 18, 1953. Bevatron-638.
XBD201310-04005.TIF -- Camera and scope setup. Photograph taken December 29, 1953. Bevatron-650.
XBD201310-04006.TIF -- Electronic measurement gear, magnet tests. Photograph taken December 29, 1953. Bevatron-652. ZN-1165.
XBD201310-04007.TIF -- Foundation for shielding. Photograph taken December 30, 1953. Bevatron-653.
XBD201310-04008.TIF -- North tank open, from outside. Photograph taken December 29, 1953. Bevatron-659.
XBD201310-04009.TIF -- Injector tank, open. Photograph taken December 17, 1953. Bevatron-661.
XBD201310-04010.TIF -- North area, interior. Photograph taken December 17, 1953. Bevatron-662.
XBD201310-04013.TIF -- Close-up of injector equipment with Bob Fitzpatrick, left and Emery Zajek. Photograph taken December 17, 1953. Bevatron-664.
XBD201310-04014.TIF -- West tank open, from interior. Photograph taken December 17, 1953. Bevatron-665.
XBD201310-04015.TIF -- General view of injector in place, tank open. Patent clearance 6/25/1059. Photograph taken December 17, 1953. Bevatron-666. ZN-1229.
XBD201310-04016.TIF -- Bevatron building and parking lot, looking southeast. Photograph taken January 8,1954. Bevatron-667.
XBD201310-04017.TIF -- Installing injector inflector with Cedric Larson. Photograph taken January 20,1954. Bevatron-670.

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**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201310-04018.TIF -- Shielding foundation progress. Photograph taken February 1,1954. Bevatron-675.
XBD201310-04019.TIF -- Ernest O. Lawrence, William Brobeck, Edward Lofgren, and Edwin McMillan looking at plans in Bevatron. Photograph taken February 5, 1954. Bevatron-679. See also XBD9709-03490.TIF for similar image.
XBD201310-04020.TIF -- Artist rendering of bevatron and site. Photograph taken January 18, 1954. Bevatron-685.
XBD201310-04021.TIF -- Bevatron shielding. Photograph taken March 5, 1953. Bevatron-687.
XBD201310-04022.TIF -- Placing of shielding blocks with Bob Pratt. Photograph taken March 24, 1954. Bevatron-688.
XBD201310-04023.TIF -- Bevatron cable shield. Photograph taken March 31, 1954. Bevatron-694.
XBD201310-04024.TIF -- East generator winding failure. Photograph taken April 8, 1954. Bevatron-703.
XBD201310-04025.TIF -- East generator winding failure. Photograph taken April 12, 1954. Bevatron-715.
XBD201310-04026.TIF -- East generator winding failure. Photograph taken April 12, 1954. Bevatron-716.
XBD201310-04027.TIF -- High level radio frequency system. Photograph taken April 15, 1954. Bevatron-722.
XBD201310-04028.TIF -- Marshall circuit in pre-scaler. Photograph taken April 19, 1954. Bevatron-724.
XBD201310-04029.TIF -- Marshall circuit in pre-scaler. Photograph taken April 19, 1954. Bevatron-725.
XBD201310-04030.TIF -- Marshall circuit in pre-scaler. Photograph taken April 19, 1954. Bevatron-726.
XBD201310-04031.TIF -- East generator winding failure. Photograph taken April 26, 1954. Bevatron-729.
XBD201310-04032.TIF -- Overall of ignitron cooling coil. Photograph taken May 3, 1954. Bevatron-739.
XBD201310-04033.TIF -- Beam probe amp power supply. Photograph taken May 7, 1954. Bevatron-741.
XBD201310-04034.TIF -- De-aerating tank. Photograph taken May 12, 1954. Bevatron-744.
XBD201310-04035.TIF -- Final amplifier reactor, back view. Photograph taken May 12, 1954. Bevatron-746.
XBD201310-04036.TIF -- Injector linac pre-exciter. Photograph taken May 20, 1954. Bevatron-758. ZN-986.
XBD201310-04037.TIF -- Ignitrons. Individuals shown: Bob Richter, Glen White, Bruce Cork, Hal Vogel, Harry Heard, Howard Smith, Dick Mack (order not indicated.) Photograph taken May 28, 1954. Bevatron-760.
XBD201310-04038.TIF -- Focusing grid, exit aperture for bevatron linac. Photograph taken June 14, 1954. Bevatron-763. ZN-1000.
XBD201310-04039.TIF -- Bevatron injector with Rod Byrns. Photograph taken July 29, 1954. Bevatron-765. ZN-1021.
XBD201310-04040.TIF -- Proton buncher. Photograph taken July 29, 1954. Bevatron-766.
XBD201310-04041.TIF -- Proton buncher. Photograph taken July 29, 1954. Bevatron-767. ZN-1022.
XBD201310-04042.TIF -- Ignitron anode bushing. Photograph taken November 11, 1954. Bevatron-

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**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

800. ZN-2001.
XBD201310-04043.TIF -- 12 X 60 analyzer magnet. Photograph taken November 22, 1954. Bevatron-801.
XBD201310-04044.TIF -- 12 X 60 analyzer magnet. Photograph taken November 22, 1954. Bevatron-802. ZN-1441.
XBD201310-04045.TIF -- 12 X 60 analyzer magnet. Photograph taken November 22, 1954. Bevatron-803. ZN-1439.
XBD201310-04046.TIF -- 1/2 kva isolation transformer. Photograph taken December 10, 1954. Bevatron-805.
XBD201310-04047.TIF -- Curve corrector power supply. Photograph taken December 15, 1954. Bevatron-806.
XBD201310-04048.TIF -- Master oscillator temperature regulator, control chassis top. Photograph taken December 15, 1954. Bevatron-808.
XBD201310-04049.TIF -- Master oscillator temperature regulator, pump chassis. Photograph taken December 15, 1954. Bevatron-810.
XBD201310-04050.TIF -- Inside east tank from west showing inflector. Photograph taken December 15, 1954. Bevatron-812.
XBD201310-04051.TIF -- Bevatron injector. Photograph taken December 15, 1954. Bevatron-815.
XBD201310-04052.TIF -- West tank target area. Photograph taken December 15, 1954. Bevatron-816.
XBD201310-04053.TIF -- Magnet generator control room. Photograph taken December 15, 1954. Bevatron-817.
XBD201310-04054.TIF -- Injector control room. Photograph taken December 15, 1954. Bevatron-819.
XBD201310-04055.TIF -- Flip-up target. Photograph taken December 29, 1954. Bevatron-827.
XBD201310-04056.TIF -- Line drawing showing "How the Bevatron Works." Photograph taken January 6, 1955. Bevatron-828.
XBD201310-04057.TIF -- Flip-up target in place. Photograph taken January 4, 1955. Bevatron-830. ZN-1379.
XBD201310-04058.TIF -- Model of 30 kilogram emulsion stock. Photograph taken February 24, 1955. Bevatron-836.
XBD201310-04060.TIF -- Inside east clipper plunger. Photograph taken February 1, 1955. Bevatron-838.
XBD201310-04061.TIF -- Stanchion mounted target actuator, 24 X 30 air lock. Photograph taken March 1, 1955. Bevatron-839.
XBD201310-04062.TIF -- 12 X 18 air lock and extension. Photograph taken March 1, 1955. Bevatron-840.
XBD201310-04063.TIF -- Inside south air lock and extension tank. Photograph taken March 1, 1955. Bevatron-841. ZN-1224.
XBD201310-04064.TIF -- Outside west thin window. Photograph taken March 1, 1955. Bevatron-842.
XBD201310-04065.TIF -- Beam clipper in position. Photograph taken March 11, 1955. Bevatron-846.
XBD201310-04066.TIF -- East induction electrode. Shielded induction electrode in north target tank. Photograph taken April 28, 1955. Bevatron-854. ZN-1415.
XBD201310-04067.TIF -- Kerth magnet, quadrapole magnet setup, west tangent tank. Photograph taken May 4, 1955. Bevatron-855.

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**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201310-04068.TIF -- Kerth magnet, quadrapole magnet setup, west tangent tank. Photograph taken May 4, 1955. Bevatron-856.
XBD201310-04069.TIF -- Kerth magnet, quadrapole magnet setup, west tangent tank. Photograph taken May 19, 1955. Bevatron-859. ZN-1375.
XBD201310-04070.TIF -- Probe plunger quick release clamp. Photograph taken May 19, 1955. Bevatron-862.
XBD201310-04071.TIF -- West tangent tank, outside. Photograph taken May 26, 1955. Bevatron-865.
XBD201310-04072.TIF -- Wilson Powell's hydrogen cloud chamber. Photograph taken May 26, 1955. Bevatron-866.
XBD201310-04073.TIF -- Magnet and columnator setup. Photograph taken May 26, 1955. Bevatron-867.
XBD201310-04074.TIF -- Wilson Powell's hydrogen cloud chamber. Photograph taken May 26, 1955. Bevatron-868.
XBD201310-04075.TIF -- 12 X 18 analyzer magnet #2, coil potting preparation. Photograph taken June 8, 1955. Bevatron-870. ZN-1432.
XBD201310-04076.TIF -- Probe plunger MK-3. Photograph taken June 10, 1955. Bevatron-874.
XBD201310-04077.TIF -- Four-inch strong focusing magnet coil potting. Photograph taken June 20, 1955. Bevatron-885. ZN-1431.
XBD201310-04078.TIF -- Overall view of bevatron magnet. Photograph taken July 14, 1955. Bevatron-890.
XBD201310-04079.TIF -- Overall view of bevatron magnet. Photograph taken September 6, 1955. Bevatron-894. ZN-1524.
XBD201310-04080.TIF -- Analyzing magnet, quadrapole magnet setup. Searching for antiprotons. Photograph taken August 3, 1955. Bevatron-895.
XBD201310-04081.TIF -- Analyzing magnet, quadrapole magnet setup. Searching for antiprotons. Photograph taken August 3, 1955. Bevatron-896.
XBD201310-04082.TIF -- Analyzing magnet, quadrapole magnet setup. Searching for antiprotons. Photograph taken August 3, 1955. Bevatron-897.
XBD201310-04083.TIF -- Segre negative proton search setup external to shielding. Photograph taken August 8, 1955. Bevatron-898.
XBD201310-04084.TIF -- Segre negative proton search setup inside shielding. Photograph taken August 8, 1955. Bevatron-899.
XBD201310-04085.TIF -- Segre negative proton search setup columnator. Photograph taken August 8, 1955. Bevatron-900.
XBD201310-04086.TIF -- Flip-up target coil. Photograph taken August 15, 1955. Bevatron-903. ZN-1435.
XBD201310-04087.TIF -- Setup in west tangent tank for Wilson Powell. Photograph taken August 16, 1955. Bevatron-905.
XBD201310-04088.TIF -- Setup in west tangent tank for Wilson Powell. Photograph taken August 16, 1955. Bevatron-906.
XBD201310-04089.TIF -- Bevatron transformer. Photograph taken August 24, 1955. Bevatron-910.
XBD201310-04090.TIF -- Bevatron transformer. Photograph taken August 24, 1955. Bevatron-911.
XBD201310-04091.TIF -- Anti-proton setup for Dr. Segre outside building. Photograph taken August 29, 1955. Bevatron-912.
XBD201310-04092.TIF -- Anti-proton setup for Dr. Segre outside building. Photograph taken August 29, 1955. Bevatron-913.

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**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201310-04093.TIF -- Anti-proton setup for Dr. Segre inside shielding. Photograph taken August 29, 1955. Bevatron-914.
XBD201310-04094.TIF -- Anti-proton setup for Dr. Segre inside shielding. Photograph taken August 29, 1955. Bevatron-915.
XBD201310-04095.TIF -- Four-inch quadrangle magnet, Alvarez #2, with Howie Smith. Photograph taken September 16, 1955. Bevatron-923. ZN-1417.
XBD201310-04096.TIF -- Four-inch quadrangle magnet, Alvarez #1, with Howie Smith. Photograph taken September 16, 1955. Bevatron-926.
XBD201310-04097.TIF -- Blackboard showing progress of anti-proton experiment. Photograph taken October 3, 1955. Bevatron-931.
XBD201310-04098.TIF -- Anti-proton setup. Photograph taken October 6, 1955. Bevatron-935.
XBD201310-04099.TIF -- Anti-proton experiment. Photograph taken October 6, 1955. Bevatron-945.
XBD201310-04100.TIF -- Reactor oil temperature control. Photograph taken September 28, 1955. Bevatron-952.
XBD201310-04101.TIF -- Line drawing of experimental facilities layout. Photograph taken October 14, 1955. Bevatron-952.
XBD201310-04102.TIF -- Line drawing of anti-proton experiment. Photograph taken October 3, 1955. Bevatron-956.
XBD201310-04103.TIF -- Mark III probe plunger mechanism. Photograph taken October 19, 1955. Bevatron-957. ZN-1416.
XBD201310-04104.TIF -- Mark III probe plunger mechanism with unnamed individual. Photograph taken October 19, 1955. Bevatron-958.
XBD201310-04105.TIF -- Cerenkov counter, anti-proton experiment. Photograph taken October 20, 1955. Bevatron-959.
XBD201310-04106.TIF -- Cerenkov counter trunion with truck installed, anti-proton experiment. Photograph taken October 21, 1955. Bevatron-960. ZN-1551.
XBD201310-04107.TIF -- Cerenkov counter trunion truck , anti-proton experiment. Photograph taken October 20, 1955. Bevatron-962.
XBD201310-04108.TIF -- Mark V flip-up target. Photograph taken November 3, 1955. Bevatron-965.
XBD201310-04109.TIF -- Bevatron air drying system with Andy Dubois. Photograph taken November 12, 1955. Bevatron-968.
XBD201310-04110.TIF -- Bevatron air drying system with Ken Lou and Andy Dubois. Photograph taken November 12, 1955. Bevatron-970.
XBD201310-04111.TIF -- Cloud chamber with Howie Smith. Photograph taken November 28, 1951. Bevatron-973.
XBD201310-04112.TIF -- Cloud chamber. Associated individuals: Leroy Kerth and Emilio Segre. Photograph taken November 28, 1951. Bevatron-974.
XBD201310-04113.TIF -- Cloud chamber with Howie Smith. Associated individuals: Leroy Kerth and Emilio Segre. Photograph taken November 28, 1951. Bevatron-976.
XBD201310-04114.TIF -- Bevatron injection timing. Photograph taken November 22, 1955. Bevatron-977. ZN-1418.
XBD201310-04115.TIF -- Oscilloscope traces showing pulses from a) meson, b) antiproton, c) accidental. Photograph taken October 19, 1955. Bevatron-978. ZN-1393.
XBD201310-04116.TIF -- Preliminary shots of proposed interior changes to bevatron, with Felix Caldera. Photograph taken December 8, 1955. Bevatron-981.

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**Group** Creative Services Offices (CSO)/PhotoLab

**Records Title**

Public Affairs Creative Services Office's Photo Lab's Historic Analog And Digital Photographs

XBD201310-04117.TIF -- New platform inside west tangent tank. Photograph taken December 8, 1955. Bevatron-985.
XBD201310-04118.TIF -- Sagane magnet for anti-proton run, with Herb Steiner, rear. Photograph taken December 16, 1955. Bevatron-987.
XBD201310-04119.TIF -- Sagane magnet for anti-proton run. Photograph taken December 16, 1955. Bevatron-988.
XBD201310-04120.TIF -- Jig aligning telescope. Photograph taken December 30, 1955. Bevatron-990.
XBD201310-04121.TIF -- Quad 3 K beam station. Photograph taken December 29, 1955. Bevatron-991.
XBD201310-04122.TIF -- Leg slab restacking fixture. Photograph taken December 28, 1955. Bevatron-995.
XBD201310-04123.TIF -- Stevenson-Crawford K-meson using sagane magnet. Photograph taken January 9, 1956. Bevatron-997.
XBD201310-04124.TIF -- West generator sign of winding fault. Photograph taken January 10, 1956. Bevatron-998.
XBD201310-04125.TIF -- East generator winding fault, side. Photograph taken January 10, 1956. Bevatron-999.
XBD201310-04126.TIF -- East generator winding fault, top. Photograph taken January 10, 1956. Bevatron-1000. ZN-1493.
XBD201310-04127.TIF -- East generator winding fault, top. Photograph taken January 10, 1956. Bevatron-1001. ZN-1997.
XBD201310-04128.TIF -- East generator winding fault, top. Photograph taken January 10, 1956. Bevatron-1002.
XBD201310-04129.TIF -- Impellers for main circulator, 24-hour pump. Photograph taken January 9, 1956. Bevatron-1003.
XBD201310-04130.TIF -- West generator inspection. Photograph taken January 11, 1956. Bevatron-1005.
XBD201310-04131.TIF -- Ignitron tank tube. Photograph taken January 18, 1956. Bevatron-1015. ZN-2000.
XBD201310-04179.TIF -- East generator coils being removed. Photograph taken January 20, 1956. Bevatron-1016.
XBD201310-04180.TIF -- Northwest target area with Andy Dubois. Photograph taken February 1, 1956. Bevatron-1017.
XBD201310-04181.TIF -- Flip coil target. Photograph taken February 2, 1956. Bevatron-1018.
XBD201310-04182.TIF -- Flip coil target. Photograph taken February 2, 1956. Bevatron-1019. ZN-1497.
XBD201310-04183.TIF -- Sagane magnet, K meson setup. Photograph taken February 24, 1956. Bevatron-1023.
XBD201310-04184.TIF -- Bubble chamber. Photograph taken February 24, 1956. Bevatron-1025.
XBD201310-04185.TIF -- Quad 3 K beam station. Photograph taken February 24, 1956. Bevatron-1027. ZN-1494.
XBD201310-04186.TIF -- Model #2 radio frequency shaper, panel down. Photograph taken March 8, 1956. Bevatron-1032. ZN-1494.
XBD201310-04187.TIF -- Radio frequency telemetering system, front wiring of transmitting equipment. Photograph taken March 14, 1956. Bevatron-1036.
XBD201310-04188.TIF -- Telemetering receiver, bottom of chassis. Photograph taken March 14,

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**Group** Creative Services Offices (CSO)/PhotoLab

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1956. Bevatron-1038.
XBD201310-04189.TIF -- Telemetering receiver, top of chassis. Photograph taken March 14, 1956. Bevatron-1039.
XBD201310-04190.TIF -- Telemetering receiver. Photograph taken March 14, 1956. Bevatron-1040.
XBD201310-04191.TIF -- Vertical drop target, overall. Photograph taken March 27, 1956. Bevatron-1043.
XBD201310-04192.TIF -- Calibration of fission counter. Photograph taken March 27, 1956. Bevatron-1045. ZN-1686.
XBD201310-04193.TIF -- Pi minus total cross section. Photograph taken March 27, 1956. Bevatron-1046. ZN-1687.
XBD201310-04194.TIF -- Section between ion source, linac with Howie Smith. Photograph taken April 3, 1956. Bevatron-1050.
XBD201310-04195.TIF -- Overall view of bevatron before shielding with Ed Lofgren seated center. Photograph taken April, 1956. Bevatron-1055.
XBD201310-04196.TIF -- Overall view of bevatron before shielding. Photograph taken April, 1956. Bevatron-1055A.
XBD201310-04197.TIF -- Eight-inch quadrapole magnet being dissembled. Photograph taken April 17, 1956. Bevatron-1055A.
XBD201310-04198.TIF -- Liquid hydrogen target flask, end cave installed. Photograph taken April 19, 1956. Bevatron-1059.
XBD201310-04199.TIF -- Flip-up target. Photograph taken May 2, 1956. Bevatron-1062.
XBD201310-04200.TIF -- Sum induction electrode Mark III south tangent tank. Photograph taken June 11, 1956. Bevatron-1086.
XBD201310-04201.TIF -- Difference induction electrode Mark III, south tangent tank. Photograph taken June 11, 1956. Bevatron-1088.
XBD201310-04202.TIF -- Internal deflection magnet, beam exit end, south tangent tank. Photograph taken June 11, 1956. Bevatron-1090.
XBD201310-04203.TIF -- Sum and difference induction electrode Mark II, south tangent tank. Photograph taken June 11, 1956. Bevatron-1091.
XBD201310-04204.TIF -- Internal deflection magnet, south tangent tank, with Andy Dubois and Howie Smith. Photograph taken June 11, 1956. Bevatron-1094. Patent clearance 6/25/1959.
XBD201310-04205.TIF -- Internal deflection magnet, south tangent tank. Photograph taken June 11, 1956. Bevatron-1096. ZN-1623.
XBD201310-04206.TIF -- Sum and difference induction electrode Mark II, south tangent tank. Photograph taken June 11, 1956. Bevatron-1099.
XBD201310-04207.TIF -- Internal deflection magnet, beam entrance end, south tangent tank. Photograph taken June 11, 1956. Bevatron-1100. Patent clearance 6/25/1959.
XBD201310-04208.TIF -- K-emulsion run, sagane, quadrapole magnets. Photograph taken June 11, 1956. Bevatron-1103.
XBD201310-04209.TIF -- Quadrapole magnet. Photograph taken July 9, 1956. Bevatron-1104.
XBD201310-04210.TIF -- Quadrapole magnet. Photograph taken July 9, 1956. Bevatron-1106.
XBD201310-04211.TIF -- Control room after modification. Photograph taken July 11, 1956. Bevatron-1107.
XBD201310-04212.TIF -- Outside radius stanchion loaded cells. Photograph taken February 15. 1956. Bevatron-1020.