

OAKLAND TRIBUNE

THE COMMISSIONERS AT BERKELEY, AUGUST 1947 / After visiting the Bohemian Grove the Commissioners met with Ernest O. Lawrence in the regents' room in the administration building at the University of California on August 20, 1947. Left to right: Lawrence, Lewis L. Strauss, Robert F. Bacher, David E. Lilienthal, Sumner T. Pike, and William W. Waymack.



WIDE WORLD

CONFIRMATION HEARINGS BEGIN / David E. Lilienthal appearing before the Senate section of the Joint Committee on Atomic Energy on January 27, 1947, to answer questions on his qualifications as chairman. Seated around the dais from left to right are Representative Melvin Price and Senators Kenneth D. McKellar, Edwin C. Johnson, Brien McMahon, and Bourke B. Hickenlooper.



LOS ALAMOS SCIENTIFIC LABORATORY

**MEMBERS OF THE GENERAL ADVISORY COMMITTEE VISIT LOS ALAMOS /** Shortly after landing at the Santa Fe Airport, April 3, 1947. Left to right: James B. Conant, Robert Oppenheimer, General James McCormack, Hartley Rowe, John H. Manley, Isidore I. Rabi, and Roger S. Warner. Manley was the committee's executive secretary. McCormack and Warner were members of the Commission's staff.



LOS ALAMOS SCIENTIFIC LABORATORY

SCIENTISTS AT LOS ALAMOS / Many of the nation's leading scientists attended the nuclear physics conference at Los Alamos in August, 1946. Left to right, first row: Norris E. Bradbury, John H. Manley, Enrico Fermi, J. M. B. Kellogg; second row: Robert Oppenheimer, Richard P. Feynman, Phil B. Porter; third row: Gregory Breit (partly hidden), Arthur Hemmendinger, Arthur D. Schelberg.





WIDE WORLD

**LABORATORY DIRECTORS WITH THE GENERAL MANAGER, JANUARY 18, 1947 / In the front row from left to right are Frank H. Spedding of Ames, Iowa, Carroll L. Wilson, and C. Guy Suits of Knolls. Standing from left to right are Ernest O. Lawrence of Berkeley, Philip M. Morse of Brookhaven, Eugene P. Wigner of Clinton, and Walter H. Zinn of Argonne.**



**THE GENERAL MANAGER MEETS WITH HIS STAFF /** Carroll L. Wilson and his principal staff in the headquarters building, Washington, in the summer of 1947. Left to right: Kenneth E. Fields, James B. Fisk, Fletcher C. Waller, Paul W. Ager, G. Lyle Belsley, Carroll L. Wilson, Wilbur E. Kelley, Walter J. Williams, Herbert S. Marks, and Paul M. Green. In the right corner, Richard O. Niehoff and John A. Derry.



U. S. ARMY

**THE GENERAL RETIRES** / Army Chief of Staff Dwight D. Eisenhower congratulates Leslie R. Groves on his promotion to Lieutenant General on January 26, 1948, a few days before Groves's retirement.



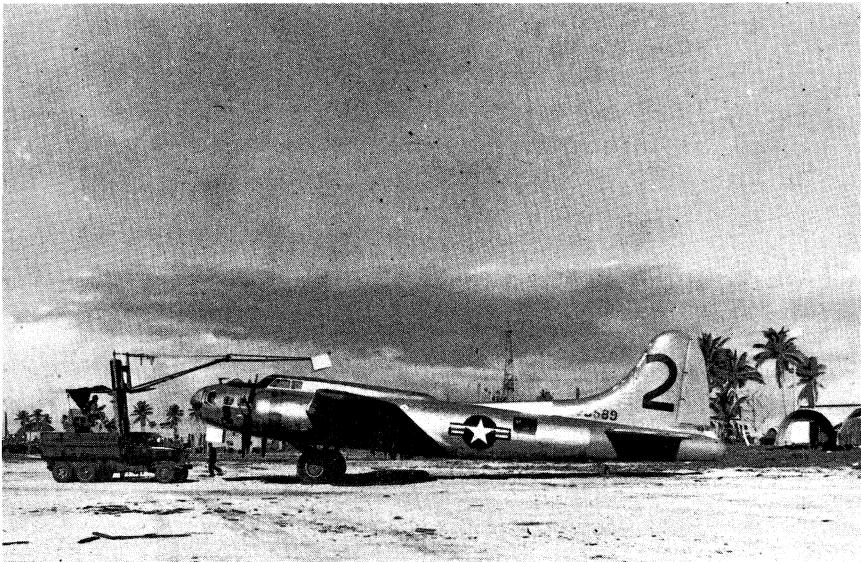
U. S. ARMY

**A NEW CHAIRMAN FOR THE MILITARY LIAISON COMMITTEE** / Major General Thomas H. Green, Judge Advocate General, U. S. Army, administers the oath to William Webster (left) in the presence of Secretary of Defense James V. Forrestal (cen-



U. S. ARMY

PREPARING FOR *SANDSTONE*, APRIL–MAY, 1948 / One group of the thousands of military and civilian personnel required for construction projects at Eniwetok in early 1948. In the background is one of the three shot towers for the Commission's first weapon test series.



U. S. ARMY

GATHERING DATA FROM *SANDSTONE*, APRIL–MAY, 1948 / A crane operator removes a filter from a B-17 drone aircraft. The B-17 had flown through the radioactive cloud, exposing the filter to pick up test debris for later analysis.





BROOKHAVEN NATIONAL LABORATORY

RADIATION BIOLOGY AT BROOKHAVEN, 1948 / Arnold H. Sparrow prepares *Trillium* bulbs for irradiation.



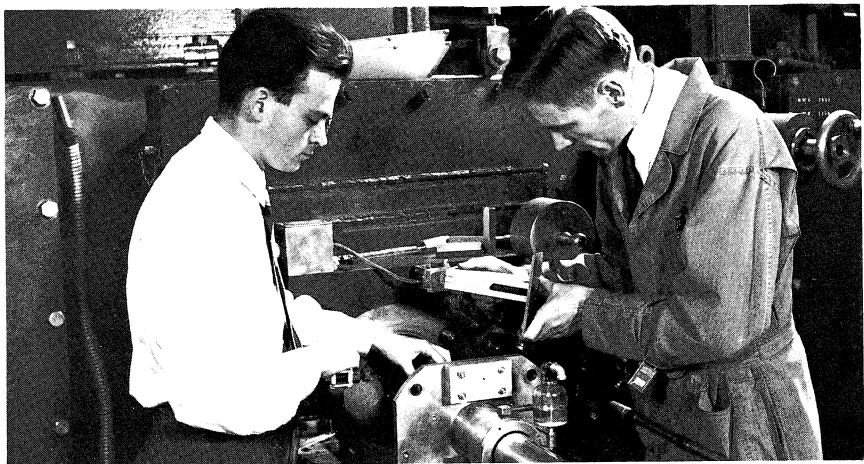
UNITED PRESS INTERNATIONAL

TRANSURANIUM RESEARCH / Glenn T. Seaborg and the elution apparatus used to separate newly created transuranium elements.



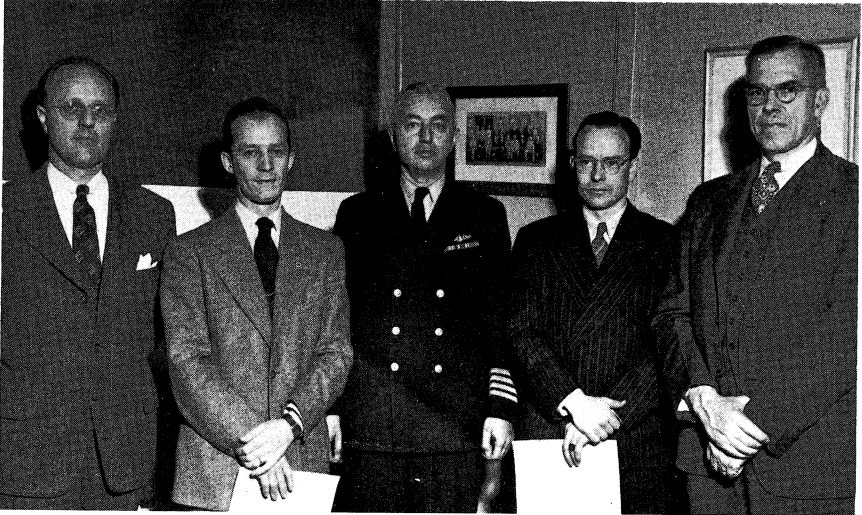
LAWRENCE RADIATION LABORATORY

**THE 184-INCH CYCLOTRON BEGINS OPERATION /** Robert L. Thornton, Ernest O. Lawrence, and Edwin M. McMillan (left to right), reading instruments at 12:15 A.M., November 1, 1946.



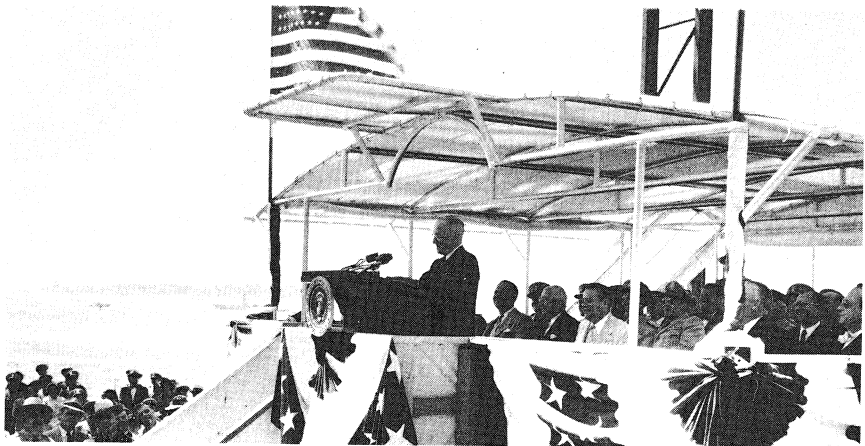
LAWRENCE RADIATION LABORATORY

**MESON RESEARCH AT BERKELEY /** Caesare M. G. Lattes (left) and Eugene Gardner place photoemulsion plates on the target probe of the 184-inch cyclotron in March, 1948, a few days after the first detection of mesons at the University of California Radiation Laboratory.

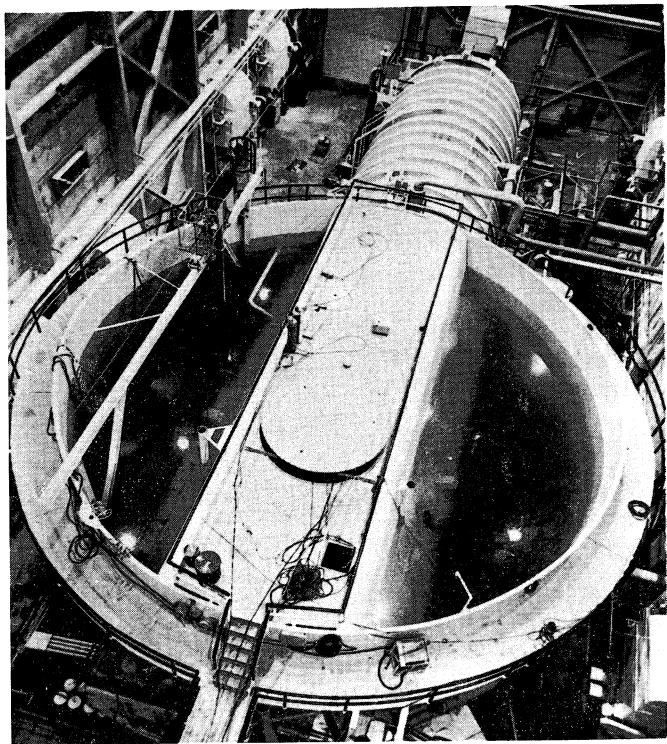


KNOLLS ATOMIC POWER LABORATORY

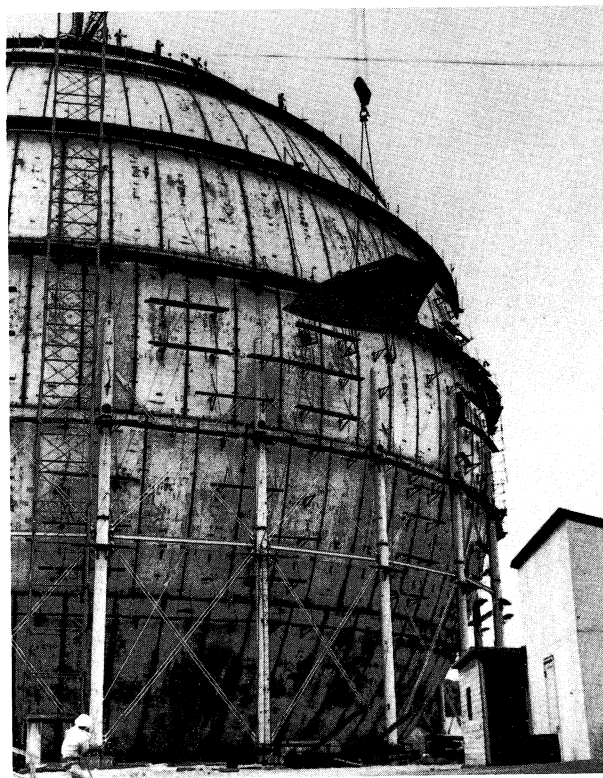
**PLANNING THE DEVELOPMENT OF NUCLEAR-POWERED SHIPS /** Captain Rickover with General Electric and Government officials in Schenectady, summer, 1946. Left to right: C. Guy Suits, John J. Rigley, Hyman G. Rickover, Leonard E. Johnston, and Harry A. Winne.



**KEEL LAYING FOR THE WORLD'S FIRST NUCLEAR SUBMARINE /** President Truman speaks at ceremonies at Groton, Connecticut, on June 14, 1952. Gordon Dean is in the first row on the far right.



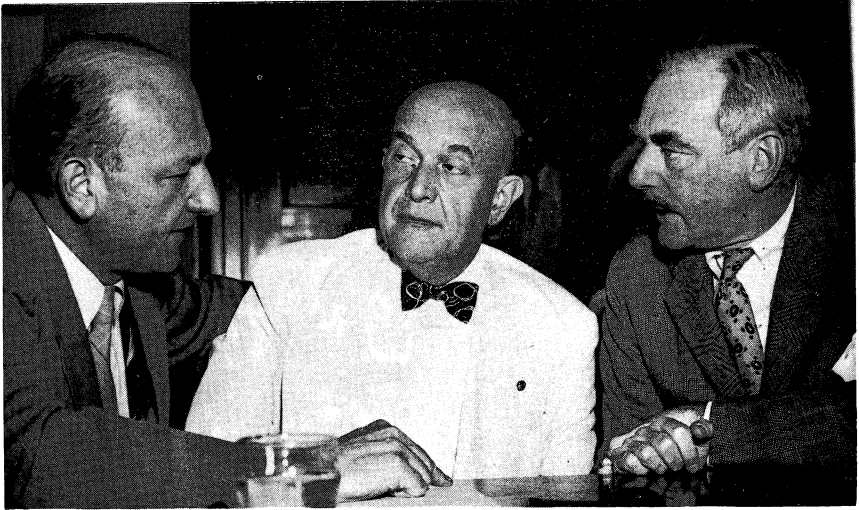
SUBMARINE THERMAL REACTOR, MARK I, IDAHO / The land-based prototype as it appeared in 1954. The reactor is located within the portion of the submarine hull surrounded by water.



GENERAL ELECTRIC COMPANY

SUBMARINE INTERMEDIATE REACTOR, MARK A, WEST MILTON, NEW YORK / The huge sphere which would contain the prototype reactor nears completion early in 1953.





WIDE WORLD

SEEKING AGREEMENT ON ANGLO-AMERICAN COOPERATION / David E. Lilienthal meets with Secretary of Defense Louis A. Johnson (center) and Secretary of State Dean G. Acheson (right) on July 27, 1949, before a hearing with the Joint Committee on Atomic Energy.



ROBLEY L. JOHNSON

COMMISSION OFFICIALS AT HANFORD, SEPTEMBER, 1949 / Deputy General Manager Carleton Shugg (right) discusses production matters with Hanford Manager Frederick C. Schlemmer (center) and Deputy Manager David F. Shaw.



WIDE WORLD

**PRESIDENT TRUMAN GREETES PRIME MINISTER ATTLEE, DECEMBER 4, 1950 / Attlee arrives in Washington to discuss the atomic bomb and Korea.**



UNITED PRESS INTERNATIONAL

**OLD FRIENDS, JANUARY 5, 1952 / Truman and Churchill at the Washington National Airport. The British leader had come to discuss several aspects of Anglo-American relations, among them atomic energy. Foreign Secretary Anthony Eden stands on the steps.**



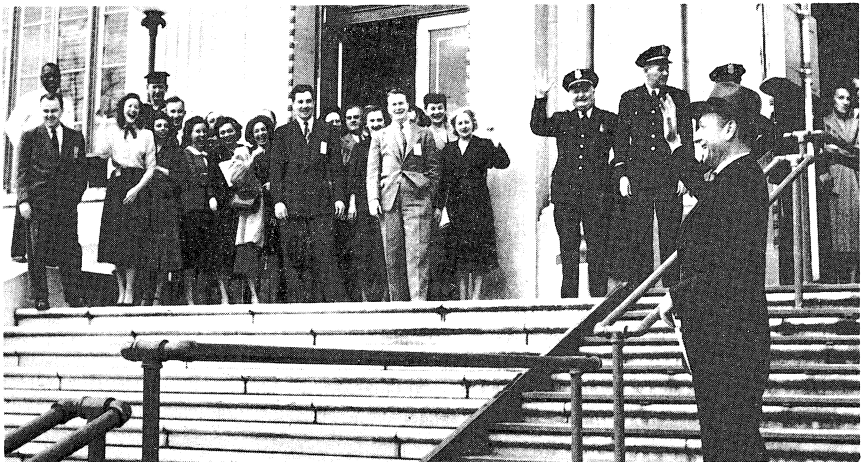
WIDE WORLD

"INCREDIBLE MISMANAGEMENT" HEARINGS BEGIN, MAY 26, 1949 / Chairman Lilienthal is seated at the small center table. From left to right behind Lilienthal are Commissioners Gordon E. Dean, Lewis L. Strauss, and Sumner T. Pike. The members of the Joint Committee on Atomic Energy are at the long table; from top to bottom: Representatives Henry M. Jackson, Melvin Price, Chet Holifield, and Carl T. Durham, and Senators Brien McMahon, Tom Connally, Bourke B. Hickenlooper, Arthur H. Vandenberg, and William F. Knowland.



UNITED PRESS INTERNATIONAL

**MILITARY VIEWS ON HYDROGEN BOMB DEVELOPMENT /** Senator McMahon (center) chats with General Omar N. Bradley, chairman of the Joint Chiefs of Staff, and Robert LeBaron, chairman of the Military Liaison Committee, on January 20, 1950, as an executive session of the Joint Committee is about to begin.



UNITED PRESS INTERNATIONAL

**LILIENTHAL WAVES FAREWELL, FEBRUARY 15, 1950 /** Employees and the first Commission chairman say goodbye on the steps of the headquarters building on Constitution Avenue.





WIDE WORLD

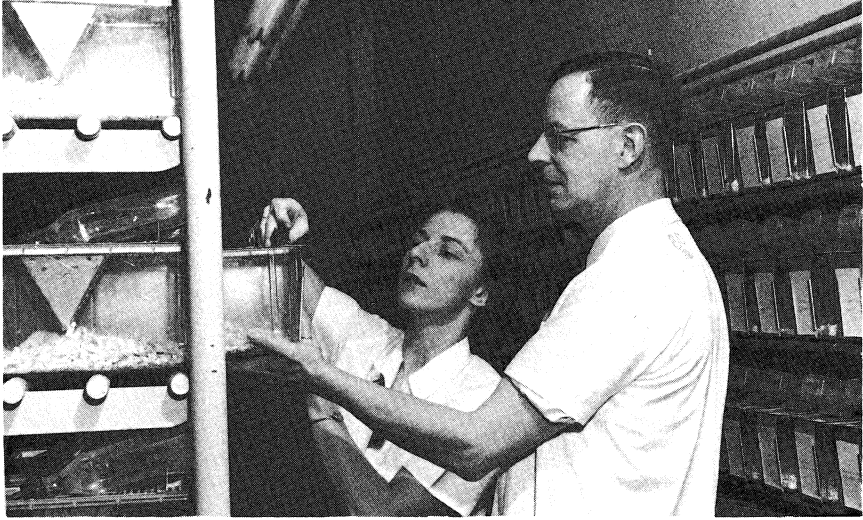
THE COMMISSIONERS AND SENATOR McMAHON BEFORE A JOINT COMMITTEE SESSION, NOVEMBER 30, 1950 / Left to right: Thomas E. Murray, Henry D. Smyth, Senator McMahon, T. Keith Glennan, Gordon E. Dean, and Sumner T. Pike.



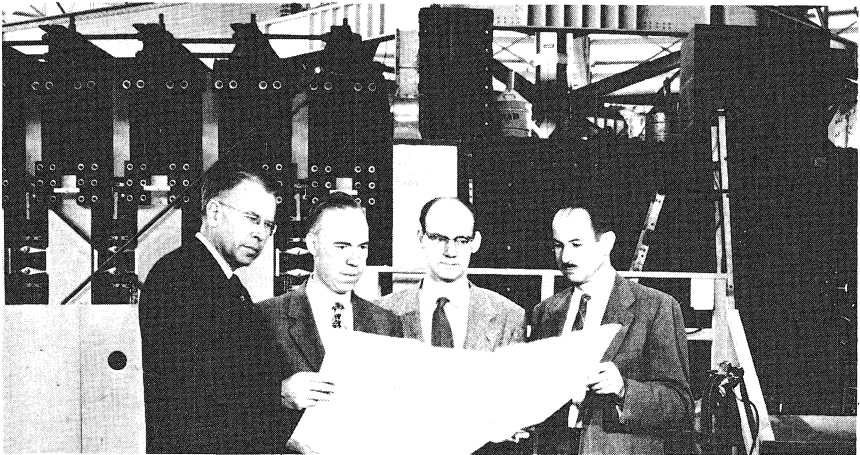
CHAIRMAN DEAN WITH A NEW COMMISSIONER AND GENERAL MANAGER / T. Keith Glennan (left), Gordon E. Dean (center), and Marion W. Boyer in Washington, November, 1950.



THE HEADQUARTERS STAFF AND FIELD PERSONNEL AT OAK RIDGE, MARCH, 1950 / Seated, left to right: Leonard E. Johnston, James C. Stewart, Wilbur E. Kelley, Richard W. Cook, Carroll L. Tyler, Carroll L. Wilson, Carleton Shugg, Frederick C. Schlemmer, and Alfonso Tammaro. Standing, left to right: J. Bion Phillipson, Samuel R. Sapirie, David Saxe, Walter F. Colby, Frank C. Watters, M. L. Black, Raymond Greenhalgh, Lindsley H. Noble, Walker E. Campbell, Fletcher C. Waller, Kenneth S. Pitzer, Francis J. McCarthy, Edward Diamond, Lawrence R. Hafstad, Henry B. Fry, Morse Salisbury, David B. Langmuir, Jesse C. Johnson, John A. Derry, James McCormack, Lawrence P. Gise, Thomas O. Jones, Charles F. Schank, John E. Greenhalgh, and James E. Travis.

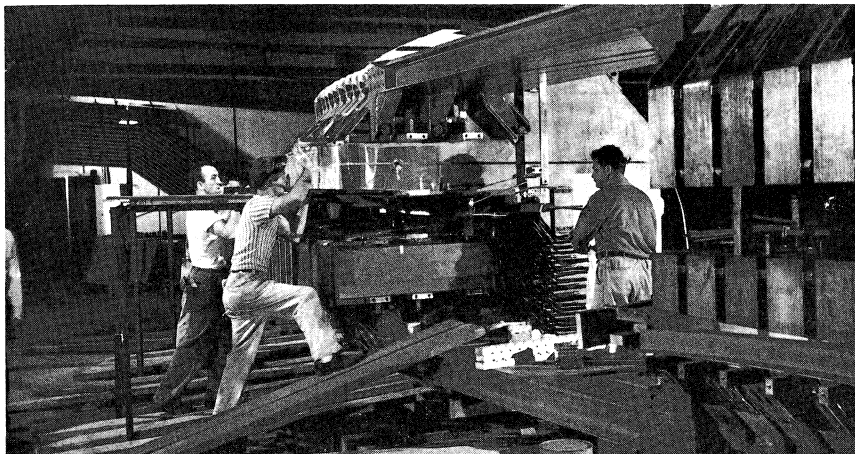


**RADIATION GENETICS AT OAK RIDGE /** William L. Russell and Liane B. Russell examine a mouse from one of the thousands of cages at the Oak Ridge National Laboratory. The bottles on top of the cages supply water for the mice.



**LAWRENCE RADIATION LABORATORY**

**BUILDERS OF THE BEVATRON /** Standing in front of the giant accelerator at Berkeley are the scientists principally responsible for designing and building it. Left to right: Ernest O. Lawrence, William M. Brobeck, Edward J. Lofgren, and Edwin M. McMillan.



BROOKHAVEN NATIONAL LABORATORY

**ASSEMBLING THE BROOKHAVEN COSMOTRON, 1950 /** Workmen are installing a bundle of water-cooled, wound copper bars which form part of the magnet coil. The photograph shows the return winding on the outside of the magnet at the end of a quadrant.



BROOKHAVEN NATIONAL LABORATORY

**CELEBRATING A MILESTONE IN CONSTRUCTION OF THE COSMOTRON /** Members of the cosmotron team enjoying a moment of relaxation after succeeding for the first time in guiding a proton beam through one quadrant of the magnet in December, 1950. G. Kenneth Green stands in the center of the group. From left to right around the circle: Abraham Wise, George B. Collins, Charles H. Keenan, Gerald F. Tape, M. Stanley Livingston, Martin Plotkin, Lyle Smith (mostly hidden), Joseph Logue, and Irving J. Palk.





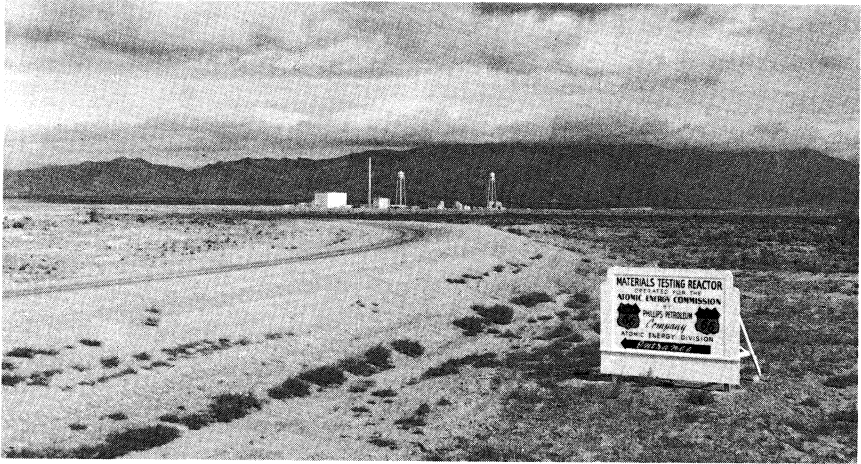
U. S. ARMY

THE NATIONAL SECURITY COUNCIL, JANUARY, 1951 / Left to right: Executive Secretary James S. Lay; W. Stuart Symington, chairman of the National Security Resources Board; W. Averell Harriman, Special Assistant to the President; Lt. Gen. Walter Bedell Smith, Director of Central Intelligence; General Omar N. Bradley, Chairman of the Joint Chiefs of Staff; Secretary of Defense George C. Marshall; Secretary of State Dean G. Acheson; President Truman; and Secretary of the Treasury John W. Snyder.

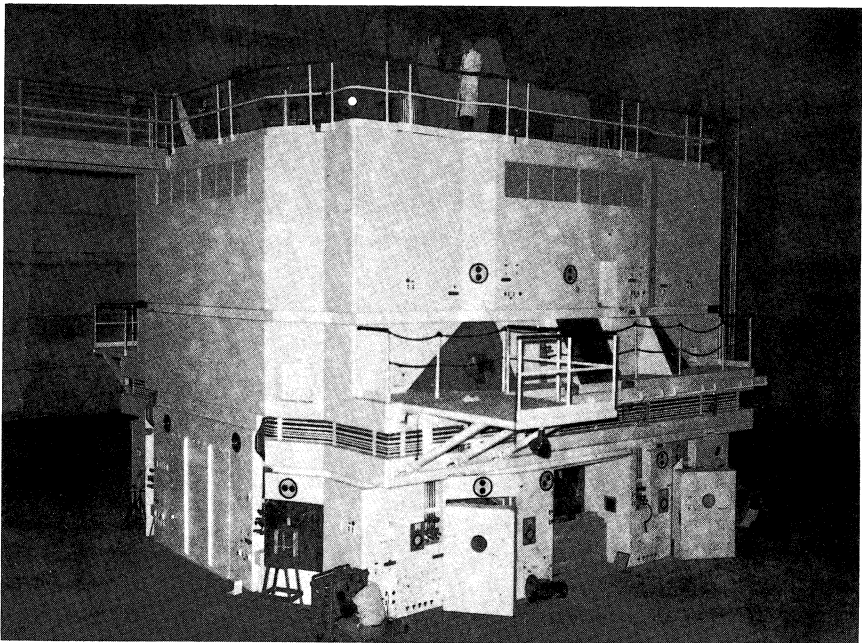


LOS ALAMOS SCIENTIFIC LABORATORY

FOUR LOS ALAMOS SCIENTISTS: Edward Teller (*top left*); Stanislaw M. Ulam (*top right*); Marshall G. Holloway (*bottom left*); Darol K. Froman (*bottom right*).



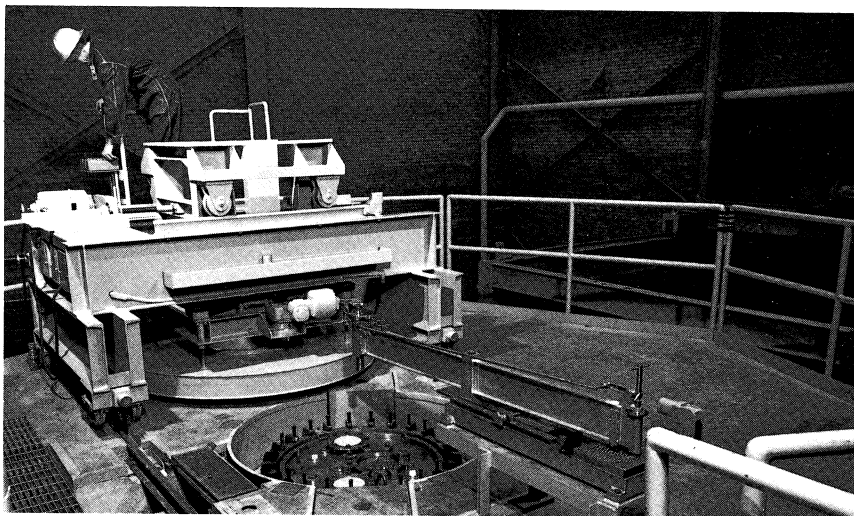
**THE MATERIALS TESTING REACTOR FACILITY AT THE TIME OF COMPLETION, 1952 /** The huge reactor building and supporting facilities are dwarfed by the vastness of the Idaho desert.



**THE MATERIALS TESTING REACTOR, JUNE, 1952 /** The reactor as it appeared about two months after criticality—still so new that the floor surrounding the reactor looks strangely vacant of experimental equipment.



**THE MATERIALS TESTING REACTOR REACHES CRITICALITY, MARCH 31, 1952** / The group is watching the reactor instrument board in the control room. Standing from left to right: Richard L. Doan of the Phillips Petroleum Company (with arms folded); J. Bion Phillipson, assistant manager of operations at Idaho for the Commission; Deslonde de Boisblanc, head of the Phillips instrument section; Steven Hanauer (in white shirt), Oak Ridge instrument technician; and Leonard E. Johnston (in dark shirt, near instrument panel), manager of Idaho operations. In the right background close to the instrument panel is Marvin M. Mann, leader of the Oak Ridge design group.



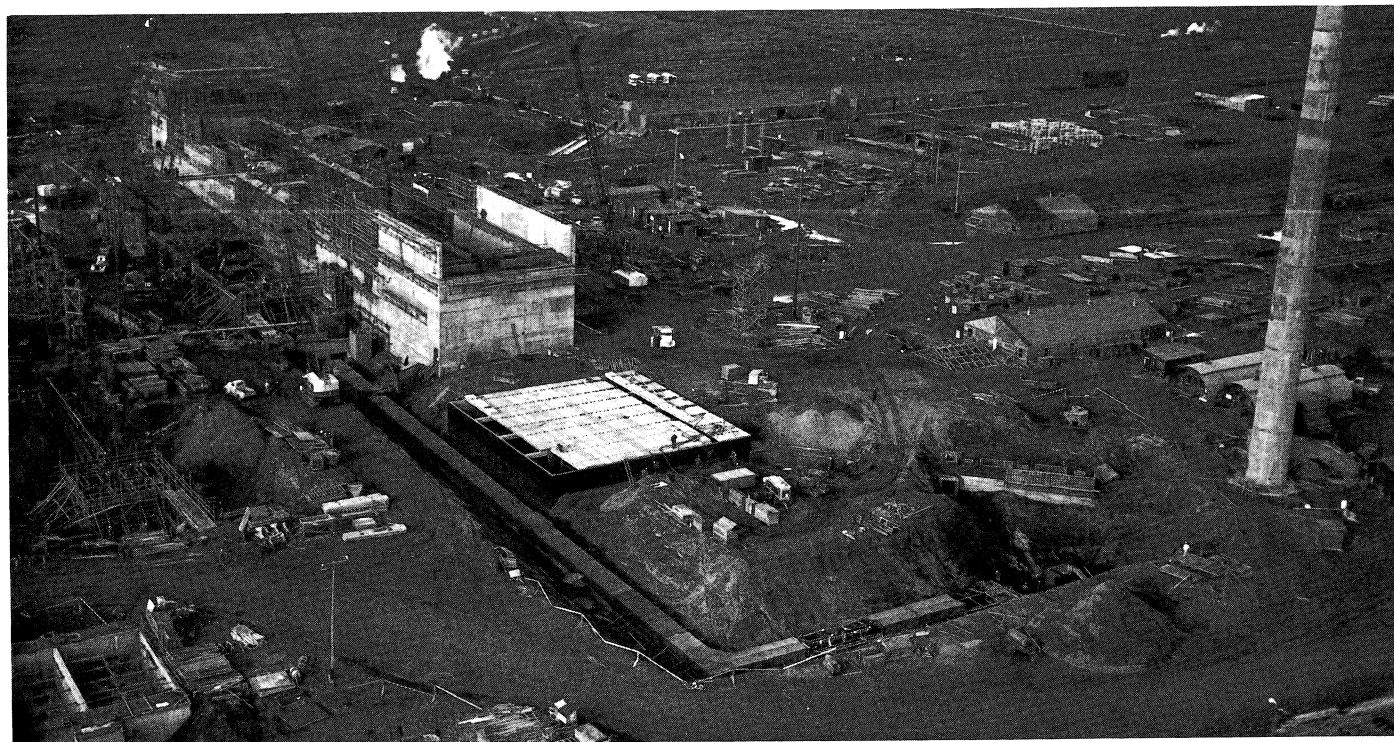
ARGONNE NATIONAL LABORATORY

**MECHANISM FOR REMOVING FUEL ELEMENTS FROM THE EXPERIMENTAL BREEDER REACTOR** / This photograph, taken just before full power operation in December, 1951, shows the small diameter of the reactor tank in comparison with the large amount of concrete shielding required. During removal the rod had to be shielded and kept in an inert atmosphere at all times.



**LIGHT FROM THE ATOM, DECEMBER 27, 1951** / The reactor building illuminated by nuclear power from the Experimental Breeder Reactor.

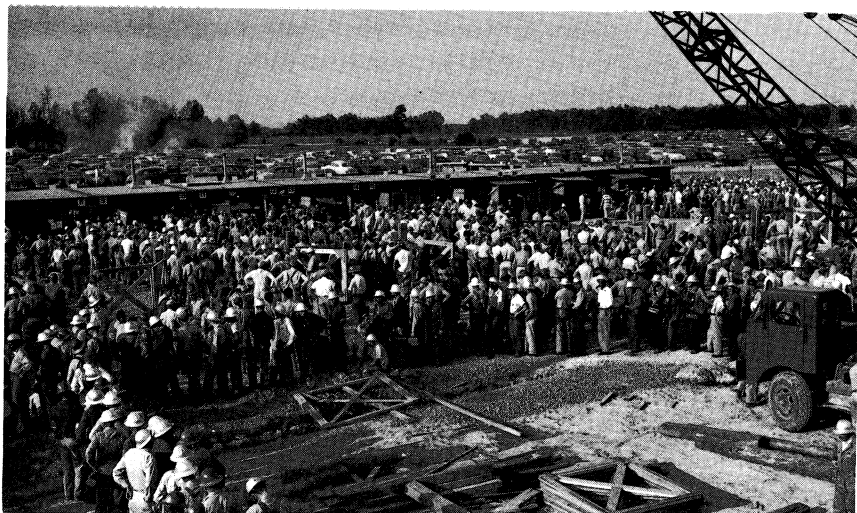




THE REDOX PLANT TAKES SHAPE AT HANFORD / The long "canyon" of concrete cells would contain chemical equipment for recovering plutonium and uranium from slugs irradiated in the Hanford production reactors. The photograph was taken on December 1, 1950.

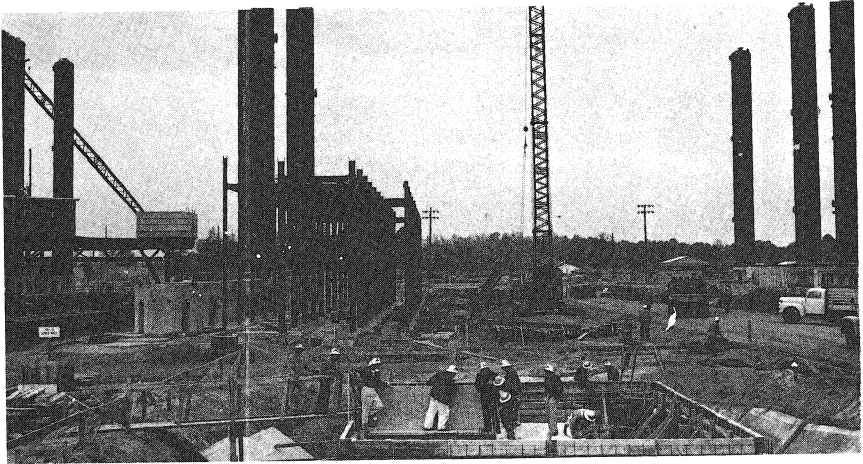


**CONSTRUCTION AT OAK RIDGE, 1952** / Grading is in progress on the site of the new K-33 gaseous-diffusion plant as part of the Commission's expansion of production facilities. Other diffusion plants are in the background.

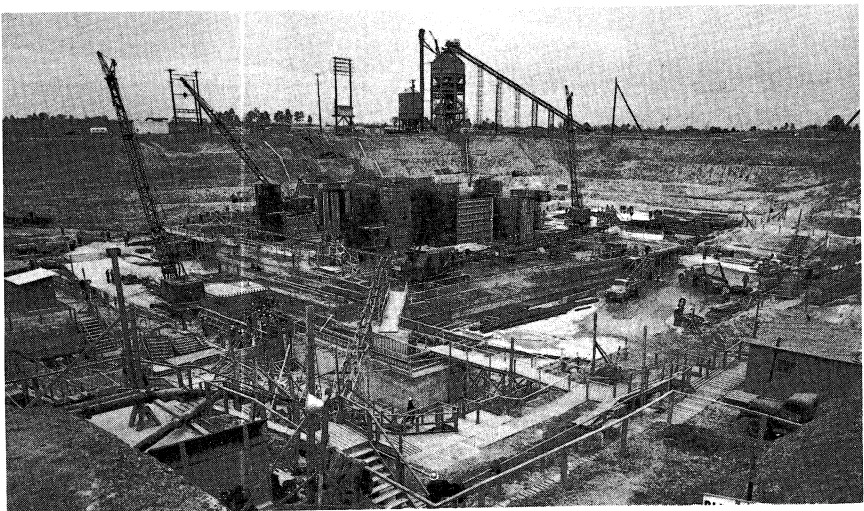


J. E. WESTCOTT

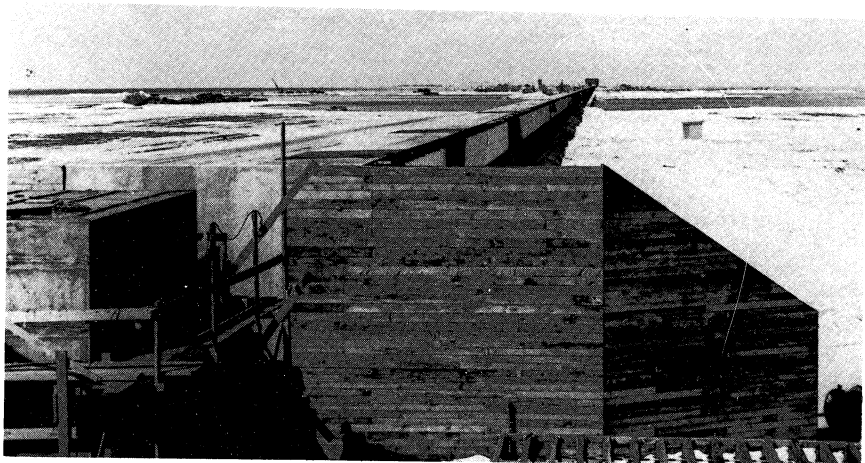
**CONSTRUCTION AT PADUCAH, 1952** / Some of the 3,000 production workers on the day shift at the Paducah, Kentucky, gaseous-diffusion plant in 1952. The Paducah plant was part of the expansion program approved by the Commission in 1950.



**CONSTRUCTION OF THE SAVANNAH RIVER HEAVY WATER PLANT, LATE 1951 /** The first of the towers had been erected by November 28, 1951, for the hydrogen-distillation plant. The hydrogen-distillation process, although costly and dangerous, was selected as the quickest method of producing heavy water for use as moderator in the production reactors at Savannah River.

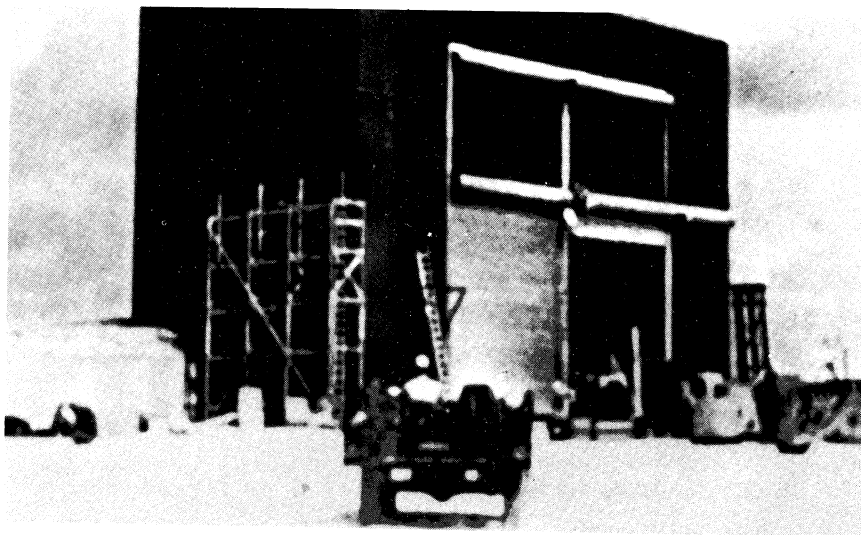


**FOOTINGS FOR THE P REACTOR AT SAVANNAH RIVER, 1951 /** Footings were being placed as this photograph was taken on November 28, 1951.



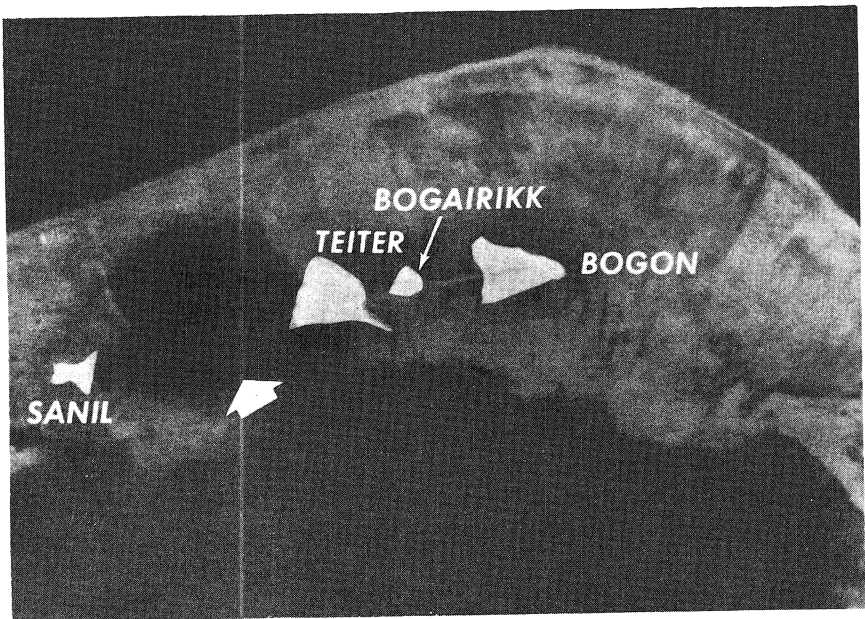
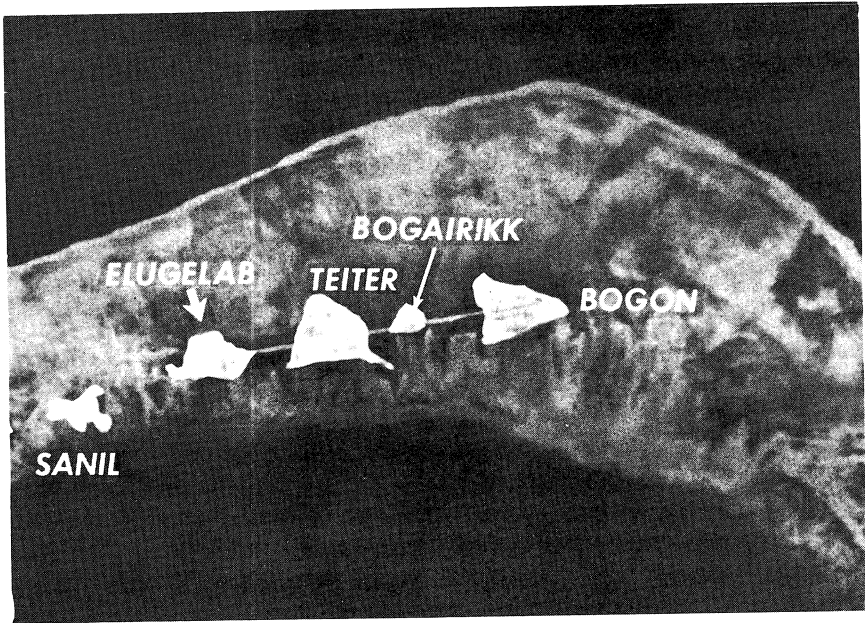
U. S. AIR FORCE

*MIKE* SHOT, OPERATION *IVY* / Some of the complex instrumentation for the first test of a thermonuclear device at Eniwetok in October, 1952. The large building at the end of the two-mile plywood tube housed the device.



UNITED PRESS INTERNATIONAL

A TEMPORARY HOME FOR *MIKE* / This structure at Eniwetok housed *Mike*, the first thermonuclear device, which was tested on October 31, 1952.



U. S. AIR FORCE

A PACIFIC ISLAND DISAPPEARS, OCTOBER 31, 1952 / The top photograph shows the Island of Elugelab in the Eniwetok chain before *Mike* was detonated. The lower photograph shows the crater, more than a mile in diameter, created by the first thermonuclear detonation.