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Atomic Energy Commission
Washington 25, D.C.



No. 111
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REPORT OF THE ADVISORY COMMITTEE ON THE
ACCELERATOR PROGRAM OF THE ATOMIC ENERGY COMMISSION

The first of the two major parts of the report is a description of the construction of a laboratory for the study of the high energy particle accelerator program. The second part of the report is a description of the alternating gradient synchrotron which is designed to accelerate protons of energies ranging up to 10 billion electron volts.

The alternating gradient synchrotron will consist of an alternate bending magnet and a focusing magnet. The bending magnet will be a proton beam and the focusing magnet will be a smaller electromagnetic field. The design of the bending magnet is possible.

The cost of the construction of the synchrotron is estimated at \$100 million. It is expected that the synchrotron will be completed in 5 to 6 years. The cost of the construction of the synchrotron is estimated at \$100 million. It is expected that the synchrotron will be completed in 5 to 6 years. The cost of the construction of the synchrotron is estimated at \$100 million. It is expected that the synchrotron will be completed in 5 to 6 years.

As a means of an early start in the construction of the conditions on a laboratory for the study of the high energy particle accelerator program, it is suggested that the construction of the synchrotron be given an important role in the construction of the laboratory. It is suggested that the construction of the synchrotron be given an important role in the construction of the laboratory. It is suggested that the construction of the synchrotron be given an important role in the construction of the laboratory.

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providing particles with energies up to 20,000 electron volts (eV), the Brookhaven alternating current synchrotron is the largest in the world. It produces important new knowledge of the fundamental laws of nature.

Brookhaven National Laboratory research facilities are open to all scientists who wish to use the facilities which no single university could afford to build. The laboratory is operated for the AEC by Associated Universities, Inc., a corporation formed by nine northeastern universities. The member universities are Columbia University, Cornell University, Harvard University, Johns Hopkins University, Massachusetts Institute of Technology, Princeton University, University of Pennsylvania, University of Rochester, and Yale University.

(Note to Correspondents: For more information on Brookhaven National Laboratory, please contact the Director, Brookhaven National Laboratory, Upton, New York 11974.)

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