

final decision. One AEC spokesman said the site choice will be made some time this spring. "We hope it will stand heads and shoulders above all the rest," he added wistfully. "I believe the physics community should be congratulated," he continued. "This is the largest basic science project that has ever been contemplated, and physicists have been very generous and cooperative in giving us their best thoughts and suggestions."

Science development grants

The National Science Foundation has awarded science development grants totalling \$11.6 million to Louisiana State University, Polytechnic Institute of Brooklyn, and University of Southern California at Los Angeles.

LSU will receive \$3.79 million to add new faculty and bolster salaries in its physics, mathematics, chemistry, and geology departments. Under a five-year plan, the school will also add research assistants and technicians and offer more attractive appointments for graduate students. The university, which had been working with the Louisiana Washington delegation for about a year and a half to win the NSF award, said that financial backing for higher academic pay scales by the governor and state legislature had strongly influenced the NSF decision.

Strengthening of faculty is also the primary focus of a \$3.3 million grant to Polytechnic Institute of Brooklyn. Main areas of investment will be the electronics-engineering and chemistry departments, with secondary support going to the library, educational experiments, and research equipment. Polytechnic plans to set up named and visiting professorships, special fellowships, and expand its sabbatical program. Part of the grant will be used in a faculty development program enabling teachers to write new textbooks and plan new courses.

NSF awarded \$4.47 million to University of Southern California to help build a 106 000-sq-ft laboratory building for research and graduate training in the solid state. Under the grant, a new department of materials science will start graduate and research programs, and research in the physics and other departments will be broadened,

with addition of new equipment and faculty. A science-engineering library will occupy one fourth of the laboratory structure, and another area will accommodate an undergraduate instructional program in physics.

The Foundation's Science Development Program to increase the number of first-rate science schools is restricted to "already good institutions that can advance rapidly to a higher level of quality." Recently, the program has come under attack from the Reuss subcommittee of the House Committee on Government Operations. A subcommittee report stated, "it is clear that the rich will continue to get richer despite the development program. The subcommittee believes that, given the necessarily limited funds available to the program, the net ought to be cast more widely, and emphasis should be placed on improving developing institutions rather than lagging departments within already important research institutions. The subcommittee hopes that . . . the first four grants have not defined the NSF's intentions; that the agency will not limit, or indeed use a preponderance of its program money to improve science at large universities with well established research programs; and that it will move into the four-year college group, not at some point, but soon." That the foundation paid no particular heed to the Reuss subcommittee suggestion is evident from the nine subsequent development award recipients, all of which are among the top 100 academic spenders of the research dollar (Arizona, Virginia, Florida, Colorado, Rice, and Rochester Universities, besides the three named above). Charles Burmeister, chairman of the physics department at Trinity University, was expressing the sentiments of the Committee on Physics Faculty in Colleges, when he told the subcommittee, "It is often stated that the science development program will make possible in the future a wider distribution of Government research funds. This program, however, is primarily directed toward those institutions which have an opportunity to become competitive with our very best graduate institutions. The non-PhD-granting institutions are generally not considered for these grants." Burmeister then went on

to propose a separate NSF program of research support to colleges.

To what extent NSF will broaden the character of its science development and institutional programs or how much other federal agencies will extend their programs to the small colleges remains to be seen. Donald F. Hornig, Special Assistant to the President for Science and Technology, recently told a symposium on universities and federal science policies, "The small colleges have difficulties recruiting faculties in the sciences; they have difficulties in providing the kind of facilities and the awareness of current change in science which is important if they are to continue to play the strong role they have in the past. There are some indications that their role is declining. I am sure that increased federal attention will be placed in this area through programs in various agencies, but I cannot now predict their form."

Laser patent challenge

R. Gordon Gould is challenging the laser patent issued to Charles H. Townes and Arthur Schawlow. In a trial before the US Court of Customs and Patent Appeals that began Dec. 8, Gould claimed that he was the first to conceive of the Fabry-Perot arrangement of plane-parallel mirrors to produce laser action.

Stories in the Nov. 27 issue of *Business Week* and Dec. 9 issue of *The New York Times* contain details of the court battle. Gould claims to have conceived his laser idea in November 1957 while he was a Columbia graduate student. Townes and Schawlow filed their patent application the following July but have notebooks containing their laser ideas dated as early as September 1957. At the time Schawlow was working for Bell Telephone Laboratories and Townes was a consultant to Bell.

Gould went to work for TRG, Inc., in March 1958, and later assigned his patent claim to them. So, actually TRG is suing Bell Labs. The Board of Patent Interferences has upheld the Townes and Schawlow patent over Gould's challenge. A decision from the US Court of Customs and Patent Appeals is expected in approximately a month or two, according to Gould.