NEWS IN BRIEF

● **DEFENSE CONTRACTS AT STONY BROOK:** The faculty senate at the State University of New York at Stony Brook has passed a resolution urging the university community not to seek new research grants or contracts from the Department of Defense and not to renew existing grants or contracts. The recommendation applies to both classified and unclassified research. Some universities have previously banned classified research, but none is known to have banned all military research. The faculty action is an advisement to the president of Stony Brook, who has taken the matter under consideration.

● **BELL LABORATORIES**: Bell Telephone Laboratories has revealed it is getting out of the missile defense business after it finishes its current contracts on the Safeguard Anti-Ballistic Missiles. A company spokesman said that Bell originally agreed 15 years ago to work on government contracts when Bell had "unique capabilities" for the work, but that the company has long wanted to shift the contracts to other companies as soon as the others developed similar capabilities. Bell wants to shift some of its 16,000 personnel working on the ABM into civilian areas. A spokesman said rising protests against defense contractors also played a minor role in the decision.

● **NSF BUDGET**: The House, acting on the advice of its Appropriations Committee, on 12 May approved a 1971 appropriation for the National Science Foundation of $497 million. This was $16 million less than President Nixon had requested and $30 million less than the House Committee on Science and Astronautics had recommended. The Senate has yet to act on the NSF budget.

● **INADEQUATE STUDENT FINANCIAL AID:** The National Association of State Universities and Land-Grant Colleges has revealed that financial aid offices on campuses across the nation are running out of money long before all student requests have been filled. Michigan State University and Ohio State University report they were forced to refuse approximately 1500 requests each. The situation is attributed to the fact that aid requests are increasing because of spiraling college costs while the amount of money available for students is tightening because of a slowdown in federal funding, the reluctance of some banks to make loans under the Guaranteed Student Loan Program, and the failure of some state legislatures to provide adequate appropriations.

● **CONTROL OF SULFUR OXIDE EMISSIONS:** A panel of the National Academy of Engineering and the National Research Council states that the emission level of sulfur oxides resulting from the use of sulfur-bearing fuels to generate electrical energy will be more than four times as great by the year 2000 unless immediate action is taken to control the problem. The panel further states that there is no commercially proven technology for control of such sulfur oxides (which are second only to automobile emissions as a cause of air pollution). These conclusions and others are contained in *Abatement of Sulfur Oxide Emissions from Stationary Combustion Sources* which will be available in a month or two for $3 from the Clearinghouse for Federal Scientific and Technical Information, 5285 Port Royal Road, Springfield, Virginia 22151.

● **YORK'S BIGGEST MISTAKE**: Herbert York, former research chief in the Pentagon, expressed chagrin last week at how he once supported development of chemical and biological weapons. "When I was director of Defense Research and Engineering under President Eisenhower," he said, "I believed that some chemical and biological weapons, especially the nonlethal variety, could be usefully incorporated into our defense arsenals and might, in some degree, make war more humane. I have come to realize that the situation is very much more complicated than I had then thought it was. Indeed, these weapons generally make war more inhumane especially when used in conjunction with conventional weapons. I consider my earlier support of biological and chemical weapons to have been perhaps my biggest mistake of that period." York made the comment while releasing a statement by the Federation of American Scientists opposing the use of chemicals in Vietnam. He chairs the FAS Council.

posed plan. This calls for making the accelerator considerably smaller in diameter than was originally considered desirable—1.8 kilometers, as compared with the 2.4 kilometers that figured in earlier designs. The smaller version, it is said, can fit comfortably onto the adjacent land without affecting various clusters of dwellings there. But, though smaller, it would hold the potential for far greater energies than were anticipated earlier because it would be equipped with the new separated function magnets, rather than with the conventional combined function type planned earlier. With the new magnets it would be possible to reach at least 300 Gev with the smaller diameter, and that is considered to be the minimum figure desired. But there is also a possibility that the accelerator might be raised to the 800- or 1000-Gev level. This hinges on progress in developing superconducting magnets, on which research is now being conducted in Europe and the United States. If they become available within the next few years—and the present signs are good—then the new CERN machine could go ahead of Batavia in energy, which is no small matter in CERN's planning. Superconductivity, however, remains to be proven, and CERN's designers and users are eager to start building. This leads to still another idea, one that is referred to as the "missing-magnet" plan, which, if successful, leads in turn to the solution of a bundle of difficult problems—scientific, technical, political, and financial.

Start at 150 Gev

Since CERN wants to start building the new machine as soon as possible and since superconductivity is still uncertain, the plan calls for starting out with separated function magnets, but at the outset putting in only half the number that could ultimately be accommodated. This would guarantee at least 150 Gev, which would put CERN behind Batavia in both starting date and energy. On the other hand, Batavia is cost-cutting on computer and bubble chamber facilities, and CERN is planning to use its extensive present facilities in support of the new machine; thus, a start up at 150 Gev might still be on the frontiers of particle physics. If superconductivity does not prove feasible, the remaining spaces could be filled with magnets of the type that were installed in the first round, bringing the energy up to 300 Gev. Batavia