

professional societies and the public."

Senate report. Frequently mentioned during the SDI sessions and press conferences at the APS meeting on 30 April was a congressional staff report prepared by aides to Democratic Senators William Proxmire of Wisconsin, J. Bennett Johnston of Louisiana and Lawton Chiles of Florida. The central finding of the report, which was based on extensive interviews with more than 75 people involved in SDI work, was that there was nothing to justify claims by SDIO officials that progress had been "incredible" or "amazing" or that there had been "genuine breakthroughs."

The report attributed changes in the SDI program to technological failures, not budget cuts (see *PHYSICS TODAY*, January, page 53), and argued that the SDI program is *not* strictly a research program in the normal sense of the term.

At the APS meeting on 30 April, there was much talk about what participants called a "more balanced" research program in the morning session, which featured experts from the Office of Technology Assessment, MIT and Stanford, as well as an SDI official. The discussions were mostly calm and sober, though there were frequent questions from representatives of Lyndon LaRouche's National Democratic Policy Committee, who seemed intent on provoking confrontations. The same was true at the evening session, which ended with a talk by Charles Schwartz of the University of California

at Berkeley.

Schwartz was worried mainly about how students would find jobs outside the growing military-research sector. In a speech he predicted many would find offensive, Schwartz characterized physicists supporting SDI as "the American counterparts of Lysenko—political ideologues and hucksters in science, acting under the patronage of a powerful chief of state."

Schwartz made two proposals: one for a worldwide "strike" by physicists, that is, a "collective and gradual withdrawal of our services in all ways that contribute to the arms race"; the other a call for development of hard data about military and nonmilitary job prospects for graduating physicists. It probably would be fair to say that Schwartz's second proposal aroused some interest, especially among the students in attendance, and that his proposal for a strike was greeted with more-or-less friendly tolerance.

Brecher, however, reacted sharply to it. She thought it would be ridiculous to stop teaching physics just because physics is subject to abuse. When she was challenged by a Canadian member of the audience, who described the idea of "value-free science" as a "naive" notion found almost exclusively among US citizens, Brecher retorted that she had lived in Rumania, Israel and the United States and had found physics to be the same science everywhere. What varied, she indicated, was the amount of political "rubbish."

—WILLIAM SWEET

Education

AIP reports on enrollments and degrees

The latest AIP education surveys—the 1984–85 bachelor's survey and the survey of enrollments and degrees—reveal few new trends or patterns at the graduate level but some interesting developments in the undergraduate population.

The number of bachelor's degrees in physics last year exceeded 5000 for the first time since 1972. Half the bachelor's recipients were going on to do graduate work, three out of five of them in physics. Most of the other half were seeking employment in the civilian sector and already had at least one job offer at the time they were surveyed.

The average starting salary for the bachelor's recipients who responded to the survey had increased 6% over last year's, to a record high of \$1990 per month. The highest average salaries were offered in manufacturing industries, as usual, and the lowest in high-school teaching.

The number of responding bachelors who went into high-school teaching

increased to just over 20, and the average starting salary offered teachers increased from \$1100 in 1983–84 to \$1270 in 1984–85 but remained far lower than what was paid to average physics bachelors in other occupations.

Military issue. In most respects the distribution of the responding bachelors among employment sectors remained essentially unchanged. The military attracted 23% of the employed bachelors in 1984–85, compared with 24% the year before. These statistics do not shed any light on the proportion of bachelor's recipients whose work in the civilian sector was funded by the military, a matter of growing concern among some physicists.

At the recent APS meeting in Washington (see preceding story), Charles Schwartz of the University of California at Berkeley complained about the absence of data on how many graduating physicists are taking work funded by the military and suggested that the Committee on Opportunities initiate or

lobby for a special study. At an evening meeting on SDI and the physics community Schwartz said, with some confirmation from his fellow panelists, that graduate students increasingly claim they are unable to find work that is not funded by the military.

Susanne D. Ellis, the education-studies analyst for AIP, says that she is hearing the same complaint from bachelors. It used to be the case, she says, that graduating bachelors hardly ever wrote anything in the part of the questionnaire reserved for comments. But in the last two years, she reports, respondents mention increasingly frequently that they are unhappy with the job prospects outside the defense sector: A typical comment is "The reason I have had such trouble finding a job is that I do not want to do defense-related work."

Enrollments and degrees. A bright spot in the latest survey results is the 4% increase in the number of first-year physics graduate students in 1985–86, though the increase is entirely attributable to growing enrollments of foreign students. The number of US citizens among the entering graduate students dropped to 1721 from 1747. The proportion of foreign students continued to rise, reaching a record level of 42.1%.

Just 7.6% of the students awarded doctorates were women, though the situation may be gradually improving: The bachelor's survey indicated that 14% of the students starting graduate study in physics were women.

Eight blacks earned physics PhDs in 1985–86, down from 15 in 1984–85 and 17 in 1983–84. The number of blacks earning bachelor's degrees in physics, however, increased to 141 in 1985–86 from 124 in 1984–85.

The 1984–85 *Survey of Physics and Astronomy Bachelor's Degree Recipients* and the 1986 edition of *Enrollments and Degrees* are available from Susanne D. Ellis, Manpower Statistics Division, American Institute of Physics, 335 East 45th Street, New York NY 10017.

Triangle education coalition picks up members and support

The Triangle Coalition for Science and Technology Education, a partnership of business and labor associations, science and engineering organizations and education groups, was founded in late 1984 to promote the formation of local "alliances" in support of pre-college science and engineering education (*PHYSICS TODAY*, March 1985, page 111). This year, at age 1½, it is on its feet and walking.

Thanks largely to the dogged efforts of John M. Fowler, who heads the coalition's small staff at the National Science Teachers Association in Wash-