

Baccalaureate Trend Downward; More Take PSSC in High School

During 1966-67, the production of physics baccalaureates continued to decline; the fraction of bachelors who had taken the Physical Science Study Committee course in high school rose almost to one fourth; one third of the graduates came from bachelor's-granting institutions. Thus reports an American Institute of Physics preliminary survey of bachelor's recipients; AIP will confirm the data with a more complete survey in the spring.

An estimated 4900 physics majors received bachelor's degrees during 1966-67, barely 130 fewer than the year before. The estimate, if corroborated by the later AIP survey, would underscore two significant trends: (1) The total number of physics bachelors continued to decline for the third consecutive year from a peak of 5611 in 1963-64. (2) Even as fewer and fewer students were electing to become physics majors, the dropout rate (from junior to baccalaureate) increased for the second consecutive year, that is, from 27% in 1965 to 29% in 1966 to 30% in 1967. At least one break, however, is expected to relieve the downward trend; the 7345 juniors during 1966-67 were the largest crop in three years, and the number being graduated this June is expected to be correspondingly large.

"The situation is an alarming one," said AIP director of education and manpower, Arnold Strassenburg. "The downward trend in physics is a phenomenon not peculiar to the US but one that can be observed all over the free world. I believe this trend does not have so much to do with the particular style in which physics is taught (although we can do much better in this respect). It is caused rather by the prospect of our troubled times. Students are concerned with social and world problems; they do not see in physics the way to solve these problems. I think we have to convey to them that physics is relevant to social progress in the best sense."

The survey also reported that 23%

of the bachelor's recipients took the PSSC course in high school, while 71% took the traditional physics course and 6% took no physics in high school. The distribution for 1965-66 was 16%, 78% and 6%, respectively. In addition, 32% of the bachelors came from bachelor's-granting institutions, 16% from master's-granting schools and 51% from PhD institutions. Postbaccalaureate plans included physics graduate study (55%), other graduate study (19%) and full-time employment (26%).

Rain or Shine, Farmers Assail Cloud Physicist

The farmers in downstate Pennsylvania, little impressed with the image of science, have recently been up in arms against cloud physicist Charles Hosler, dean of the College of Earth and Mineral Sciences at Pennsylvania State University. They charge that Hosler's research in cloud development and precipitation, over 50 miles away, has resulted in excessive

droughts, ruinous downpours, death of flora and fauna and the weakening of the fertility of eagles. The scientist, who is currently studying the snow showers over the Great Lakes, takes exception to these charges.

It all started seven years ago when the orchardists signed a hail-prevention agreement with a private contractor, Hosler told *PHYSICS TODAY*. Whether the contractor, with his silver-iodide generators, actually prevented hail formation is uncertain, but some time after he had begun his program, a severe drought afflicted the entire northeast part of the US. The dairy farmers, presuming cause and effect, believed the seeding was bringing on the drought. At this point a lawyer for the orchardists contacted Hosler, asking the scientist to explain to the farmers just what cloud seeding could and could not do. "I went down and told the dairymen that the drought was caused by large-scale atmospheric motions and not by seeding," says Hosler.

But the drought continued, and the contractor (and his successor) left;

RESONANCES

Major accelerator and reactor projects will not be appreciably affected as a result of the 10% reduction in programs ordered by the President for fiscal 1968. The AEC budget office reported that though commitment authority to spend funds has been deferred to some degree, "anything that is actively under construction we are going to keep on schedule, and, on architectural and engineering work, we will go full speed."

Strengths and weaknesses of US science are assessed in a report by the Organization for Economic Cooperation and Development. Some conclusions are: While intense competition for funds, prestige and quick results has made US science extraordinarily productive, it is for many a hectic "rat race", leaving little room for bold departures from theory. The decision-making machinery is exceedingly effective in programming development of particular disciplines, but huge sums are sometimes spent on prestige projects at the expense of vital goals.