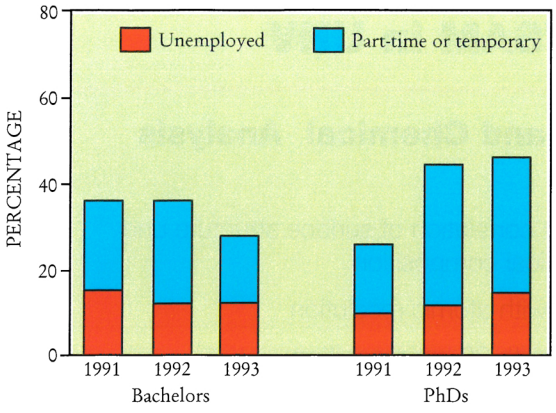

EMPLOYMENT STATUS of physics bachelors and PhDs (excluding those with postdocs) who had not secured potentially permanent jobs as of the winter following the year of graduation.

"Hell, that's not unemployment," he said, "that's full employment." But the *1994 Initial Employment Follow-Up of 1993 Physics Degree Recipients,* a new report from the education and employment statistics division of the American Institute of Physics, shows that about 6% of new physics PhDs remain unemployed in the winter following their graduation, more than six months after receiving their degree.

Equally important, by reformulating the survey instrument, authors Michael Neuschatz and Patrick Mulvey have been able to pinpoint for the first time the proportion of PhD recipients who enter the job market with nonpostdoctoral temporary positions. When Neuschatz and Mulvey exclude the 70% with postdocs, they find that about half of the remaining 30% of the new PhD recipients either take part-time or temporary jobs or remain unemployed (see graph above). But, as Neuschatz told PHYSICS TODAY, a temporary nonpostdoctoral position does not always represent an undesirable position.

With the number of postdocs (about 3000) now more than double the number of new PhDs produced each year, Neuschatz suspects that the number of PhDs who enter or reenter the nonpostdoctoral job market with a year or more of seasoning exceeds the number who enter fresh from graduate school. The scientists comprising this reservoir of talent also compete with even more experienced PhDs who are exiting from both industry and the Federal government as funding for basic and applied research is cut.

The AIP survey also examined the connection between career expectations and employment outcomes. When questioned about career goals, one-quarter of the new PhD recipients said they were looking for nonacademic positions, another quarter said they would be flexible and the remaining half expressed a desire for positions in academe. Among those taking postdocs, more than half want academic positions. The authors note that other AIP data suggest "that the fraction of new physics PhDs who will finally get permanent academic positions in the US is closer to one-fifth than one-half." Congressman Boehlert noted back in July that advanced-degree holders are not alone in experiencing career disappointment. "Join the rest of us," he said.

The AIP survey detects evidence of unemployment and underutilization for bachelor's and master's degree recipients too. From the order in which jobs are taken, the authors infer that individuals with BS degrees begin by looking for work that will enable them to make maximum use of their schooling, but then, unable to find such jobs, they broaden their search. In the end, 57% said they had accepted a position "where they would use little or none of their physics background."

This report may be obtained from AIP, Education and Employment Statistics Division, One Physics Ellipse, College Park MD 20740-3843. Single copies are free, and multiple copies may be ordered.

DENIS F. CIOFFI

Physics at James Madison University Gets a New Life

"There were probably about a 100 better ways to have gotten to this point," said H. Kent Moore, the retired chairman of the physics department at James Madison University, in Harrisonburg, Virginia, "but now we see this as an opportunity to strengthen the department." On 21 July the JMU administration reversed a major part of its January decision and decided not to send letters of termination to the physics faculty (see PHYSICS TODAY, March, page 81).

The reprieve came in the form of a prepared statement by Norman Garrison, the interim dean of the college of science and mathematics. Garrison said that he had told JMU administrators of the physics department's "good faith effort to increase teaching productivity" by having some physics faculty teach in other departments and by designing new courses "to meet specific needs."

An internal committee composed of Moore and three other physics professors proposed a redefinition of the major. A five-member external review team that was headed by A. Jerry Benson, the dean of the college of education, and included Judy Franz, the executive officer of the American Physical Society, reviewed the department's plans. The exact status of the major has not been decided as of this writing, but strong consideration is being given to a multitrack system.

The first track would be the traditional preparation for graduate school. Another track may combine physics and engineering and would be undertaken with the assistance of the engineering school of the University of Virginia (JMU and UVA are both part of the state university system). More speculative is a "liberal arts" track, which would be designed for those who want to combine studies of, say, physics and business, or physics and law. Thus, JMU appears to be one of several US universities and colleges now expanding opportunities for undergraduates who want to study physics but do not necessarily wish to pursue an advanced degree (see, for example, PHYSICS TODAY, June, page 47).

In addition to restructuring its physics major, JMU has reduced its physics faculty for the 1995–96 academic year from 10 to 7.5 members: Moore retired at the end of August, Raymond Serway is away on a previously planned educational leave and another faculty member is teaching half-time at JMU's College of Integrated Science and Technology.

Meanwhile, a legal suit against the university continues. Filed by nonphysics faculty, the suit concerns the process by which the administration attempted to remove the major and the faculty. This dispute about authority and regulations is also being played out elsewhere. As funding for higher education falls (and outside scrutiny rises), faculty layoffs are being considered at other universities in the US and Canada.

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