

our bureaucracy and in our education system; but, gentlemen, that Japanese torpedo did run level. Surely we have people capable of smoothing out this lurching, broaching torpedo run on which we are being taken.

HAROLD P. HANSON
University of Florida

One way to reduce the present employment crisis is for the appropriate government agencies (NSF or HEW) to allocate a small amount of money for programs to train present PhD graduates or graduates-to-be to take jobs in other fields. The money would pay their tuition for supplemental courses in fields such as business administration, management, medical science and so on, and in the case of PhD graduates to provide fellowships for such training.

If we assume that one quarter of the total graduates need tuition assistance and one quarter of these need fellowships, the total amount required is about $(400 \times \$1000) + (100 \times \$8000) = \$1.2$ million per year. This would be well spent if we consider the time and money already invested in these young talents.

S. J. TAO
The New England Institute
Ridgefield, Conn.

Job-hunting experiences

It has been amusing to read the recent letters in PHYSICS TODAY concerning the employment situation for young (and old) physicists. And I would probably be chuckling if it weren't for my sense of rage about the attitudes contained in them.

For instance, it would no doubt be valuable for graduate schools to gear their production of physicists to the market (James D. Kerwin's letter, November, page 9), if only we knew what the market was going to be like four years hence. Or we could be righteously indignant (along with R. C. Hansen, February, page 11) about all these young fellows, with their narrow disciplinary training, sitting on their butts waiting for job offers to arrive in the mail. If only that were true so that our indignation could be justified. And of course it was nice to reminisce (with Harold A. Zahl, April, page 11) about the hard times with happy endings in the good old days.

PHYSICS TODAY TO DROP MEETINGS DEPARTMENT

Beginning with this issue PHYSICS TODAY will no longer publish a meetings-report department. The amount of space that we can make available to this kind of department is no longer adequate to do justice to the already large and still increasing number of physics meetings being held each year. In future issues we plan to include the significant developments presented at meetings in our staff-written news columns. Verbatim accounts of selected physics meetings will soon become available as part of the AIP Conference Proceedings Series, which the American Institute of Physics has recently announced it will begin to publish (see May, page 62). —The Editor

I have working for me this year a postdoctoral fellow who decided for family and financial reasons to do battle with the job market. I think that a careful accounting of our efforts will reveal that even if the job market isn't disastrous, it is tough and discouraging. Whether the job market is disastrous or not can not be determined from an isolated example, such as this one, but from figures such as those in the April issue of PHYSICS TODAY (page 23). The circumstances I describe here contradict most of the assumptions and conclusions contained in recent letters. The job applicant was young, intelligent, willing to look for a job, willing to leave his narrow discipline, and do anything, except intellectually perjure himself, to get a job. Between mid-December, 1969, and mid-March, 1970, a total of 139 prospective employers were contacted by first-class mail with individually written and addressed letters (see Edward P. Clancy's letter, April, page 15) with a breakdown and response as follows:

Small Colleges (up to 2500 students)—35 written, no jobs at 29, no response from 4, job filled at 1, 1 interview, no offers.

Medium Universities (up to 8000 students)—48 written, no jobs at 30, wrong category of research interest at 5, jobs filled at 5, no response from 3, under consideration at 3, interviews at 2, 2 job offers.

Large Universities (larger than 8000 students)—18 written, no jobs at 11, wrong category at 5, no response from 1, 1 was confused by

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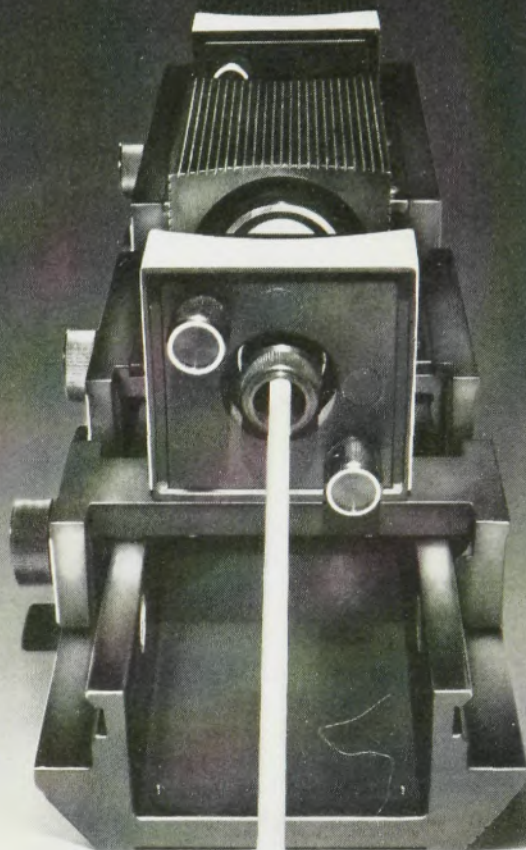
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the plethora of candidates, no interviews.

Industry—38 written, no jobs at 38. It is difficult to delineate properly the response from industry as was done for teaching positions, but the fundamental content of their response was that there were no jobs.

The next few months will indicate to what extent a job shortage exists for physicists, after the spring sorting out is concluded. And it will still be difficult to know what to do. But until I am convinced of some better guidelines, I am not taking on any more graduate students.

STANLEY SEGEL
Queen's University
Kingston, Ontario

I would like to remind Clancy and his fellow chairmen with full "circular files" that common courtesy and thoughtfulness are two-way things. Replies to my inquiries (all individually typed and with a salutation) the past year about physics teaching positions have ranged from no reply at all, to one line saying "no openings," to a mimeographed form dated over a month before I received it. However, I must admit that department chairmen (or their secretaries) are better than us poor applicants; only about 7 out of 10 replies were of the above type.

LARRY L. LYNN
Massachusetts Institute of Technology

While agreeing with Edward P. Clancy's observations (April, page 15) we would like to point out a similar situation we have observed from our side of the market. It is amazingly common to submit applications and letters of recommendation and then never to hear from the institution. It appears to us that when an institution actively solicits applications by advertisements or placement services, the very least it owes those who have responded is a notice that the opening has been filled.

At the Chicago meeting of the American Physical Society we had interviews that were initiated by ourselves and by the school representatives. These interviews resulted in the representatives expressing an interest in our qualifications and a request for us to submit formal applica-

tions and letters of recommendation. One even asked for a prospectus detailing the equipment and expense necessary to establish a low-temperature laboratory. It takes a lot of time and effort to respond properly to these requests, not only for the candidate, but also for those who are kind enough to furnish recommendations. Two months later we have yet to receive even an acknowledgement, even though we have heard through other sources that some of these positions have been long filled.

As the pages of *PHYSICS TODAY* make clear, it is a buyer's market; but this sort of treatment seems to us to be unnecessarily rude.

RICHARD H. BURKEL
J. MARTIN PECK
University of Cincinnati

About cycles—bi- and motor

The article on the stability of the bicycle by David E. H. Jones (April, page 34) has, except for the computer-generated curves, been covered in most popular motorcycle magazines in the last few years. The fact that increased rake, or steering angle, provides increased directional stability at the expense of quick maneuverability is well known both to manufacturers, who provide greater rake on trail and dirt machines than on street bikes, and to outlaws—the traditional "chopper" includes a much increased rake.

Technical publications on the subject exist. I would suggest a search of British engineering journals for papers by Philip Vincent, dealing with a speed-record machine with variable trail (front projection).

Of course, the motorcycle problem is complicated by suspension movement. If the author could include this factor in his programming, I would be very interested in the results.

JAMES HOSKIN
Secretary
The Calgary Motorcycle Club
Alberta

THE AUTHOR COMMENTS: Of course, any enterprising manufacturer will know from experience roughly what results to expect from changes in the front-fork design of his machines, and in the competitive world of motorcycling there is naturally a good deal of empirical lore on the subject. My article was more concerned with the theory behind such knowledge, which

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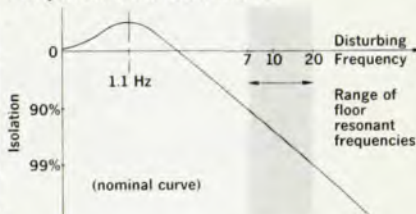


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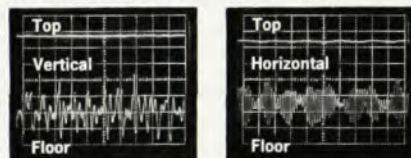
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