

is essential that it be broadminded with respect to its own research; for the community as a whole and for all its industries, it is essential to support also the most abstract type of fundamental research."

This does not mean that research in particle physics is likely to be undertaken at Eindhoven. But there is a biology group of about a dozen researchers—critical size, according to local opinion—working on enzymes. This work doesn't fit obviously into the scheme of things at an industrial lab. The justification is that the work is in a field which is sure to grow even more important in the future, and at any rate it provides background research for the company's pharmaceutical wing.

To an American observer the Eindhoven labs in scale and spirit resemble Bell laboratories in the United States. Part of the original inspiration of the Philips "Physical laboratories," as they are still called in the Dutch, seems to have been the Schenectady labs of General Electric. But if the Philips lab looks like something of a transatlantic hybrid, the European strain is very strong. This is particularly clear in re-

spect to personnel policies. Philips researchers, as has been noted, are hired with great care, and employment is, to all intents, permanent. Layoffs are regarded as unmentionable, and departure of employees to establish "spin-off" sub-contractors or competitors is practically unheard of.

The Philips lab differs from most of its American counterparts in being a truly private lab. Its contract work for outside customers such as Euratom and the European space program amounts to only about 1 percent of the budget. Company money is heavily invested, and results are expected ultimately to be worth the expenditures.

Nobody at Philips claims the system works perfectly. There is concern, as there is elsewhere, about the lag in applying the findings of research. And in recent years it has proved difficult to recruit a sufficient number of people of the required quality to maintain a constant rate of expansion in the labs. For some years the labs staff expanded by about 7 percent a year, but for the time being, at least, the period of rapid expansion seems to be past.

This has been one of the reasons for

the growth of the Philips research laboratories in other European countries. These now employ more than 1500 people. An advantage for Philips, which draws its Eindhoven staff from Dutch universities almost exclusively, is that the dangers of scientific inbreeding are mitigated through contacts with researchers in other laboratories.

The relative scarcity of top-quality graduates in Holland is, as might be expected, a matter of demand. Before the war many university graduates in physics, for example, took teaching jobs in the secondary schools. Now Philips faces stiff competition from smaller Dutch companies and international companies with operations in Holland for the services of these graduates, particularly the most promising ones. A new element has been injected, with some companies, especially those with American ties, beginning to seek senior scientists of proved ability and experience. Whether this will cause significant changes in European career patterns remains to be seen. Philips, for its part, while aware of the competition, doesn't seem to fear the challenge.—JOHN WALSH

## Paying for College: Loan Plan Receives Chilly Reception

Ships, upon launching, have been known to slide down the ways, hit the water, and sink out of sight.

Such was not exactly the fate of an ingeniously devised, long-labored-on educational finance plan that was launched from the White House science office early this month. But the plan, known as the Educational Opportunity Bank (EOB), is far from making a *bon voyage*. This is what happened.

In recent years the strains of financing higher education have inspired attention toward the development of relatively painless borrowing plans. Last year, under the direction of Jerrold R. Zacharias, an MIT physicist long influential in government science circles, a White House panel focused its interest on one particular borrowing

scheme for assisting undergraduate education. This was a sort of reverse insurance plan, in which the benefits come first and the payments, geared to income, are spread over a long period, with disability, low income, or death reducing or canceling the obligation to repay.

As conceived by the Zacharias panel, the plan would work as follows. The EOB would establish a pool of loan funds by borrowing money from the federal government at going interest rates. Any student, needy or rich, could borrow perhaps \$3000 a year from this pool to meet the costs of tuition and subsistence. Repayment would be linked to the borrower's annual gross income over the next 30 to 40 years. Though the panel reported that calculations are

yet to be completed, it estimated that if repayment were on the basis of 1 percent of gross annual income each year for 30 years, the bank would break even. Thus, a borrower with an \$8000 debt would repay \$266 in the year in which he had a \$10,000 income. If his income rose to the point where annual repayments of 1 percent per each \$3000 borrowed exceeded the financial benefits he had received, he could pay off his debt in one lump, plus 6 percent compound interest. On the other hand, if he had a bad year financially he would be obliged to repay little or nothing for that year.

The advantages cited for the scheme are numerous, the principal ones being that, since it is attached to the on-going income tax system, it would be administratively simple; it avoids means tests, helps meet the costs of tuition and subsistence, and would tend to free the student of financial consideration in selecting the institution he wishes to attend; also, it links repayment to the financial fortunes of the borrower, and, finally, it opens a new source of revenue for financially strapped institutions, especially those that are not tax-supported. Clearly, there is a case to be

made for the EOB, and though the panel emphasized that it offered the plan as a supplement, rather than replacement for, the many existing arrangements for financing higher education, it is not at all improbable that a vigorously promoted EOB might rapidly become a financial mainstay of college finance.

Since the Zacharias plan emanated from the White House science advisory apparatus, it might have been expected to benefit from the tradition that the advisory core does its hassling in private and unites in public to amplify its impact. (Formally, the Zacharias group was constituted as the Panel on Educational Innovation of the President's Science Advisory Committee, and its report was addressed to the U.S. Commissioner of Education, the Director of the National Science Foundation, and the Special Assistant to the President for Science and Technology.\*) But, from the moment it was formally unveiled by Donald F. Hornig, the special assistant, at a press conference beginning at 2:30 p.m. 7 September, it was obvious that EOB would have to fend for itself in the jungles of education politics and the Johnson administration's currently deep preference for dampening domestic spending.

Standing before some 40 reporters,

\* Copies of the report, *Educational Opportunity Bank* (21 pages), are available for 15 cents from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Hornig said the EOB proposal was being released "because it has some obviously interesting features." He added, however, that "we are not now proposing establishment of an Educational Opportunity Bank. . . . Our position is that it has interesting possibilities and is worthy of consideration."

Hornig then introduced Zacharias, who briefly outlined the EOB. Hornig observed the proceedings for a few minutes and then left the room, shortly after which Zacharias stated, "It is not enough to say here's an interesting thing. . . . It should be pushed through."

Question: Would he describe the status of the report in the administrative hierarchy?

Replied Zacharias: "I feel we ought to establish an EOB of some size. . . . But this is not a report out of the President's office. It's just a report of a panel. Hornig felt it would be a good thing to get a first-class public debate of this [proposal]."

If a howl of opposition can be classified as debate, the goal was swiftly achieved, for at 4 p.m., in a hotel a few blocks from the Executive Office building, two groups, representing more than 300 publicly supported educational institutions with over half the nation's higher-education enrollment, somewhat emotionally set forth their objections. These groups were the National Association of State Universities and Land-Grant Colleges and the Association of

State Colleges and Universities, which, in a joint statement, damned the EOB as a "College Student Life-Indenture Plan."

"It is an ironic commentary on our times," the statement asserted, "that in this most affluent nation in the world's history, in the year 1967, a panel should seriously take the position that our society cannot afford to continue to finance the education of its young people, and must therefore ask the less affluent to sign a life-indenture in return for the privilege of educational opportunity."

The underlying principle of the plan, it said, is that "this generation of our society should largely abandon responsibility for the higher education of its young people and shift the cost to the students." And, in comments afterward by representatives of the associations, it was suggested that the EOB was simply a scheme cooked up by representatives of private institutions to get to the public treasury. Motives aside, it turns out that the Zacharias panel did not include any representatives from tax-supported institutions. The members were Frederick Burkhardt, chairman of the American Council of Learned Societies; Andrew Gleason, Harvard; Jacqueline Grennan, Webster College; John Hawkes, Brown; and George G. Stern, Syracuse.

Thus, in something less than a blaze of glory, EOB has been launched for public consideration.—D. S. GREENBERG

## Political Science: CIA, Ethics Stir Otherwise Placid Convention

*Chicago.* The American Political Science Association (APSA) held its annual meeting here from 5 to 9 September, and most of the program followed a well-established, accepted pattern. There were panel meetings in the morning and afternoon for presentation of papers; cocktail parties in the early evening for renewing old friendships; and plenary sessions at night for the presidential address, a discussion of politics in developing nations, and the announcement of awards. The gathering of more than 2500 political scientists

also had its commercial attractions, and dozens of publishers spread displays across most of the second floor of the Pick-Congress Hotel, where the APSA met.

But for a brief fragment of the convention, there was a bitter reminder of last winter's disclosures that the CIA was covertly financing educational and cultural organizations. The uneasy moment came at the usually routine business session, when a motion was offered to prohibit the APSA's executive director and treasurer from also

holding office in another organization, Operations and Policy Research, Inc. (OPR), which was identified last winter as a recipient of funds from CIA-supported foundations. The fact that Evron M. Kirkpatrick, the APSA's executive director, and Max M. Kampelman, the treasurer, were then, and still are, president and vice-president of OPR caused concern among some political scientists, and prompted APSA president Robert Dahl of Yale to appoint a special committee to determine whether APSA's independence and integrity had been compromised. In April the committee reported that none of OPR's research was classified, that Kirkpatrick and Kampelman were not involved in a conflict of interest, and that they should, in fact, be commended for their long service to the association.

Not everyone was satisfied with this outcome. The challenging motion, sub-