

randa, some merely initiating staff discussions. Most appear to have followed the State Department's lead in not proscribing response to the Soviet poll, but, despite the permissive tone of official actions, the implication is clear that the government considers answering the poll a naïve and unconstructive act. (At least one agency, NASA, took an additional step and stressed in a memorandum that contact between American and Soviet scientists—in areas of expertise—was not being discouraged.)

The State Department's assessment

that the answers to the Soviet questionnaire could be used to discredit American policy seems plausible enough, but the significance of such usage could easily be misinterpreted. If every American response bore out Soviet propaganda themes, it would prove not so much that the Soviets are adept propagandists as that grave domestic dissatisfaction with American policy already exists. The questions raised in the Soviet poll are questions to which a substantial number of American scientists have already publicly addressed themselves. The Soviet poll would

clearly be only one of many vehicles the American academic community has been using to tell the Johnson administration what it feels and fears.

But whatever the conceivable merits of the Soviet questionnaire as an instrument of either international or domestic communication might have been, the intervention of the State Department has probably made its effective utilization impossible. The message to American scientists from the State Department, if gently spoken, is also clear: "Your failure to respond will be appreciated."—ELINOR LANGER

Student Housing: Colleges Line Up for U.S. Loans

The current and growing shortage of student housing on college and university campuses is a mundane subject which cannot compete for headlines with a riotous "free speech" demonstration or an angry faculty petition over Vietnam. Nevertheless, it is being viewed with increasing concern by administrators on many campuses. Colleges and universities would be facing continually mounting enrollment pressures and strains on their student housing facilities if only because of the nation's steadily growing population. However, the government's concern for the needy student—expressed for example in the National Defense Education Act loan program, the antipoverty office's Upward Bound program, and the new Cold War G.I. bill—will contribute also to the demands for college space and facilities.

The full strength of these formidable pressures may be felt by the institutions at a time when the federal government's college housing loan program is overwhelmed by the demands being made upon it. Many academic officials, alarmed by this prospect, are hoping that something will be done promptly to avert housing shortages more troublesome than any that have yet arisen. In April a spokesman for the American

Council on Education, the National Association of State Universities and Land-Grant Colleges, and five other higher-education groups told a congressional committee that serious shortages already exist.

"Lack of space in which students can live is increasingly becoming the determining factor in admissions," said David W. Mullins, president of the University of Arkansas. "Because of insufficient housing many institutions have ceased to accept new applications several weeks earlier this year than in the past."

Even on those campuses where shortages of academic facilities and qualified faculty are the really decisive factors in limiting enrollment, it is clear that a shortage of relatively low-cost housing will work a major hardship on students living on a tight budget: Military veterans largely dependent on the \$100- to \$150-a-month G.I. Bill benefits often will suffer. Moreover, even in a period of federal budgetary constraints arising out of the Vietnam war and threats of inflation, some university people think it unfortunate that college housing, usually financed on a self-liquidating basis through rental fees, should be denied adequate federal loan funds.

The college housing loan program, popular since its inception in 1950, acquired still further importance and popularity last year after Congress fixed the interest on loans at a maximum of 3 percent—a rate lower than the rate at which states can borrow through the sale of tax-exempt bonds. Previously, the rate had been based on the cost to the Treasury of borrowing money at long term, plus ¼ of 1 percent to cover the cost of administering the program.

In the past, state institutions frequently could fare as well or better by relying on the private money market. In fact, the law establishing the federal loan program required that private financing be used if available at comparable rates. Private institutions always have found it advantageous to seek the federal loans. The Community Facilities Administration (CFA), now part of the new Housing and Urban Development Department (HUD), estimated in 1963 that the loan program, during its history, had financed 60 percent of all higher-education housing construction. The 1793 loans granted from 1950–1962 totaled \$1.8 billion.

Since 1961 the loan program has been authorized at a level of \$300 million a year. Even before demand for the loans was increased by fixing the interest rate at 3 percent, the available loan funds had begun to fall behind the colleges' needs. On 1 July 1965 the program began the 1966 fiscal year with a backlog of loan applications totaling \$192 million. By 1 February 1966, when it was announced that no more applications would be received until further notice, an additional \$568 million in applications had been filed. In the opinion of qualified observers, had applications been received through 30 June, the close of the fiscal year,

the total would have reached \$1.1 billion. The current backlog of applications totals \$460 million; meanwhile the moratorium on new applications is still in effect, and CFA does not know when it will be lifted.

This year the college housing program has been affected by the administration's attempts to reduce the effect of government loan programs on the

size of the budget deficit—always a topic popular with the Republican opposition. In fiscal 1967 the administration will not provide the usual \$300 million in college housing loans by the customary method of having CFA borrow the money from the Treasury. Instead, the money will come from the sale to private investors of \$820 million worth of "participation certificates" in

college housing bonds held by the government. (At the end of December almost \$2 billion worth of such bonds was in the government's portfolio.) The proceeds from the certificate sales, less the \$300 million to be used for loans and the interest to be paid on the certificates, will result in a net gain to the Treasury of about half a billion dollars.

Research Policy: Trumpets on Capitol Hill

One of the more entertaining sideshows in science-government affairs is reflected in a series of documents issuing from the Research and Technical Programs Subcommittee of the House Government Operations Committee, chaired by Representative Henry S. Reuss (D-Wis.).

In recent months, Reuss has become the frequent articulator of two theses: (i) the volume and structure of federal support for academic research has had a harmful effect on teaching, (ii), to improve this country's balance of payments, reductions should be made in federal expenditures for research abroad. Both are arguable theses, and Reuss has plenty of respectable company in holding them.

Following an exchange of letters with Budget Director Charles L. Schultze, Reuss issued two press releases, bearing the headings, "Reforms to Be Made in Federal Research Programs Affecting Teaching Following Reuss Subcommittee Recommendation," and "Budget Bureau to Tighten Controls on Federal Foreign Research Spending Following Reuss Subcommittee Recommendations."

Now what Schultze wrote about research and teaching was: "I cannot disagree with the objective of 'balancing' research and teaching needs, but such balance is exceedingly difficult to measure objectively. Moreover, I am not sure how effectively the problem can be dealt with at the level of central decision-making . . . [It] is primarily the responsibility of university administrators to apply restraints on the nonteaching activities of their professional staffs. But having said this, I must agree that the Federal Government should explore further the impact of research support upon the teaching function, even though the present evidence seems to indicate that Federal support of academic research has generally been beneficial to the universities." Schultze said that the matter would be referred for study to the Federal Inter-agency Committee on Education and the Committee on Academic Science and Technology, committees whose roles and whereabouts mystify some of the capital's most knowledgeable administrative cartographers.

Taking up another of the Congressman's points—that fellows, trainees, and research assistants should be involved in teaching—Schultze wrote, "I note, however, that agencies have liberalized their fellowship and traineeship programs to permit and encourage teaching In any event, I take it that you are not suggesting that the Federal Government should impose upon the universities

a requirement that fellows and trainees must teach as a condition of support."

On support of research abroad, the Budget Director wrote: "We recognize that there may be a need to re-emphasize and reinforce the limitations which have already been imposed. We agree with the committee that it might prove beneficial, in this context, to reiterate the objectives of the balance of payments program, with specific reference to research activities. . . . We would emphasize . . . that the Bureau of the Budget believes strongly . . . that Government expenditures affecting the balance of payments must be held to the minimum consistent with the national interest. On balance, we believe that our efforts to apply this principle to scientific activities . . . constitute a reasonable approach in terms of the relative magnitude of this aspect of the overall balance of payments problem."

Just last week the Congressman issued another announcement, bearing the heading: "Reuss Hails National Science Foundation Agreement to Curtail Fellowships for Study Outside U.S., Following House Research Subcommittee Recommendation." This referred to a letter Reuss wrote last April to NSF Director Leland J. Haworth expressing concern about the dollar drain caused by NSF fellows studying abroad.

In his reply Haworth stated that, while 53 percent of NSF postdoctoral fellows study abroad, only a small portion of all NSF fellows and trainees leave these shores for study—currently 220 out of a total 8275. The amounts involved, Haworth wrote, probably total \$1.5 million a year. Haworth also noted that applicants now submit "detailed and specific justification" for studying abroad, and he added that NSF "has already established limited conditions for study abroad, such as instructions to panelists to consider the appropriateness of the foreign instruction for scientific study. . . ." But henceforth, he wrote, applicants wishing to go abroad will be required to state the benefits they expect from foreign study, and panels will be asked to determine whether comparable benefits might be obtained in the U.S. These changes he described as "more stringent guidelines" aimed at "reducing foreign tenure to a minimum."

In his press release Reuss stated that "Haworth's initiative" is "most encouraging and praiseworthy." All of which suggests that, though it is difficult to change government policy, it is easy to employ a mimeograph machine to suggest that it has been changed.—D.S.G.

The sales will be made under the Participation Sales Act of 1966, enacted by Congress in May at the administration's behest. The Act provides a somewhat controversial device (fiscal "gimmickry," the Republicans say) by which the government seeks to have investors share in the financing of a number of government loan programs.

Preliminary findings of an American Council on Education study of the need for student housing indicate that \$1 billion a year should go into the construction of such housing over the next 10 years. The A.C.E. study is as yet unpublished, and the basis for its projection of needs has not been revealed. However, from a perusal of available statistics one can get a sense of the dimensions of the problem. According to U.S. Office of Education projections, by the fall of 1974 the total enrollment in colleges and universities is expected to reach 8.6 million, compared to 4.9 million in 1964. Moreover, 40 percent of the additional students would be women, who generally require more campus-housing facilities than men students do. By 1974 freshmen students (men and women), who at many institutions require campus housing, will total nearly 2 million, or 680,000 more than in 1964.

The Office of Education projections, published last year, could not take into account all the recent developments which may result in enrollments still higher than those expected. The benefits of the Cold War G.I. Bill, for example, will be available to the millions of young men who in the years ahead will serve a tour of duty and return to civilian life.

The emphasis of the new Upward Bound program is on awakening in capable young people from impoverished backgrounds a desire for higher education. During the summer and the coming academic year some 20,000 selected high school students will be sent to college and university campuses to take part in special programs designed to arouse their interest in continuing their studies. The program's ultimate potential for increasing campus enrollments seems significant. These and other developments make the Office of Education projections appear conservative and may greatly increase the demand for low-cost campus housing.

The moratorium on federal loan applications disturbs college officials. Construction of a dormitory often takes 2 years after financing has been arranged.

News Internships

Applications are invited for a newly established internship program in the *Science* news department, in Washington. The program is flexible as to professional or academic background and level of experience. The object of the program is to enlarge the understanding of relations between science and government by providing an opportunity to research and write for the news columns. Starting date, length of appointment, and salary will be determined on an individual basis. Inquiries, accompanied by résumés and samples of writing, should be sent to Daniel S. Greenberg, News Department, *Science*, 1515 Massachusetts Ave., NW, Washington, D.C. 20005.

Furthermore, if the building is completed after the fall semester has begun, full occupancy of the new dormitory may not occur until the start of the next school year. Thus, the moratorium, unless lifted soon, could delay the construction and effective use of some campus housing by 3 or 4 years.

At most institutions where the majority of the students traditionally have lived on campus, current housing shortages do not appear to have reached crisis proportions—yet. The situation at the University of Arkansas is a case in point. President Mullins has said that some students were unable to attend the University last year because of the lack of housing on campus or in the city of Fayetteville. The same will be true this fall. But Mullins can give no indication of the number of students affected; presumably, if the number were large, the dimensions of the university's current housing problem would be more evident.

The potential problem at Arkansas is evident enough. The University expects its enrollment to grow from about 10,000 students this fall to about 15,000 in 1975. By the fall of 1967, some 5000 students will be housed in university facilities or fraternity houses. From 2500 to 4750 additional student living spaces will have to be provided over the next 9 years if the university is to meet its goal of housing from 50 to 65 percent of its students on campus.

The situation at Arkansas is suggestive of that at many institutions in small cities or towns. According to Mullins, Fayetteville, with a population estimated at 26,000, cannot easily absorb the students who overflow the university's housing facilities.

In some cases where a campus is in a locality which has an abundance of private apartments available to students, the institution's officials are disquieted by what they see—and don't see—going on in the free-and-easy atmosphere of those off-campus quarters. Robert B. Mautz, vice president for academic affairs at the University of Florida, Gainesville, says that enclaves of private apartments which students are renting have developed around his campus, as they have at a number of other campuses. The normal societal controls are not present in these student-occupied apartments, Mautz observes. Nobody thumps the floor with a shoe when the party down below goes on too late and too noisily. "We suddenly have a student culture," Mautz says.

The importance of campus housing seems to vary according to the size, location, and nature of the institution. At a big northern institution such as the University of Michigan, large numbers of students have the freedom of off-campus living, and parents and university officials give no very visible signs of alarm. A similar situation at some Southern colleges and universities, as Mautz's remarks indicate, may be viewed with greater concern. Whether this is because Southerners are less sophisticated or because Northerners have lost their fear of the Devil is a matter to be considered by those who have time for such speculation.

The University of California system provides some important contrasts with respect to the role of campus housing. Less than a third of Berkeley students live in university housing. Again, at U.C.L.A. a relatively small percentage of students live on campus; most students occupy off-campus private housing or live at home. On the other hand, at the new Irvine and Santa Cruz campuses of the California system, most students will live on campus. Indeed, the Santa Cruz campus, to develop as a kind of Oxford of the West, is being built around the concept of a grouping of a number of individual residential colleges.

Santa Cruz expects to have 1375 students this fall and Irvine expects to have 2190. Eventually, each is to have 27,500. Large sums will be required to

build the dormitories necessary for these huge student bodies. University of California officials, like the university officials in most states, will be looking to the federal college housing loan program.

Unless liberalized, however, that program will support only a small part of the college housing needed over the coming decade. In speaking for the higher education groups before the Senate Housing Subcommittee, Mullins proposed that the entire \$820 million—not just \$300 million—to be realized from the sale this year of college housing bond participation certificates be made available for additional loans to the colleges.

An alternative proposal, also being considered by groups such as the American Council on Education and the National Association of State Universities and Land-Grant Colleges, is to have the government guarantee the bonds sold by educational institutions in the private market and to provide that part of the interest payments exceeding 3 percent. Whether Congress and the administration will accept either of these proposals is not, at this point, an easy question.

According to William B. Ross, Deputy Undersecretary of HUD for policy analysis and program evaluation, the administration is intensely aware of the college housing shortage but has no new plan of action in hand. The problem is being studied with a view to developing proposals for consideration late this fall, when work on the fiscal 1968 budget will enter its final phase, Ross said. The proposals being discussed by the education groups are among the alternatives under review.

The House Banking and Currency Committee, which has jurisdiction over housing matters, recently reported an omnibus housing measure which makes no mention of college housing. However, there is at least a possibility that action to help the colleges will be initiated by the Senate Banking and Currency Committee and its Housing Subcommittee. The subcommittee was to have met this week, as *Science* was going to press, and the college housing problem was one of the matters expected to be taken up. A sympathetic interest in the colleges' problem is not lacking in Congress, but to say that that interest will be translated promptly into more housing loans would be only an optimistic guess.

—LUTHER J. CARTER

NEWS IN BRIEF

● **PROPOSAL WRITING:** The Research Institute for Science, a private firm located in Berkeley, offers assistance in writing grant proposals, at \$25 to \$100 a job—and administrators of some of the major granting agencies are frothing in anger. The "Institute" is a one-man enterprise headed by William D. Harris, who says he did similar work on the payroll of the University of California. Harris claims success for "several" clients and says he has "about 20 applications in the pipelines." One letter of solicitation from Harris says, in part, "Our review of your proposal . . . will greatly improve your chances of securing grants."

The intrusion of free-enterprise into the supposedly self-regulating grant system is not accepted with equanimity by NSF and NIH officials. "Any guy who can't write his own proposal doesn't deserve a grant," said one official who also expressed concern about how Congress might react to the implication that substance is not the all-governing factor in proposal evaluation. He added that agencies would not look kindly upon commercially prepared applications, but agreed that there is no easy way of determining who had prepared a form. The agencies say there is no objection to universities assisting their applicants, since this may be part of efforts to maintain "institutional harmony." They also say that they stand ready to offer assistance to applicants in filling out forms, but the existence of a commercial service, even a small one, suggests that the paperwork may be more of a burden than is publicly acknowledged.

● **INTERNATIONAL AFFAIRS TRAINING:** H.R. 14643, passed by the House 6 June, gives the Secretary of Health, Education, and Welfare authority to make grants to institutions to set up and maintain research and training centers in international studies, both at the graduate and at the undergraduate levels (*Science*, 1 April). A similar bill on education, introduced by Senator Wayne Morse (D-Ore.), is pending in the Subcommittee on Education, of which Morse is chairman. Hearings on the measure have not been scheduled and probably won't be held until late this summer.

● **HEALTH MANPOWER:** A non-government commission has been set up by the President to study health personnel problems in the U. S. The 15-member commission is headed by J. Irwin Miller, chairman of the board of Cummins Engine Company, Inc. Miller chaired a special Presidential committee last year that made the report on U.S. Trade Relations with Eastern European Countries and the Soviet Union. The Commission is charged with studying the health manpower situation and with submitting a report within a year suggesting methods for accelerating the education of health personnel and for improving utilization of the existing manpower pool. The commission has headquarters at the Office of Science and Technology in Washington and plans meetings throughout the year.

● **UNEMPLOYMENT INSURANCE:** A bill extending coverage primarily to "blue collar" workers of institutions of higher education has been approved by the House Ways and Means Committee. Specifically exempted are faculty, research personnel, and many administrators. The bill (H.R. 15119) gives institutions of higher education and other nonprofit groups the option of either making regular state unemployment insurance contributions or reimbursing the state for unemployment compensation claims by their employees. The bill represents a compromise sought by nonprofit spokesmen (*Science*, 8 April).

● **SENATE APPOINTMENT:** Robert P. Griffin, appointed by Michigan Governor George W. Romney to succeed the late Senator Pat McNamara (D-Mich.), has been assigned to the Senate Committee on Labor and Public Welfare, which is the authorizing committee for legislation affecting education and medical research. Griffin, a Republican member of the House since 1956, was co-author in 1964 of the National Student Loan Program, National Defense Education Act.

● **FISH FLOUR:** The Senate has passed and sent to the House a bill (S. 2720) authorizing \$5 million for five government demonstration plants for fish protein concentrate research (*Science*, 6 May). The bill authorizes the Interior