

## News and Comment

### NASA and Education; Fast Growth Stirs Senate Committee To Place Brakes on New University Grants

Throughout the debate over the space program, one thing hasn't been debatable, and that is that NASA has proved to be a godsend for many American universities, particularly the small but worthy institutions outside the mainstream of federal support.

Like so many things associated with the huge, rich, and politically astute space agency, this role was achieved without Congress paying very close attention. NASA was given broad mandates, encouraged to think big and fast, and in a matter of a few years it evolved into one of the federal government's largest single supporters of predoctoral science and engineering training. This year, 780 students, at 88 universities, are enrolled in graduate studies under NASA auspices; eventually 4000 are expected to be in the program at one time. The numbers take on more significance when it is noted, for example, that only 3000 doctorates were awarded in engineering, mathematics, and the physical sciences in 1960, and that the administration has been counting upon NASA to make the largest single contribution toward its goal of 7500 Ph.D.'s in these fields by 1970. Thus, NASA has been good news for the goal of expanding graduate training, and, along the way, it has been good news for the students and the institutions. Its stipends, of \$2400 to \$3400 a year, are, with a few small exceptions, the most lucrative to be had from the federal government; and the institutional allowance—that is, the money given the university to cover the costs of training—has been at the top of the list, averaging about \$4000 per student. In addition, the predoctoral fellowships have been tied to each of the 88 institutions, thus giving them a fighting chance to attract top-notch students. This is in contrast to

the type of fellowship that permits the student to go wherever he can get himself accepted, a method which has its merits but which generally has worked to the advantage of the more prestigious institutions.

As a result, in a relatively short time, and without very much notice, NASA has evolved into one of the most significant sources of support for graduate education in the sciences and engineering. Last week, however, a Senate committee made clear that it has noticed this, and it now appears quite likely that NASA's rapid growth as a source of university support is coming to an end. It is clear that NASA is still going to be on the scene as an important source of funds—these totaled about \$100 million this year for various university programs, not including an additional \$180 million or so for Cal Tech's Jet Propulsion Laboratory; but, like all the major federal agencies putting support into the nation's universities in one form or another, NASA is feeling the congressional throttle, and it seems reasonable to expect that the relatively free and easy patterns established over the past few years will not prevail in the coming years.

#### Committee Report

Congressional concern over NASA's rapid expansion into education has been rumbling for some time, but its first formal expression came in the report of the Senate Independent Offices Appropriations Subcommittee, which has jurisdiction over the space agency's budget. "The committee found," it reported, "that the National Aeronautics and Space Administration has initiated an academic grant program which is projected to cost between \$21 and \$28 million per year in the near future. Because of the overlap with other governmental grant education programs, the committee questions the propriety of such a program administered by this agency, and therefore

directs that no new grants be made without specific authorization and appropriation."

The directive does not have the force of law unless it is written into the final appropriations bill adopted by both houses and signed by the President, and the prohibition against "new grants" is by no means clear (does it, for example, bar the continuance of the predoctoral program in the next fiscal year?). But the message is otherwise quite clear, and whether it becomes law or not, NASA has now joined the train of federal agencies that are on notice of Congress's growing concern over the federal government's deep and costly involvement in research and development and related educational activities.

From the point of view of the universities involved with NASA, this is a fairly unpleasant development, for the space agency, despite a few irritations here and there, has turned out to be a highly cooperative and intelligent patron of education. It, of course, had a mixed bag of motives in spreading its funds to areas where other agencies had scarcely at all ventured: it is politically useful to have a widespread constituency, and it is educationally useful to get new money and aspirations coursing through promising institutions. And, though administration officials have never said so publicly, even those who are dubious about the moon program have felt that the space agency has turned out to be a successful end-run around congressional suspicions of federal aid to education, one that could be sustained politically by spreading the wealth.

The difficulty is that in this case, as in so many others, the Congress is in a turbulent and unpredictable mood. Several weeks ago, the National Science Foundation was lacerated by a House appropriations subcommittee for not spreading the wealth, and its punishment, inexplicably, was the elimination of a new program intended for just that purpose.

Meanwhile, Representative L. H. Fountain (D-N.C.) has been assailing NIH for using what he calls acceptability, rather than excellence, as the criterion for making grants. In Fountain's view, grants should go only to the best, a point of view that is certainly defensible, but if federal agency heads are today somewhat befuddled on the care, feeding and pleasing of Congress, they certainly have just cause.

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