

Harry Hess Dies

Harry H. Hess, chairman of the National Academy of Sciences' Space Science Board since 1962, died of a heart attack on 25 August. Hess, 63, suffered the attack while at Woods Hole, Massachusetts, attending the board's summer study of the scientific objectives of lunar exploration. The board advises the National Aeronautics and Space Administration (NASA) on scientific priorities and strategies.

Hess, Blair professor of geology at Princeton, was a past president of the Mineralogical Society of America and of the Geological Society of America. He has been an adviser to other federal agencies as well as to NASA. For example, he once chaired the Atomic Energy Commission's advisory committee on disposal of radioactive wastes and was chairman of the site-selection committee for the National Science Foundation's Project Mohole.

examinations as a measure of performance, they see a need for the Open University to establish the quality of its degrees, and consequently examinations will be held for degree credits. Since the university feels surrounded by doubters, it is likely that these examinations will be as rigorous as any in Britain, but there is nothing to stop nonmatriculating "eavesdroppers" from obtaining the necessary materials and taking the courses.

As far as admission requirements are concerned, the Open University will indeed be open. There will be no academic prerequisites for enrollment, though several criteria for admissions have been set up following a survey that indicated that there would be at least 100,000 applicants for the 25,000 places that the university expects to have available in its first year. Sometimes referred to as "the university of the second chance," the Open University first of all conceives of itself as a "rescue operation" for adults who, for whatever reason, did not go to a university. Thus, applications are invited from anyone over standard university age who wants to go. But, since the national government, which is the sole source of finance, is pressing higher education to pay more attention to

Britain's economic and social problems, "national needs" will be considered in admitting students. In this connection, high priority will be given to applicants from among the 250,000 school teachers whose education did not go beyond the teaching certificate level. A third criterion is "likelihood of success," though the university's planners acknowledge that this is a delicate matter, since emphasis on it can boost the university's academic record at the price of restricting its openness.

Although few if any of the Open University's techniques are unique, their incorporation into a centrally administered, nationwide system at university-degree level is regarded as a pioneering venture. But, in the British context, there is still another aspect of pioneering, for, in its course structure, the Open University will sharply depart from the narrow specialization that characterizes higher education here and follow the nonspecialist programs commonplace in American higher education. Thus, all students will be required to take two "foundation" courses, each a year long, in mathematics, science, the arts, or sociology. These and all other courses will carry one credit. Six will be required for an ordinary undergraduate degree, and eight for an honors degree. The Open University's academic year will be 35 weeks, compared with 25 to 30 in most British universities, and, on the basis of each course requiring about 10 hours' work per week, it is expected that the average student will qualify for an ordinary degree in 4 or 5 years. (Three years is the standard undergraduate course in British universities.) Though all the details are yet to be worked out, graduate programs will probably require more concentrated work, but by using research facilities at other institutions on weekends and evenings, it is expected that a good deal of flexibility can be achieved.

Because of Britain's economic troubles, one of the most attractive aspects of the Open University is the likelihood that it will be relatively inexpensive. The capital costs are expected to be no more than \$12 million, and the annual operating costs somewhere around \$7.5 million. The charges for students have not been decided upon, but according to Michael J. Pentz, director of studies for science, there will be a registration fee of about \$25, plus a similar charge for each course. Pentz, a physicist who came to the Open Uni-

versity after 12 years at the European Organization for Nuclear Research (CERN), said that it is planned to let a student take a course for 3 months before he has to decide whether to pay for the materials and continue.

The genesis of the Open University is attributed to the sociologist Michael Young, with a strong assist from Harold Wilson, who gave the idea its first public airing in a speech in 1963. Eventually it evolved into a proposal for a University of the Air, meaning a system that would be heavily reliant on television and radio. But once the matter was brought under close study by a planning committee drawn mainly from the upper administrative levels of some of Britain's top universities, it was decided that broadcasting should have only a part, and not the central role in the new university. As things now stand, only about 10 percent of the instruction will be over the air waves, but qualitatively this could be of major importance, since the Open University will be free to go beyond its own faculty and invite anyone it chooses to participate in the broadcast part of its curriculum. An interesting thought is that when both radio and TV lectures go out to the country, students at conventional universities will have their first opportunity to apply some comparison to the instruction they receive.

The chief executive of the Open University is Walter L. Perry, a pharmacologist who was director of the Department of Biological Standards at the National Institute of Medical Research from 1952 to 1958, and later professor of pharmacology and vice principal of Edinburgh University. The university is operating under a tight schedule in preparation for the beginning of instruction in less than 18 months. On 23 July, it received its charter in a ceremony at the Royal Society. In ample attendance were the heads of most of Britain's major universities, which was interpreted as a sign that they wished to lay to rest reports that established institutions were not keen about a new arrival seeking to share Britain's tightly stretched budget for higher education. No doubt they are not keen, but the Open University, at relatively low cost, will take some enrollment pressure off the regular universities. At the beginning of next year, applications will be accepted from students. And a year later, school begins.

—D. S. GREENBERG