Leonard M. Rieser, President-Elect, 1972

At the very moment when the role and structure of the AAAS are undergoing important changes, and when science in the United States itself requires as vigorous and thoughtful a leadership as it ever did in the past, the AAAS has elected a new president who seems ideally suited to deal with the new challenges. Leonard Rieser, as scientist-administrator and educator, has found himself in many of the chief transitions characteristic of the last three decades -in projects ranging from the exploitation of nuclear energy to the upgrading of education in science for public schools and the implementation of equal opportunity programs in higher education. Moreover, those who have worked with him in the recent past agree that no one knows better than he does how the AAAS really works-not only its strength but also its deficiencies that need attention. His dedication to the Association, most recently in the heavy work of preparing the new constitution, stems from his conviction that the time has come for the AAAS to widen its base and its mandate in order to give scientists across the board a strong voice as well as an organization through which they can improve the public understanding and support for science and better serve national needs.

Rieser was born in Chicago in 1922. His mother came from Virginia; his father was an attorney who came from a family that had long lived in Chicago (an old family letter from Rieser's great-grandparents tells how their 3-month-old daughter, separated from her parents during the great Chicago fire, was rescued and ultimately reunited with her family). Leonard Rieser was studying physics at the University of Chicago when World War II broke out in Europe and would have suspected little of the activity that was gearing up at the Metallurgical Laboratory and Stagg Field. He had enlisted in the Army's Signal Corps in 1942, but after graduation in December 1943 was drawn into the Manhattan Project.

There he worked on instrumentation for measuring neutron density on graphite reactors, commuting occasionally to Oak Ridge.

In 1944 he married Rosemary Littledale and not long after the Riesers found themselves transferred to Los Alamos. Leonard joined Bacher's division under Charles Critchfield, and Rosemary became the director of a nursery school. On the day of their first wedding anniversary, Leonard found himself lying on the sand of Alamagordo, head down to avoid the blinding light of the first atomic bomb test explosion.

After the war ended, he worked with O. R. Frisch on proportional-counter experiments, and on his discharge from the Army he returned to Chicago for graduate study in physics; but through an encounter with Felix Bloch he left to accept an assistantship at Stanford University. There he began work on low-energy beta decay with Hans Staub. When Staub left for Zurich, Rieser came into the laboratory of Paul Kirkpatrick, who was pursuing experiments on x-ray optics and x-ray microscopy, and later on holography. In his thesis, Rieser concentrated on x-ray reflection experiments from very thin, evaporated metal films which provided the background for low-energy reflection optics.

After he had completed his Ph.D. and served as research associate at Stanford, an overriding desire to teach physics drew him back to New England and Dartmouth College, which he had attended for 2 years as an undergraduate before the war. He began as instructor in 1952, and 5 years later became associate professor.

In 1956 he received a fellowship from the National Foundation to spend half a year with Max Delbrück at the California Institute of Technology. On his return to Dartmouth he became chairman of the physics department, and for 2 years engaged in the task of recruiting colleagues, revising the curriculum, and improving research facilities to develop a modern department in a college which had experienced periods of great distinction with C. A. Young in the 1870's and with Nichols and Hull at the turn of the century.

While confronted with the problems of a chairman of a department, Rieser began to develop the style of thought and of administration that is so characteristic of him. Behind the question of the moment, he deals also with the basic questions, "What is the purpose of this organization? How can it be best realized? What can this group be that is more than the sum of its parts?" He takes time to listen and to think as long as necessary to arrive at a rational and fair decision that will be respected even if it has to be adverse.

While chairman of the physics department, he also began teaching science weekly in the fourth grade of the Norwich, Vermont, elementary school, where Leonard, Timothy, and Abigail, his three children, were students. Later he went on to initiate a comprehensive science program for the school. Through this civilizing experience he became involved in the work of the American Association of Physics Teachers, in the Elementary Science Study group based in Cambridge, and in the Commission on Science Education of AAAS. Two years after joining the Commission, he was asked to be its chairman and served through a period of expanding activity in curriculum and materials development and teacher education.

In 1959, Dartmouth's president, John Dickey, Rieser's administrative mentor for a decade to come, asked him to serve as deputy provost for the sciences at Dartmouth. He accepted the position because it gave him a chance to work toward bringing support and cohesion to the science departments. Simultaneously he served as director of graduate studies when Dartmouth began Ph.D. programs in 1962 through the initiative of John Kemeny, then chairman of the mathematics department and now president of Dartmouth, with whom Rieser has had a continuing working relationship for many years.

In 1966 Rieser served as president of the New England Council on Graduate Education. As a member of the grants committee of the Research Corporation, he also participated for 6 years in its very imaginative program of support for college science departments, some of which are known today primarily as a result of these initiatives. Rieser became dean of the faculty at Dartmouth in 1964 and provost in 1967. Since July 1971 he has been vice president and dean of the faculty of arts and sciences.

Rieser has recently been occupied with negotiating and planning as the college moved through two discontinuities. One was to bring to Dartmouth a fair share of black students and black faculty, and the other, more recent, was to engage in a serious effort to enroll more American Indians.

The problem, as Rieser sees it, is not going to be solved simply by bringing minorities into a "white man's college." Rather, as part of a commitment to a larger national purpose, Dartmouth is developing new educational programs and organizations that will result in changes that are educationally sound and equally valid for all groups in the college. The same approach is being used as Dartmouth is undertaking to become coeducational.

In 1967 Rieser was elected to a 4year term on the Board of Directors of the AAAS, and throughout the past year served as chairman of the joint Board and Council Committee on Governance, established to revise the constitution and make the Association more responsive to the membership. This has been a grueling but rewarding task. Innumerable meetings over eight drafts, submitted to wider and wider circles for discussion, resulted in December in a vote of acceptance by the Council of AAAS. The fact that the vote was unanimous though the changes are in many ways deepgoing is at least to some degree testimony to Rieser's perception and skill that will now be tested in the enormous demands the AAAS presidency makes on the holder of the office.

As president-elect of the Associa-



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tion, Rieser perceives the opportunity to continue a tradition which began in 1848, but which also requires now, following the changes voted in governance, a deep reassessment of its purpose. For example, he shared in the Board's decision to press for a significant increase in the membership in order to meet the objectives which have remained unchanged but increasingly demanding since 1946. The strength of the Association lies in the diversity of its membership, diversity among disciplines, and diversity in the range of accomplishment of is members. While this very diversity is its strength, leadership by the Council and the Board is essential, as is participation by all the members who write for Science, who join in the meetings, and who work on the committees of the

AAAS. Science is not the property of scientists, nor can the uses of science be a matter of indifference to the nonscientist. Because his respect for the AAAS is deep, Rieser is likely to respond firmly to those few who would turn its activities into propaganda events. He is aware of the great tension inherent in the free-speech issue, and he recalls the episode at Dartmouth some years ago when his college had to administer discipline to a group of students who prevented an unpopular speaker from making himself heard. "Free speech is meaningful only if you preserve it when it hurts."

One cannot close such an account without saying something of the sense of a natural ecology which seems to pervade the daily life of Leonard Rieser. The Riesers live in an old Vermont farmhouse where it is difficult for a visitor to think of the demands of a challenging job at an extraordinary college 5 minutes away. (There is no longer a farm, but there is room for a dog and cat, a pony, a donkey, and a 12-year-old duck.) He finds the vitality and shared adversity of the Vermont climate and countryside a source of strength and inspiration. Water coming from one's own well makes one aware of its preciousness. Splitting wood is the way to end a trying day. On a Sunday, one can sometimes get lost skiing in one's own woodlot 2 miles from the house. At the same time, an airport 5 miles distant provides access to AAAS headquarters, 3 hours away in Washington, when those duties call. This life-style is a symbol of the balance of contemplation and action in the new president-elect that will stand the AAAS in good stead in the period ahead.

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