

unique capabilities, it has not been stated that uniqueness must be established before individual proposals may receive supporting funds.

I do not consider the answer to that problem to be within the scope of this article. Nor was any answer demanded

of the EOARDC staff. Yet one statement from Krisberg, made in another context, might be considered at least a partial answer. In a conversation with me one afternoon in Brussels, he said, "It must now be obvious to all that science is today one of the major battle-

fields in the cold war. It seems equally obvious to us that in this war, the brain power of the Western World is the maximum weapon. We feel that the European Office can, through initiative and understanding, contribute to a unity of purpose."

Louis N. Ridenour, Physicist and Administrator

When Louis N. Ridenour died on 21 May 1959, the scientific community lost a remarkable physicist and scientific administrator who had an uncanny ability to sense the areas in which a scientific or a technological "harvest" is likely. He devoted himself to helping achieve and exploit such break-throughs. This he did as a working physicist in his early years. In his later years he accomplished his goal as dean of the Graduate College at the University of Illinois, as chief scientist of the Air Force, as an executive with International Telemeter Corporation, and, finally, with Lockheed Aircraft Corporation.

He was born on 1 November 1911, in Montclair, New Jersey. He took a B.S. degree in physics at the University of Chicago, where he was the editor of the *Daily Maroon*, the student newspaper, in his senior year. This experience undoubtedly was closely coupled with his unusual facility as a writer of both technical material and fiction.

Ridenour received his Ph.D. degree in physics at California Institute of Technology, under Lauritsen, in 1935 and went to the Institute for Advanced Study, Princeton, New Jersey, in the fall of that year. He was to be an assistant to Fermi. Although the latter did not come to Princeton, Ridenour stayed as an instructor in physics at Princeton University until the fall of 1938.

At that time he joined Harnwell, the head of the physics department at the University of Pennsylvania. Since he felt that nuclear physics was badly in

need of precise measurements, he undertook the construction of an electrostatic accelerator with accurate high-voltage control. This work was interrupted when he was called to the Radiation Laboratory at Massachusetts Institute of Technology in 1941. He tried to continue work on the machine by long distance and by making periodic visits to the University of Pennsylvania. His plans for this work never came to fruition, since the electrostatic generator was destroyed by fire soon after being placed in operation.

The years 1941-46 were crowded with great events for many physicists, particularly for Ridenour. He played an important role in determining which of the devices being developed at the Radi-

ation Laboratory could be used effectively, in influencing the development of such devices, in persuading those involved in application to use them, and finally in working near the front of combat in order to make certain that the devices were used properly. He possessed an almost unique ability to influence all phases of a situation.

He was appointed editor of the *Radiation Laboratory Technical Series* in 1945. The series consists of a set of 28 volumes which describe the topic of radar as it stood at the end of the war. Concerning this effort, F. W. Loomis [*Phys. Today* 12, 18 (Sept. 1959)] made the following statement: "Rarely has a man so perfectly fitted a job. It called out all his qualities—his facility in writing, his talent for assembling and leading a group, his own encyclopedic knowledge of radar and electronics, plus his quick ability to learn and understand what he didn't already know; and especially his persuasiveness and influence in high military quarters, needed to overcome the timidity of the security-conscious bureaucrats. . . . It is used by all the engineers in the now huge radar industry and serves to educate the new generations as they come along."

Ridenour became dean of the Graduate College of the University of Illinois in 1947 after returning to the University of Pennsylvania for one year. During his three-year tenure as dean, he played a major role in initiating new programs and study groups at the University of Illinois. Among them are the Control Systems Laboratory, the Digital Computer Laboratory, the microbiology group under Luria and Spiegelman, the Radio Carbon Laboratory, and the solid-state group under Seitz. His enthusiasm, drive, and administrative wisdom contributed much to the successes these enterprises achieved.

In 1949-50 he served as chairman of an *ad hoc* committee to survey research and development in the Air Force. The report of this committee, the Ridenour Report, recommended the formation of the Air Research and De-



Louis N. Ridenour

velopment Command and the establishment of the post of Deputy Chief of Staff for Development. In the summer of 1950 Ridenour became chief scientist of the Air Force in order to help implement the recommendations of this report. During his tenure in that position he sponsored the establishment of the Massachusetts Institute of Technology's Lincoln Laboratory, which developed the SAGE air defense system and the Dew Line.

He never returned to the University of Illinois because his younger daughter became seriously ill. Instead, he took a position as vice president of International Telemeter Corporation in Los

Angeles. While with that company he endeavored to develop pay-as-you-go television devices and computer components. He is largely responsible for the formation of Telemeter-Magnetics.

In 1955 he joined the Lockheed Aircraft Corporation. There he was much concerned with the gathering of personnel for the research division of the Missile Systems Division. He rose through a series of positions and responsibilities; just two months before his death he was named vice president of the company and general manager of the new Electronics and Avionics Division.

Ridenour was awarded the Presi-

dent's Medal for Merit and the Bronze Star for his services during the war. He was awarded, posthumously, the U.S. Air Force's highest peacetime decoration, the Exceptional Civilian Service Medal.

He is survived by his widow, the former Gretchen Hinkley Kramer, and his two daughters, Eleanor and Nancy, as well as his parents, Louis N. and Clare Ridenour.

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Science in the News

Next Few Years Said To Promise Solution of Antarctic Research Program's Recruiting Problems

Recruiting problems, which are adversely affecting this country's antarctic research program, will probably be solved within the next few years, according to T. O. Jones, the National Science Foundation official who directs the program. Jones, who recently returned from a trip to the U.S. stations in Antarctica, believes that policies now being instituted will attract enough scientists to antarctic research to leave NSF, which supports such work, only the problem of selecting from among them those whose projects will contribute to a balanced program. The current program, which is now under way with the onset of the antarctic summer, suffers, according to observers, from a lack of balance between scientists and technicians. This situation, in which the technicians heavily outnumber the scientists, was suited to the activities of the International Geophysical Year, but the relative numbers now must be reversed, Jones feels, if a long-term antarctic program is to be carried out and is to produce significant results.

The foundation hopes to attract people to the Antarctic who will be able to pursue individual research projects in addition to making the routine readings and measurements for programs that are hold-overs from the International Geophysical Year.

Three developments, among others, will work toward a solution of the problem, Jones feels. The first is a growing awareness on the part of American scientists of the possibilities for research offered by the opening up of Antarctica. The second is the increasing availability of adequate scientific facilities and transportation in the Antarctic. The third is the possibility that special institutes can be established in the United States for workers in the academic field for whom research in Antarctica involves absence from universities and colleges during the academic year.

Efforts by Jones and his staff to acquaint American scientists, particularly those in universities, with research possibilities in Antarctica are beginning to show results, according to foundation officials. More numerous and more varied proposals are being received at NSF headquarters in Washington. Scientists who have returned to their uni-

versities from work on the Antarctic continent during the IGY or post-IGY period are discussing this work with their colleagues and graduate students, with the result that men with the training the program needs are becoming interested. Jones himself has taken a number of university scientists to the continent to see the work that is being done and to visualize what can be done. This interest, Jones feels, is a seed which in time will produce projects that will fill out the antarctic research program—a program that is no longer just one aspect of a world-wide geophysical program but is slowly achieving a new status as a complete and balanced undertaking in its own right.

The new and well-equipped biological laboratory at the McMurdo Sound Naval Air Facility is one of the evidences that the needed equipment for scientific work is now becoming available on the Antarctic continent. It provides facilities such as are found in the laboratory of a small college, and plans are under way to enlarge it. New living quarters will soon be built for scientific personnel at this base. At the more isolated stations, such as the Byrd and the Scott-Amundson stations at the South Pole, electronic and photographic equipment is available for studies of the ionosphere and of aurora and for work in the fields of geomagnetism, seismology, meteorology, and other disciplines. Plans are under way to transform the antarctic bases which were built for temporary use during the IGY into permanent stations.

January 1960 will mark the beginning of a new program in transportation that promises to be a great aid to research in the Antarctic. Ski-equipped