OFFICE OF THE PRESIDENT

May 25, 1967

To Members of the Faculty:

Nine members of the Faculty will retire at the close of the current academic year. They are William P. Allis, Professor of Physics; Howard R. Bartlett, Professor of History; Alexander J. Bone, Associate Professor of Civil Engineering; Jacob P. Den Hartog, Professor in Mechanical Engineering; Giorgio D. de Santillana, Professor of History and Philosophy of Science; C. Stark Draper, Institute Professor and Professor of Aeronautics and Astronautics; Harold L. Hazen, Dean of the Graduate School and Professor of Electrical Engineering; Paul N. Rosenstein-Rodan, Professor of Economics; Bertram E. Warren, Professor of Physics.

Professor Allis is an authority on electrical discharges in gases, a subject now called plasma physics, and has been a member of the M.I.T. Faculty for forty-two years. He received his bachelor's and master's degrees at M.I.T. and his doctorate at the University of Nancy. He also studied at Princeton, Munich and Cambridge (England). In 1925, he returned to M.I.T. as a research associate and he has devoted most of his career to teaching and research. He was awarded the Legion of Merit by the War Department in 1948 for his outstanding work during the war as a liaison officer for the National Defense Research Committee. Following the war, he directed Project Ashby in M.I.T.'s Research Laboratory of Electronics, studying properties of plasma, which may be of interest in the design of a fusion engine, and he has conducted extensive basic research on the application of the Boltzmann Theory. He has served as a consultant to the Los Alamos Scientific Laboratory and the Atomic Energy Commission. He interrupted his research from 1962 to 1964 to become Assistant Secretary General for Scientific Affairs to the North Atlantic Treaty Organization. In this post he advised the NATO Secretary General and was in charge of making research grants to the fourteen NATO countries. He also directed the NATO advanced study institutes.

Professor Bartlett, who has been a member of the Faculty since 1929, and headed the Department of English and History and then the Department of Humanities for 25 years, withdrawing in 1962 to devote full time to teaching. He was Master of Burton House from 1958 to 1963. He received his education at Dartmouth and Harvard and then spent five years in business and taught history at Haverhill High School for a year before coming to M.I.T. as an Instructor in English and History. When the late Professor Henry G. Pearson retired in 1938, Professor Bartlett became Acting Head of the department, and in 1940 he became Department Head and Professor of English and History. In 1957 he went to India as a consultant on general education for the Department of State's International Exchange Services and the Indian Ministry of Education. In India he lectured at the University of Roorkee and also spent a period at the University of Bombay working with the representatives of sixteen affiliated colleges. In 1963 he again went to India as a consultant for the Ford Foundation to help establish the Birla Institute of Technology and Science. He is a former member of the Winchester School Committee and former chairman of the Division of English and the Humanistic-Social Division of the American Society for Engineering Education.

Professor Bone graduated from M.I.T. in 1924, and except for a period of five years, when he was an engineer associated with the late Professor C. B. Breed, he has been with M.I.T. ever since. He was appointed Instructor in Civil Engineering in 1933, received the S.M. degree and was named Assistant Professor in 1936 and in 1945 was made Associate Professor. Between 1954 and 1962 he was Acting Head of the Transportation Division of the Civil Engineering Department. He has been Supervisor of the Joint Highway Research Project of M.I.T. and the Massachusetts Department of Public Works since 1951, and is currently supervising a number of research projects on highway traffic and operations. As a consultant, he has engaged in a range of studies dealing with highway, railroad and airport problems, including a major study of the phenomenally successful Route 128 highway. The two-year study, which he directed, consisted of a detailed analysis of the impact of Route 128 on the Massachusetts economy. Professor Bone has done extensive consulting on the economics of highway planning and transportation. He is author of the Highway and Airport Engineering Section of the Civil Engineering Handbook.

Professor Den Hartog, one of the world's foremost authorities on mechanical vibrations, was born in Ambarawa, Java, Indonesia, and came to the United States after receiving the degree of Electrical Engineer from Technische Hoogeschool in Delft, Holland, in 1924. After several years with the Westinghouse Electric Company in Pittsburgh and after receiving the Ph.D. degree in mathematics from the University of Pittsburgh, he served as Assistant and Associate Professor of applied mechanics at Harvard University for nine years. During World War II he was in the Navy Bureau of Ships and participated in the trials of practically every new type of ship. He left the Navy with the rank of Captain in 1945 and joined the M.I.T. Faculty as Professor of Mechanical Engineering. He was Head of the Department of Mechanical Engineering from 1954 to 1958. His book Mechanical Vibrations is in its fourth American Edition and has been translated into seven foreign languages. He holds honorary memberships in the mechanical engineering societies of the United States and of Japan, and has been awarded three honorary doctorates.

Professor de Santillana received his doctorate in physics from the University of Rome and did graduate work in philosophy in Paris before becoming an instructor in physics at the University of Milan. In 1929 he helped organize a school for the history of science at the University of Rome. Following a series of lectures in this country, he became an Instructor in philosophy of science at the New School for Social Research and, later, Visiting Lecturer at Harvard University. He came to M.I.T. in 1941 as an Instructor in history and, by 1954, was Professor of the History and Philosophy of Science. His book The Crime of Galileo won wide critical acclaim. He also wrote The Origins of Scientific Thought and The Age of Adventure: The Renaissance Philosophers, included in the two popular Mentor paperback series on "The History of Scientific Thought" and "Great Ages of Western Philosophy." Dr. de Santillana's boldly perceptive interpretations of history and his vivid and compelling way of expressing these insights have earned for him a place of honor among the world's historians of science.

Dr. Draper, after distinguished contributions of the highest order to both M.I.T. and to the broader engineering and scientific community, will retire from the Faculty but will continue as Director of the Instrumentation Laboratory, which he founded more than 25 years ago. Dr. Draper came to M.I.T. as a student in 1922 after he had received a degree in psychology from Stanford University. He went on to take B.S., M.S. and Ph.D. degrees from M.I.T. and it is Institute legend that he accumulated more subject credit than anyone in M.I.T. history. He joined the teaching staff in 1929, became full Professor of Aeronautics in 1939,

was department head from 1951 to 1966, and was appointed Institute Professor in 1966. During World War II he developed gyroscopic sights for naval anti-aircraft guns and, from this work, evolved the designs on which he based the development of many inertial guidance, navigation and control systems, including the system that will guide three U.S. Apollo astronauts to the moon and back. Dr. Draper's honors include the National Medal of Science awarded by President Lyndon Johnson in 1964.

Dean Hazen, one of the nation's leading engineering educators, is senior member of the Faculty and was Head of the Department of Electrical Engineering for fourteen years. He has been Dean of the Graduate School for fifteen years, the period of its greatest growth in size and excellence. Dean Hazen came to M.I.T. as a freshman in 1920. He received his S.B. in Electrical Engineering in 1924, returned to the staff after a year with General Electric Company, and became an Assistant Professor in 1931, the same year he received the Sc.D. degree. In 1938 he was appointed Professor of Electrical Engineering and Head of the Department. He was made Dean of the Graduate School in 1952. Dean Hazen was involved in pioneering research on computing machines with Dr. Vannevar Bush, and his writings on the theory and design of servomechanisms, for which he received the Levy Gold Medal of the Franklin Institute, are regarded as classics. He was Chairman of the Education and Accreditation Committee of the Engineers' Council for Professional Development from 1954 to 1956 and received the nation's highest award in engineering education, the Lamme Medal of the American Society for Engineering Education, in 1962. He is a trustee of the College of Petroleum and Minerals at Dhahran, Saudi Arabia, and of Robert College in Istanbul and was Interim President of the latter during most of 1961. He is a member of the commission which recommended the federation of Case Institute of Technology and Western Reserve University. Following his retirement he will serve as Foreign Study Advisor at M.I.T.

Dr. Paul N. Rosenstein-Rodan joined the Faculty of M.I.T. as a Visiting Professor of Economics in 1953, and accepted a permanent appointment as Professor in 1959. Since 1953 he has also been a senior staff member at M.I.T.'s Center for International Studies, directing the India and Italy Projects of the Economic and Political Development Program sponsored by the Ford Foundation. He serves as a consultant to the United Nations for the Economic Commissions for Latin America and the Far East, the Bureau of Economic Affairs, and the Food and Agriculture Organization. In 1961 he was appointed a member of the panel of nine experts of the Alliance for Progress. Educated at the University of Vienna, Dr. Rodan joined the faculty of the University of London in 1931, and served as head of the Department of Political Economy from 1939-1947. In 1947 he became head of the economic advisory staff and assistant director of the Economics Department of the International Bank for Reconstruction and Development in Washington. His professional publications in the field of economics have covered a wide range and have in recent years concentrated on the problems of economic development of less developed countries. Dr. Rodan is a Fellow of the American Academy of Arts and Sciences.

Professor Warren is an authority on the application of x-ray diffraction to the study of the structures and imperfections in solids and has published widely in this field. He has been a member of the Faculty since 1930, when he joined the staff as Assistant Professor of Physics. He was promoted to Professor in 1939. He received his S.B., S.M. and Sc.D. at M.I.T., was a Malcolm Cotton Brown