



September 14, 1966

To Members of the Faculty:

I am pleased to announce the appointment of Professor Louis D. Smullin as Head of the Department of Electrical Engineering effective immediately.

He succeeds Professor Peter Elias who has served with distinction as department head since 1960 and who now wishes to devote his energies to teaching and research. Professor Elias' resignation as department head was effective June 30, but he has continued as acting head pending the appointment of a successor.

The Department of Electrical Engineering is the largest at M.I.T. and one of the most prestigious in the world. It includes more than 100 faculty, 600 undergraduate students and 400 graduate students. During the last academic year, students from the department received 202 B.S. degrees, 177 M.S. degrees, 47 Engineer degrees, and 27 Sc.D. or Ph.D. degrees. I am certain that under Professor Smullin's demonstrated capacities for leadership in research and teaching the department will continue the high standards of competency and achievement that marked Professor Elias' term as department head.

During the coming academic year, Professor Elias will teach information theory at the graduate level and will lead a freshman seminar on the same subject. Also, he will rejoin the Processing and Transmission of Information Group in the Research Laboratory of Electronics. This group, which includes Dr. Claude Shannon, Donner Professor of Science, is one of the most distinguished of its kind in the world and Professor Elias was one of its leading members when he gave up that formal association six years ago to become Head of the Department of Electrical Engineering. Dr. Elias has been most active in research on problems of information theory and coding and particularly has he made important contributions to the theory of transmission of reliable information over noisy, unreliable communications channels. It is this work to which he now desires to return full time.

Professor Smullin has been connected with M.I.T. almost continuously since 1941 when he joined the staff of the war time Radiation Laboratory. He is widely recognized as an authority on microwave tubes and microwave electronics and is particularly gifted in the experimental exploitation of new theoretical ideas.

He has just returned from a one-year term on the electrical engineering faculty at the Indian Institute of Technology at Kanpur, India. Professor Smullin was a member of the three-man faculty committee which recommended that M.I.T. organize and join in the university consortium that is now helping build I.I.T.-Kanpur under Agency for International Development support. Others on that committee were Professors Norman Dahl and William Beachner.

Professor Smullin received the B.S. degree in electrical engineering from the

University of Michigan in 1936 and the M.S. degree from M.I.T. in 1939. He spent two years in industry and joined the Radiation Laboratory in November, 1941, where he directed the Microwave Gas Discharge Group which, under his leadership, became the most outstanding of its kind in the country.

Following the war, Professor Smullin headed the Microwave Tube Department at Federal Telecommunications Laboratory, Inc., for a year and a half, then returned to M.I.T. to organize and head the Microwave Tube Laboratory of the Research Laboratory of Electronics. He helped plan and set up Lincoln Laboratory through the Project Charles studies and in September, 1952, became Head of the Radar and Weapons Division at Lincoln. In September, 1955, he returned to Cambridge as associate professor of electrical engineering and was made professor in 1960. His long association and leadership in microwave beam tube studies and development more recently led Professor Smullin and his students to the general area of plasma dynamics and he now is head of the Active Plasma Systems Group of RLE which is concerned with techniques of producing high temperature plasmas, and of studying the dispersive properties of plasma systems. The field is directly related to the larger problem of power production through controlled thermonuclear fusion.

Professor Smullin and his students in 1962 bounced a laser beam off the surface of the moon and detected reflections back to earth in a demonstration of the use of lasers in a radar mode.

Professor Smullin is characterized not only by expertise in experimentation, but also by unflagging and sympathetic concern with the professional and personal growth of his students. Even during his years at Lincoln Laboratory, he continued informal connections with his students in the RLE Microwave Tube Laboratory. He has been active in department curricula development and academic affairs. He developed and taught the department's graduate subjects in beam-type microwave tubes, taught undergraduate core curriculum subjects and more recently has been in charge of the Junior electromagnetic laboratory. He has served on the department Senior Thesis Committee, the Undergraduate Policy Committee and the General Doctoral Qualifying Committee.

Professor and Mrs. Smullin make their home at (76 Standish Rd.) Watertown, Mass. They have four children: Susan, a 1963 graduate of Brandeis University has been working on the development of new mathematics curricula at Educational Services, Inc.; Frank, a 1965 graduate of Harvard University now studying sculpture at the Boston University School of Fine Arts; Joseph, a 1966 graduate of M.I.T. in aeronautics and astronautics and now a graduate student in the M.I.T. Department of Naval Architecture and Marine Engineering; and David, a student at the Cambridge School of Weston.

GORDON S. BROWN
Dean, School of Engineering