Contributors to this Issue

ARTHUR C. KELLER. B.S., Cooper Union, 1923; M.S., Yale University, 1925; E.E., Cooper Union, 1926; Columbia University, 1926-30; Western Electric Company, 1917-25; Bell Telephone Laboratories, 1925-. Special Apparatus Development Engineer, 1943; Switching Apparatus Development Engineer, 1946; Assistant Director of Switching Apparatus Development, 1949; Director of Switching Apparatus Development, 1949-. Mr. Keller's experience in the Bell System includes development and design of telephone instruments; development of systems and apparatus for recording and reproducing sound; and, during World War II, the development, design, and preparation for manufacture of sonar systems and apparatus. His department, in addition to being responsible for a number of military projects, is responsible for the fundamental studies of switching apparatus and the development, design, and preparation for manufacture of electromagnetic and electromechanical switching apparatus for telephone systems. Member of the American Physical Society, A.I.E.E., Acoustical Society of America, I.R.E., S.M.P.T.E., and the Yale Engineering Association. Representative for Bell Telephone Laboratories in the Society for Experimental Stress Analysis. For his contributions to the Navy during World War II, he received awards from the Bureau of Ships and the Bureau of Ordanance.

Mason A. Logan, B.S. in Physics and Engineering, California Institute of Technology, 1927; M.A. in Physics, Columbia University, 1933; Bell Telephone Laboratories, 1927—. His early Laboratories' projects were concerned with wire transmission problems particularly those of circuits, noise and cross induction in local, manual and dial telephone circuits. This was followed by circuit research on alternating current methods of signaling including the use of non-linear elements and electronic terminal equipment. From 1941 to 1948 he worked on military projects, including a mine fire control system, anti-aircraft gun director, magnetic proximity fuses, and guided missiles. For the past five years he has been a member of the Switching Apparatus Development Department in which he is supervising a group concerned with static and dynamic behavior of

new electromagnets and relays. He is also engaged in investigations of the performance of electrical contacts on telephone relays.

Robert L. Peek, Jr., A.B. and Met.E., Columbia University, 1921 and 1923; Bell Telephone Laboratories, 1924—. In the Chemical Research Department and later the Apparatus Development Department, Mr. Peek's work related to the analytical and testing aspects of materials development. Since 1936 he has been engaged in apparatus development projects, including the wire spring relay and, during World War II, underwater ordnance and magnetostriction sonar.

H. N. Wagar, B.S. in Physics, Harvard University, 1926; M.A. in Physics, Columbia University, 1931; Bell Telephone Laboratories, 1926—Mr. Wagar has worked on the design of nearly all types of telephone relays as well as magnets, insulating methods and allied apparatus and practices. He was also associated with the preparation of text and presentation of training courses in this field. During World War II his projects for the military included work on an antiaircraft director and a proximity fuse for magnetic mines. He is currently Switching Apparatus Engineer, in charge of fundamental studies on electromagnetic switching apparatus, including contacts and magnetics.