neers in the field. Multiplexing of the three signals required for transmitting color into the same frequency band used for monochrome transmission was based on the application of two principles which were old in the communication art, but of which only a few specialists were aware. The techniques of circuit design required to insure the interference-free transmission of this composite signal and the recovery of its components in a receiver also were well known only to those engineers who were regularly engaged in the design of complicated communication systems. In addition, there was hardly an electronic engineer who had heard of, much less who was familiar with, the sciences of photometry and of colorimetry.

The Hazeltine Corporation set out to correct this situation for its licensees. First, by issuing a series of reports, and then by operating a school in which these reports were used as a textbook, the engineers in the organizations of the Hazeltine licensees were given an opportunity to become familiar with those principles which overnight had become important in television engineering. Tempered by the criticisms of other experts, and by their use as a textbook, these reports, along with some more recent material, became the basis for *Principles of Color Television.*

The ground covered by this book is indicated by its chapter headings: "Light and photometry," "Color perception," "Color space and color triangles," "Colorimetry," "Color in a television system," "Required information content," "Characteristics of the eye," "The choice of the color components and their interleaving in the composite signal," "Production of the composite color signal," "Synchronization," "Nonlinear amplitude relations and gamma correction," "The color television standards of the FCC," "Equipment for producing the transmitted signal," "Color television receivers," "Decoders for three-gun displays," "Decoders for one-gun picture tubes," "Test and measuring methods," and "Glossary of color television terms." This list is indeed a promise that every fact has been presented that a television engineer requires in order to become skilled in color. This promise is fulfilled.

Twelve members of the Hazeltine organization contributed to the text of *Principles of Color Television.* Skillful editing by Knox McIlwain and Charles E. Dean has done much in reducing the differences of style and treatment of the several authors. Such differences as remain are no greater than one might expect from the disparity of subjects, as is indicated by the chapter headings.

This is an authoritative textbook and reference book. The Hazeltine Corporation, which sponsored it, has made many important contributions to the standards under which present-day color television broadcasting is carried out. And of the 12 contributing authors, eight were parties to the deliberations of the National Television System Committeee in which the pros and cons of every detail of these standards were argued at length.

Principles of Color Television is recommended reading for anyone with some knowledge of monochrome television techniques who wishes to learn the fundamentals of our present system of color television broadcasting. The generous list of references at the end of each chapter of this book will be helpful to one in search of more information than is contained between its covers.

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