

American Standard—Z57.1—1954

THE AMERICAN STANDARD, Method for Determining Flutter Content of Sound Recorders and Reproducers, Z57.1-1954, was approved by the American Standards Association on March 16, 1954, marking the conclusion of some eight years of effort.

This Standard was first proposed and the basic approach developed in 1946 by the Sound Committee of the Society under the chairmanship of John G. Frayne and was published for comment as a proposed standard in the August 1947 *Journal*. As a result of this publication, rather extensive comments were received from all fields of sound recording.

In October 1947 the American Standards Association set up a Sectional Committee on Sound Recording, Z57, sponsored jointly by the Institute of Radio Engineers and the Society. This proposed standard was referred for processing as its first American Standards project. In view of the comments that had been received, a subcommittee of Z57 under the chairmanship of Dr. E. W. Kellogg was appointed to attempt to resolve differences pointed up by these suggested modifications and to prepare another draft. This first Z57 draft, Z57/19, was circulated to the Z57 subcommittee and to the Sound Committee of the Society. The Sound Committee informed Dr. Kellogg's group that they desired further changes and in October 1948, a second draft, Z57/42, was circulated to all concerned.

Following circulation of this additional draft many months elapsed during which a consensus could not be reached on the matter of including weighted flutter and the flutter index. Also, some difference of opinion existed as to how to define such terms as flutter, flutter rate, flutter index, etc.

In January 1950 the third draft, Z57/58, which was thought to be acceptable, was

duplicated and sent to the chairmen of the appropriate committees of the IRE, SMPTE, RMA and ASA. This limited circulation resulted in a few minor changes which were incorporated in still a fourth draft, Z57/63, which was sent to letter ballot of the Z57 Sectional Committee on August 10, 1950. It was still not possible to reach agreement, however, so this ballot was withdrawn. Further work on the proposed standard was undertaken by the Z57 subcommittee in an attempt to iron out the remaining differences regarding the definitions for flutter, flutter index, and weighted flutter. Agreement was finally reached on flutter and flutter index, and it was decided to omit all reference to weighted flutter in order to clear away the last obstacle.

This fifth draft, Z57.1/68, was approved by Sectional Committee Z57 on February 15, 1952, was subsequently approved by both sponsors of Z57, and has now become an American Standard.

It should be noted that the 1948-1952 SMPTE Sound Committee, under the chairmanship of Lloyd Goldsmith, played an important role in the development of this Standard; credit should also be given to William H. Deacy, Staff Engineer of the SMPTE for part of this period, for his considerable labor in shepherding this project through its manifold procedures and channels.

On July 15, 1953, the SMPTE withdrew its sponsorship of Sectional Committee Z57 leaving the IRE as sole sponsor. In its role as sponsor of Z57, the IRE has published this American Standard in the March 1954 issue of its *Proceedings*, page 537. Copies of the Standard can be purchased at 75¢ per copy directly from the IRE, 1 East 79 St., New York, N. Y.—Henry Kogel, Staff Engineer.