

## REPORT OF THE COMMITTEE ON NON-THEATRICAL EQUIPMENT\*

*Summary.*—Among the problems facing the Committee this year is the preparation of a list of performance criteria covering the important functions of 16-mm projection equipment, both silent and sound. The Committee has arranged in this respect to cooperate with the Committee on Scientific Aids to Learning, of the National Research Council, in preparing a report to guide the educational field in the selection and use of this equipment.

The legitimate field of interest of the Non-Theatrical Equipment Committee covers a range of subjects which, in their 35-mm aspects, occupy the attention of at least five of the Society's other committees. As a consequence, one of the most difficult of the problems of the Committee is the selection of those projects on which it can most usefully spend its time.

In considering this problem the present Chairman was fortunate in having had presented a definite request for coöperation from the *Committee on Scientific Aids to Learning* of the National Research Council, of which Dr. Irvin Stewart is chairman. This committee has for several years been carrying on a study of the use of 16-mm projection equipment in schools and colleges, with a view to preparing reports to guide the educational field in the selection and use of this equipment.

After careful consideration of this request and several conferences between the Chairman, Dr. Stewart, and the Engineering Vice-President of the Society, the Chairman has proposed to the Non-Theatrical Committee, and the Committee has decided to undertake, the preparation of a list of *performance criteria* covering the important functions of 16-mm projection equipment, both silent and sound. This list will cover such topics as steadiness of projected picture, sharpness of screen image, quantity and distribution of screen illumination in relation to power of light-source, reasonable expectation of film life, freedom from excessive heat effects, steadiness of film motion in sound-reproducing mechanisms, frequency characteristics of re-

---

\* Presented at the 1940 Fall Meeting at Hollywood, Calif.; received October 19, 1940.

produced sound, amplifier power, background noise level of equipment, *etc.* In addition, performance criteria for screens will be investigated and specifications given for equipment installations in various sizes of rooms.

The purpose is to provide an impartial composite portrayal of the performance that may reasonably be expected at the present time from good 16-mm projection equipment, expressed so far as possible in terms that admit of definite quantitative measurement. The project obviously involves, in many instances, the specifying of the method of measurement, and, in other instances, the classifying of equipment in relation to factors such that the requirements differ with the conditions of use, and also where the factor of cost has a controlling effect.

A list of performance criteria such as is proposed will be valuable to the educational world as a guide to the selection of equipment for specific purposes, and it will also serve to indicate when equipment is in need of repair or adjustment, and when it is obsolete. At the same time this study can not fail to be helpful to manufacturers by indicating those points of performance which may most advantageously be improved, as well as by laying a foundation for better understanding between the manufacturer and the user of equipment.

Fortunately, the present Committee is well qualified to carry on such a study, since it includes directly among its members men who have specialized knowledge of all the topics mentioned above. It is hoped that by the time of the next convention of the Society, the work will have progressed far enough to permit the presentation of a detailed report on this project.

A second project which has been referred to the Non-Theatrical Committee by the Standards Committee is a study of 16-mm and 8-mm sprocket design, with a view to possible revision of the recommended practices of the Society covering these sizes of sprockets.

J. A. MAURER, *Chairman*

J. G. BLACK  
F. E. CARLSON  
N. B. GREEN  
F. M. HALL

J. A. HAMMOND  
M. HOBART  
R. C. HOLSLAG  
R. KINGSLAKE  
L. R. MARTIN

R. F. MITCHELL  
L. T. SACHTLEBEN  
A. SHAPIRO  
M. G. TOWNSLEY