

Approved SMPTE Recommended Practice

On September 27, 1964 the Society's Board of Governors approved SMPTE Recommended Practice RP 18, Test Film for Checking 16mm Motion-Picture Photographic Sound

Projectors. This film, developed and distributed by the Society for many years, is used for rapid nontechnical checking and demonstrating of 16mm projection equipment.

Copies of this and all SMPTE Recommended Practices may be acquired from Society Headquarters upon request.—A.E.A.

Test Film for Checking 16mm Motion-Picture Photographic Sound Projectors

This Recommended Practice originated in the 16 & 8mm Committee of the Society. Approved by the initiating and Standards Committees, the proposal was published for trial and comment in the April 1964 Journal. The recommendation received final approval by the Society's Board of Governors on September 27, 1964.

1. Scope

This Recommended Practice describes a film and method for rapidly checking and demonstrating 16mm motion-picture projection and photographic sound performance. The film is suitable for use by projector manufacturers, service stations, educational organizations and camera stores. No test instruments are required.

2. Test Film

- 2.1 The film shall have a photographic sound record and accompanying picture. The sound record dimensions shall comply with American Standard Sound Record on 16mm Prints, PH22.41-1957, and the film stock used shall be cut and perforated in accordance with American Standard Dimensions for 16mm Film, Perforated One Edge, PH22.12-1953.
- 2.2 The test film shall contain sections selected by a special Engineering Committee of the Society of Motion Picture and Television Engineers to test for the following:

Sound Samples

1. Faithful reproduction of wide-range music
2. Clarity of tone—piano
3. Correct sound track guiding—buzz track
4. Normal volume level
5. Compromise sound focus
6. Frequency response from 50 to 5,000 cycles
7. Dialogue intelligibility

Picture Samples

1. General picture steadiness
2. Uniform aperture brightness
3. General picture quality

- 2.3 Each film shall be provided with a head and tail leader. The main title shall include the issue number of the film so that revised versions may be easily identified. Sub-

titles superimposed over each section shall indicate the particular projector sound and/or picture characteristic to be tested by that portion of the film.

- 2.4 Each film shall be accompanied by an instruction sheet indicating the procedure to be used in checking and demonstrating 16mm projection equipment.
- 2.5 The length of the film shall be approximately 135 feet.
- 2.6 Each film shall be wound on a reel and packed in a taped can.

3. Method of Use

- 3.1 With the projector set up for projection of a sound picture print and the loudspeaker(s) properly located in accordance with the instruction book furnished with the equipment, proceed as follows:
 - (a) Set tone control(s) to normal, thread test film into projector and set volume for comfortable loudness. If the sound optics have adjustable focus, adjust the focus to give the most satisfactory audio quality.
 - (b) Frame and focus picture for best overall screen image.
- 3.2 As the test sections are projected, observe the following:
 - (a) Listen for full range of orchestra. Note picture steadiness at top and sides. Note picture sharpness across the entire frame. White streaks on letters indicate travel ghost.
 - (b) Look for uniform picture brightness. Listen for smooth, even music; quaver indicates flutter.
 - (c) Silence or equal loudness of the two tones shows correct side-guide adjustment.
 - (d) Normal volume is established while listening to a 700-cycle tone. Use same gain setting each run.
 - (e) Three high tones (5,000 cycles) will indicate correct scanning assembly adjustment. Emulsion position is reversed in middle section.
 - (f) Seven distinct tones are frequencies of 50 to 5,000 cycles. All should reproduce well.
 - (g) Listen for natural sound of voices.

Note: A test film made in accordance with this Recommended Practice is available from the Society of Motion Picture and Television Engineers. (This film was formerly called "Jiffy" Test Film.)