Treasurer's Report—January 1–December 31, 1973

CASH

Cash on deposit—January 1, 1973	$ 40,808	
Deposits	1,037,081	
	$1,077,889	
Disbursements	1,004,780	
Cash on deposit—December 31, 1973		$ 73,109
Petty cash fund		200
Total Cash Deposit and On Hand—General Fund—December 31, 1973		$ 73,309

RESERVE FUND

CASH

Cash on deposit		$ 9,230
Accrued Interest		3,087
INVESTMENTS, at cost		
Corporate Bonds	$ 98,746	
Common stocks	109,993	
Total Investment—Reserve Fund		$208,739
Total Cash and Investments—Reserve Fund—December 31, 1973		$221,056
Total Cash and Investments—General and Reserve Funds—December 31, 1973		$294,365

Respectfully submitted, ROBERT M. SMITH, *Treasurer*

Errata

A Unique Timing Reference System for Broadcast Videotape Recorders

By Bert H. Dann
FEBRUARY 1974 JOURNAL, pp. 100–104

Three errors occurred in the illustrations for this paper.

The diagram shown as Fig. 5, p. 103, was incomplete; a corrected version is given at the right.

The photographs on p. 104 corresponding to Figure captions 6 and 7 were transposed.

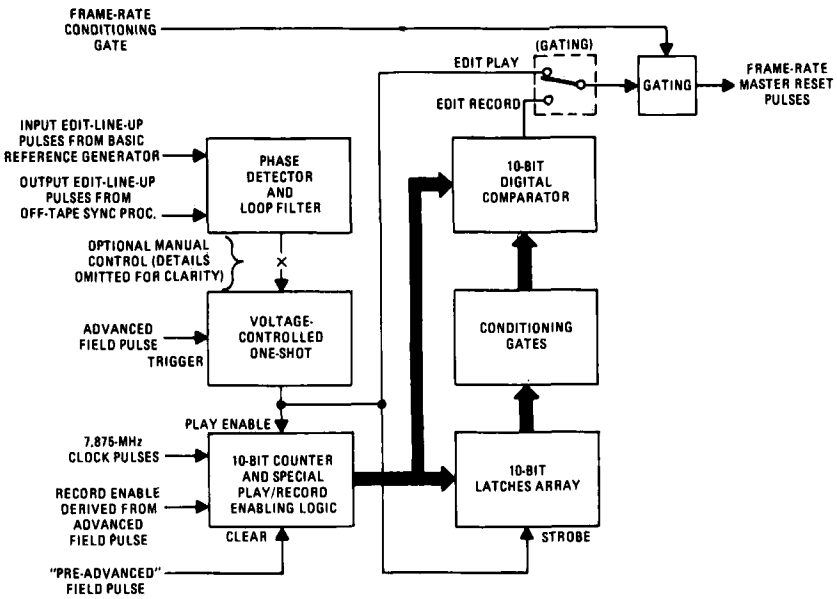


Fig. 5. Simplified block diagram of digital delay system — edit modes.

The Role of Super 8 in Photographic Surveillance

By Charles M. Wall
MARCH 1974 JOURNAL, pp. 192–193

The caption for Figure 3 stated incorrectly that the Nizo camera was made in Japan. It should have read:

Fig. 3. Nizo camera made in Germany.

Directory for Members, March 1974

On page 8, three Sections' Membership Chairmen were listed incorrectly. They should read as follows:

FLORIDA-CARIBBEAN: Francis M. Flynn
NEW YORK: George Perno, Frederick R. Nobbs, Jr.
PACIFIC NORTHWEST: Stephen D. Kerman

On page S10, in the Sustaining Member description for Frezzolini Electronics, Inc., on the eighth line,

instead of: Model MS-571-DC
read: Model MC-571-DC

standards and recommended practices

Approved American National Standards

On 22 February 1974, the American National Standards Institute approved three standards which are editorial revisions of earlier issues: PH22.59-1974, Dimensions of 35mm Motion-Picture Camera Aperture Image; PH22.141-1974, Dimensions for 32mm Motion-Picture Film, 2R; and PH22.142-1974, Dimensions for 32mm Motion-Picture Film, 4R.

PH22.59 has been modified to be in agreement with the comparable ISO Standard. Minor changes do not significantly affect U.S. practices.

PH22.141, a revision of PH22.71-1965 and PH22.141-1965, combines the specifications applicable to 32mm film having two rows of perforations and a perforation pitch of either 0.2994 or 0.3000 inch.

PH22.142 consolidates the revision of PH22.72-1965 and PH22.142-1965 for the same format except that the film has four rows of perforations.

Inasmuch as compliance with American National Standards is purely voluntary, these standards will become truly effective when broad publicity is given to their existence. ANSI and SMPTE would appreciate any personal influence to promote the use of these standards where such action is appropriate. Copies of the standards may be obtained for a nominal fee from the American National Standards Institute, 1430 Broadway, New York, NY 10018.—Alex E. Alden, *Staff Engineer*

ANSI PH22.59-1974
Revision of PH22.59-1966

American National Standard
dimensions of 35 mm motion-picture camera aperture images

Approved February 22, 1974

Secretariat: Society of Motion Picture and Television Engineers, Inc.

1. Scope

1.1 This standard specifies the dimensions of the camera aperture images and the relative positions of the vertical and horizontal centerlines of the intended image area with respect to the reference edge and the perforations of the camera negative film for 35 mm motion-picture cameras.

1.2 Motion-picture cameras used for different purposes require different aperture sizes. This standard specifies the image dimensions resulting from three styles of apertures used for the following purposes:

Style A: Nonanamorphic sound motion pictures

Style B: Anamorphic sound motion pictures

Style C: Instrumentation photography and special processes

2. Dimensions

The dimensions shall be as specified in the figures and tables. They shall apply to measurements of the images formed on freshly exposed and processed film.

NOTE: The displacement of 0.050 inch (1.27 mm), Dimension G, of the vertical centerline of the image area for Styles A and B is in accord with current usage of low-shrinkage film base. However, there are in use many cameras in which the vertical centerline is displaced by 0.055 inch (1.40 mm), which is the dimension used prior to development of low-shrinkage film base.

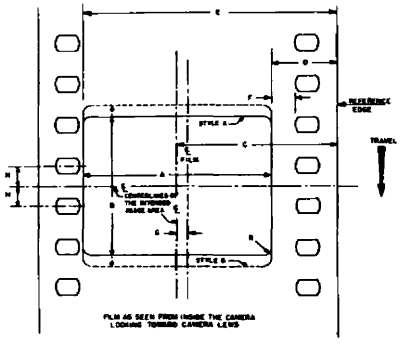


Figure 1
Styles A and B Camera Aperture Image Area

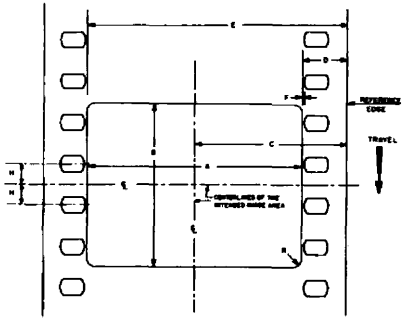


Figure 2
Style C Camera Aperture Image Area

Table 1. Style A

Dimensions	Inches	Millimeters
A	0.864 min	21.95 min
B	0.63 $^{+0.02}_{-0.00}$	16.0 $^{+0.5}_{-0.0}$
C	0.738 nom	18.75 nom
D	0.307 max	7.80 max
E	1.171 min	29.74 min
F	0.115 nom	2.92 nom
G	0.050 nom	1.27 nom
H	0.093 ± 0.002	2.36 ± 0.05
R	0.03 max	0.8 max

Table 2. Style B

B	0.732 $^{+0.008}_{-0.000}$	18.59 $^{+0.20}_{-0.00}$

Table 3. Style C

A	0.980 nom	24.89 nom
B	0.735 ± 0.002	18.67 ± 0.05
C	0.688 ± 0.002	17.48 ± 0.05
D	0.196 min	4.98 min
E	1.174 min	29.82 min
F	0.009 nom	0.23 nom
H	0.093 ± 0.002	2.36 ± 0.05
R	0.030 max	0.76 max

ANSI PH22.141-1974
Revision and Consolidation of
PH22.71-1965 and PH22.141-1965

American National Standard dimensions for 32 mm motion-picture film, 2R

Approved February 22, 1974 Secretariat: Society of Motion Picture and Television Engineers, Inc.

1. Scope

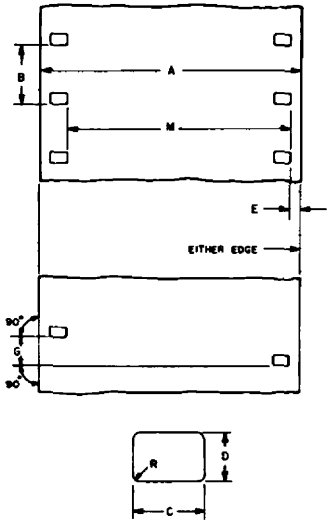
This standard specifies the cutting and perforating dimensions for 32 mm motion-picture film having two rows of 16 mm-type perforations, one row near each edge, and a perforation pitch of either 0.2994 or 0.3000 inch (7.605 or 7.620 mm).

2. Dimensions

2.1 The dimensions shall be as given in the figure and table.

2.2 The dimensions pertain to a safety film as defined in American National Standard Specifications for Motion-Picture Safety Film, PH22.31-1973 (R-1967).

2.3 The dimensions apply at the time of cutting and perforating for film adjusted to a temperature of 23 ± 1°C (nominally converted to 73 ± 2°F) and a relative humidity of 50 ± 2 percent. The manufacturer may indicate other nominal humidity conditions under which the dimensions apply.



Dimensions		Inches	Millimeters
A	Film width	1.256 ± 0.001	31.90 ± 0.03
B	Perforation pitch (long)	0.3000 ± 0.0004	7.620 ± 0.010
B'	Perforation pitch (short)	0.2994 ± 0.0004	7.605 ± 0.010
C	Perforation width	0.0720 ± 0.0004	1.829 ± 0.010
D	Perforation height	0.0500 ± 0.0004	1.270 ± 0.010
E	Edge to perforation	0.0355 ± 0.0020	0.902 ± 0.051
G	Perforation misalignment	0.001 max	0.03 max
L	100 consecutive perforation pitches	30.00 ± 0.03	762.0 ± 0.8
L'	100 consecutive perforation pitches	29.94 ± 0.03	760.5 ± 0.8
M	Lateral perforation displacement	1.113 ± 0.001	28.27 ± 0.03
R	Radius of perforation fillet	0.010 ± 0.001	0.25 ± 0.03

NOTE 1: The title of this standard was established by the application of a nomenclature system developed for *all film dimension standards: Each title provides an* indication of the film width, a code designation for the perforation shape (BH, KS, DH or CS) or the number of rows of perforations (1R, 2R, etc.), depending upon which is the significant factor, or the perforation pitch without the decimal point.

NOTE 2: The metric values in the table of dimensions are converted from the inch values in accordance with conversion principles outlined in American National Standard Practice for Inch-Millimeter Conversion for Industrial Use, B48.1-1947 (R-1933).

Appendix

(The Appendix is not a part of this American National Standard, but is included for information purposes only.)

A1. The user is reminded that, as a plastic, film can change dimensions temporarily due to moisture or temperature, or permanently due to solvent loss or strain effect.

A2. Film for positive use has a longitudinal pitch 0.2 percent longer than its companion negative. Shrinkage of the negative during aging and processing prior to printing will generally not exceed 0.2 percent. Thus, the negative stock is expected to be 0.3 ± 0.1 percent shorter than the positive. This difference will minimize slippage between the two on the 12-inch (305-mm) circumference sprocket of the printer, assuming a film thickness of 0.0055 to 0.0065 in (0.140 to 0.165 mm).

A3. The uniformity of pitch, hole size and margin (Dimensions B, C, D and E) is an important variable affecting steadiness. Variations in these dimensions, from roll to roll, are of little significance compared to variations from one perforation to the next within any small group of consecutive perforations. As an example, the uniformity of the margin is uniquely critical for optical printing. During the printing process, the placement of the image on the film is usually with respect to successive lateral pairs of perforations at one-frame intervals. During subsequent projection, however, the portion of the image projected is usually located, not by these perforations, but by the edge of the film. The lateral steadiness of the projected image is, therefore, directly related to the frame-to-frame uniformity of the margin.

A4. For historical background on the development of this standard, refer to A. J. Miller and A. C. Robertson, "Motion-picture film — its size and dimensional characteristics," Jour. SMPTE, 74: 3-11, Jan. 1965.

ANSI PH22.142-1974
Revision and Consolidation of
PH22.72-1965 and PH22.142-1965

American National Standard dimensions for 32 mm motion-picture film, 4R

Approved February 22, 1974 Secretariat: Society of Motion Picture and Television Engineers, Inc.

1. Scope

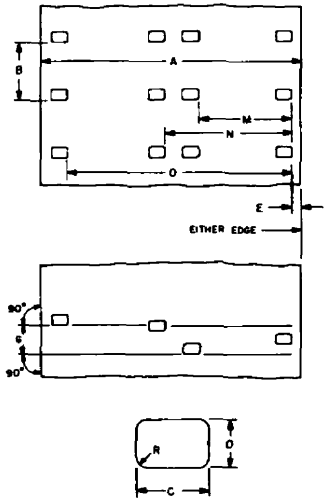
This standard specifies the cutting and perforating dimensions for 32 mm motion-picture film having four rows of 16 mm-type perforations and a perforation pitch of either 0.2994 or 0.3000 inch (7.605 or 7.620 mm).

2. Dimensions

2.1 The dimensions shall be as given in the figure and table.

2.2 *The dimensions pertain to a safety film as* defined in American National Standard Specifications for Motion-Picture Safety Film, PH22.31-1973 (R-1967).

2.3 The dimensions apply at the time of cutting and perforating for film adjusted to a temperature of 23 ± 1°C (nominally converted to 73 ± 2°F) and a relative humidity of 50 ± 2 percent. The manufacturer may indicate other nominal humidity conditions under which the dimensions apply.



	Dimensions	Inches	Millimeters
A	Film width	1.256 ± 0.001	31.90 ± 0.03
B	Perforation pitch (long)	0.3000 ± 0.0004	7.620 ± 0.010
B′	Perforation pitch (short)	0.2994 ± 0.0004	7.605 ± 0.010
C	Perforation width	0.0720 ± 0.0004	1.829 ± 0.010
D	Perforation height	0.0500 ± 0.0004	1.270 ± 0.010
E	Edge to perforation	0.0355 ± 0.0020	0.902 ± 0.051
G	Perforation misalignment	0.001 max	0.03 max
L	100 consecutive perforation pitches	30.00 ± 0.03	762.0 ± 0.8
L′	100 consecutive perforation pitches	29.94 ± 0.03	760.5 ± 0.8
M	Lateral perforation displacement	0.485 ± 0.001	12.32 ± 0.03
N	Lateral perforation displacement	0.628 ± 0.001	15.95 ± 0.03
O	Lateral perforation displacement	1.113 ± 0.001	28.27 ± 0.03
R	Radius of perforation fillet	0.010 ± 0.001	0.25 ± 0.03

NOTE 1: The title of this standard was established by the application of a nomenclature system developed for all film dimension standards: Each title provides an indication of the film width, a code designation for the perforation shape (BH, KS, DH or CS) or the number of rows of perforations (1R, 2R, etc.), depending upon which is the significant factor, or the perforation pitch without the decimal point.

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