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A document should be stabilized if it is believed to be substantially correct, does not contain harmful or misleading recommendations, may still be relevant to equipment or practices in use, is stable, but does not represent current technology, and need not be subject to future reviews.

A Stable document shall still be made available and offered for sale by the Society, but it shall be prefaced by a cover page explaining its current status.

At any time, a Technology Committee may revise, amend, or otherwise initiate a new Project on a Stable document.

A Stable document is “In Force”, and not deprecated or withdrawn.

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Note:

SMPTE “Stable” documents were previously described as “Archived” and the attached document may be marked as “Archived”. The status of a SMPTE document described as “Archived” is exactly as described above for a “Stable” document.

Stable documents may not adhere to the latest style and format of SMPTE documents, or to current usage of normative language. Suitable care should be taken in interpretation.

Film Negative Cutter's Conform List



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1 Scope

This practice describes the data format of a list generated by electronic film editing systems to be used as the master reference for a film negative cutter when conforming the original negative to the electronic work tape.

The scope of this format does not consider the needs of the pre-assembler whose job is to pull the appropriate negative prior to the actual cutting and splicing of specific edits. A separate format for such a task will be developed.

The negative cutter's task is one of precision coupled with speed, and the reference cutting list must strive to provide only the essential information with a minimum of clutter for that specific task, and in a form immediately recognizable. As a result, "white space" and accurate and familiar representation of data may be as important as the data itself. The columnar layout and negative edge identifier/coding scheme replication is therefore considered crucial.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this practice. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this practice are encouraged to investigate the possibility of applying the most recent edition of the standards listed below.

ANSI/SMPTE 270-1994, Motion-Picture Film (65-mm) — Manufacturer-Printed Latent Image Identification Information

SMPTE 12M-1999, Television, Audio and Film — Time and Control Code

SMPTE 254-2002, Motion-Picture Film (35-mm) — Manufacturer-Printed Latent Image Identification Information

SMPTE 258M-2004, Television — Transfer of Edit Decision Lists

SMPTE 271-2002, Motion-Picture Film (16-mm) — Manufacturer-Printed Latent Image Identification Information

SMPTE RP 195-2004, Use of the Reference Mark in Manufacturer-Printed Latent Image Key Numbers for Unambiguous Film Frame Identification

SMPTE RP 197-2003, Film-to-Video Transfer List

3 Glossary

3.1 Terms defined by this practice

3.1.1 cuts: The sequential list of specific splices to be made in the negative assembly.

3.1.2 duration: The number of frames used in an overlapping transition effect.

3.1.3 film feet: That unique part of the key number which increments by one regularly along a continuous section of film, typically each foot. This is also referred to as the "footage indicator."

3.1.4 film frame offset: The offset, not included as part of the key number, which is the frame count away from a film feet indicator. This offset may be an increment ("+") or decrement ("-") to an associated film feet indicator.

3.1.5 film prefix code: That common part of the key number which is used to identify the stock and batch of film. The code, as used in this practice, is an exact replication of the code marked on the film edge, including all alpha and numeric characters.

3.1.6 head: The first frame of original negative to be included in the finished product.

3.1.7 roll: The unique identifier for the original camera negative roll containing the footage to be spliced.

3.1.8 runtime: The cumulative running time, beginning with the first cut in the list. This information is displayed in two forms: film feet and film frame offset, and the corresponding SMPTE time code as it appears on the work tape.

3.1.9 shot: A sequence of negative frames, cut to cut.

3.1.10 shot duration: The number of negative frames in a shot, measured in feet plus remaining frames.

3.1.11 tail: The last frame of the original negative to be included in the finished product.

3.1.12 white space: Blank, unprinted space on a line with beginning and ending columns specified.

3.2 Terms defined by SMPTE 254, ANSI/SMPTE 270, and SMPTE 271

3.2.1 frame line: The junction between two exposed film images on the film.

3.2.2 key number: A number (sometimes imprecisely referred to as an edge number or footage number) that is printed with ink or exposed onto film at the time of manufacture. The numbers are placed at regular intervals, typically submultiples of one foot. A key number is composed of a film prefix code and a film feet count.

3.2.3 latent image key number: A key number which is exposed onto the film at the time of manufacture.

3.2.4 reference mark: A mark, usually a dot, which is included in the latent image of the key number, and which is aligned to a perforation on the film.

3.3 Term defined by SMPTE RP 195

3.3.1 perf offset: The count of the number of perforations from the frameline to the reference mark (the count includes the perforation adjacent to the reference mark). The procedure for determining the perf offset on any given exposed film format is specified in SMPTE RP 195.

3.4 Term defined by SMPTE RP 197

3.4.1 film feet edge number: The string of characters which defines a single film frame, including the key number, film frame offset, and perf offset, and is both human and machine readable. The syntactic definition of a film feet edge number is given in SMPTE RP 197. The following types of edge numbers are defined:

BAR – Machine readable latent-image bar code per SMPTE 254, ANSI/SMPTE 270, or SMPTE 271.

LHR – Human readable version of machine readable latent-image barcode.

LAT – Latent image characters not conforming to the above standards.

INK – Other printed characters applied to the film after processing.

4 Layout

4.1 Header information

Information placed at the head of each page.

4.1.1 Date and time information

Column 1, first line of header information.

4.1.2 Column header information

Labeling for data columns, sixth line of header information, as follows:

CUT ROLL TRANS PREFIX HEAD (+) TAIL (+) SHOT DUR RUNTIME

The column headers for head and tail include indication of whether the frames are counted ahead from the previous start of foot ("+") or back from the next start of foot ("-"). The count direction may be different for the head and tail columns (see 4.2 for a description of the data).

4.1.3 Page information

Columns 60-80, first line of header information, right justified. The current page and the total pages should be printed; for example: Page 5 of 25.

4.1.4 Production/title line

Columns 1-80, second line of header information appearing on every page.

4.1.5 Supplemental first page information

Columns 1-80 of the third and fourth lines of header information. This appears on the first page only.

4.2 Data items

4.2.1 Cut

Columns 1-4, four numerics, 0001-9999 with leading zeros. The unique and sequential identifier of cuts in the list.

4.2.2 Roll

Columns 7-14, eight alphanumerics (upper case alphas) identifying the source camera negative roll.

4.2.3 Transition

Columns 17-21, alphabetic characters, identifying the type of transition. The text may be "C," indicating a cut, or "MATCH," indicating that the head of this shot matches the tail of the preceding shot - if, for instance, an optical is to be intercut with a camera roll.

4.2.4 Prefix

Columns 24-32, nine alphanumerics. The film prefix code, exactly as it appears on the film.

In the uncommon case where the film prefix codes of the head cut and tail cut differ, the film prefix code of the head cut should be used. In this case, the film prefix code of the tail cut may be noted in a user comment.

4.2.5 Head

Columns 36-42, four numerics indicating film feet, one increment/decrement symbol ("+" or "-"), plus two numerics indicating film frame offset (with leading zeros). The head cut of the shot to be spliced.

The "+" or "-" indicates whether the frames are counted ahead from the previous start of foot ("+") or back from the next start of foot ("-"). Either notation may be used; however, the same notation should be used throughout the list.

4.2.6 Head perf offset

Columns 44-46, the letter "P" followed by one or two digits indicating the perf offset at the start of the foot.

This field is required for film and key number formats where the key number repetition rate is not divisible by the frame repetition rate (for example, 35-mm 3 perforations). For formats not requiring the perf specifier, this field must be blank (refer to SMPTE RP 195 for an explanation of the perf offset).

4.2.7 Tail

Columns 49-55, four numerics (film feet), one increment/decrement symbol ("+" or "-"), plus two numerics (film frame offset) with leading zeros. The tail cut of the shot to be spliced. The frame identified is to be included in the finished product.

The "+" or "-" indicates whether the frames are counted ahead from the previous start of foot ("+") or back from the next start of foot ("-"). Either notation may be used, and the count direction for tail may be different from that for head; however, the same notation should be used throughout the list.

4.2.8 Tail perf offset

Columns 57-59, the letter "P" followed by one or two digits indicating the perf offset at the start of the foot. This field is required for film and key number formats where the key number repetition rate is not divisible by the frame repetition rate (for example, 35-mm 3 perforations). For formats not requiring the perf specifier, this field must be blank (refer to SMPTE RP 195 for an explanation of the perf offset).

4.2.9 Shot duration

Columns 60-67 (right justified from column 67), up to five numerics indicating footage (no leading zeros) plus an increment symbol ("+") plus two numerics indicating partial footage in frames (with leading zeros). The duration of the current shot being spliced.

4.2.10 Runtime footage and frames

Columns 73-80 (right justified from column 80), five numerics indicating footage (no leading zeros) plus a punctuator ("."), plus two numerics indicating partial footage in frames (with leading zeros). The total runtime of all shots, including the current shot, up to that point.

4.2.11 Runtime SMPTE time code

Columns 70-80, second line of the cut data. Standard SMPTE format (using SMPTE standard drop frame/nondrop frame notation for NTSC, as defined in SMPTE 258M). The actual work tape time code as would be displayed in a window at the tail of the current edit.

4.2.12 User comments

Column 1, third+ line of the cut data, upper case. No limit on the number of lines of user comments. A maximum of 80 characters.

4.2.13 Cut data delimiter

A blank line separating the current cut from the next.

5 Examples

5.1 Constant-width font

When printed in a constant-width font, the following formatting rules should be observed:

- character size should be no smaller than 12 characters per inch (as shown in the example below). Preferred size is 10 characters per inch;
- the column assignments given in 4.2 should be used.

This example of the negative cutter's conform list is formatted in typewriter font (Courier, 12 CPI).

In this example, perf offsets are used; and both head and tail frames are counted forward from the preceding start of foot ("+").

The column ruler is provided for information only. It is not part of the required format (see example 1).

5.2 Proportionally-spaced font

When printed in a proportionally-spaced font, the following formatting rules should be observed:

- a serif font is preferred for legibility;
- character size should be no smaller than 10 points, 12 points is preferred;
- the same font should be used throughout. Enlarged characters may be used for emphasis of the head, tail, and runtime columns, as shown in example 2;
- tab stops corresponding to the column assignments in 4.2 should be used in order to preserve ample white space.

This example of the negative cutter's conform list is formatted in 12-point Times, with emphasized columns in 14 point.

In this example, perf offsets are used, and both head and tail frames are counted forward from the preceding start of foot (+).

Example 1 – Constant-width font

0000000001111111111222222222233333333333444444444455555555556666666666777777777778
 12345678901234567890123456789012345678901234567890123456789012345678901234567890

JANUARY 16, 1996, 10:00 AM

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EXAMPLE CUT LIST FOR SMPTE RP 194

OPTIONAL LINE 1 (NOT INCLUDED IN HEADER OF ADDITIONAL PAGES)

OPTIONAL LINE 2 (NOT INCLUDED IN HEADER OF ADDITIONAL PAGES)

| CUT | ROLL | TRANS | PREFIX | HEAD (+) | TAIL (+) | SHOT DUR | RUNTIME |
|---------------------------------|----------|-------|-----------|------------|------------|----------|-----------------------|
| 0001 | LABROLL1 | C | KJ29-9011 | 5511+04 P1 | 5616+07 P1 | 105+04 | 105.04 01:01:10:05 |
| 0002 | LABROLL2 | C | KJ29-9005 | 5741+04 P2 | 5750+02 P1 | 8+15 | 114.03 01:01:16:04 |
| AN EXAMPLE OF A NOTE | | | | | | | |
| 0003 | LABROLL3 | MATCH | KJ03-9329 | 5779+14 P2 | 5802+08 P3 | 22+11 | 136.14 01:01:31:07 |
| OPTICAL ELEMENT – MATCH AT HEAD | | | | | | | |
| 0004 | LABROLL1 | C | KJ29-9011 | 5930+11 P3 | 5942+03 P3 | 11+09 | 148.07 01:01:38:29 |

Example 2 – Proportionally-spaced font

JANUARY 16, 1996, 10:00 AM

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EXAMPLE CUT LIST FOR SMPTE RP 194

OPTIONAL LINE 1 (NOT INCLUDED IN HEADER OF ADDITIONAL PAGES)

OPTIONAL LINE 2 (NOT INCLUDED IN HEADER OF ADDITIONAL PAGES)

| CUT | ROLL | TRANS | PREFIX | HEAD (+) | TAIL (+) | SHOT DUR | RUNTIME |
|---------------------------------|----------|-------|-----------|------------|------------|----------|-----------------------|
| 0001 | LABROLL1 | C | KJ29-9011 | 5511+04 P1 | 5616+07 P1 | 105+04 | 105.04 01:01:10:05 |
| 0002 | LABROLL2 | C | KJ29-9005 | 5741+04 P2 | 5750+02 P1 | 8+15 | 114.03 01:01:16:04 |
| AN EXAMPLE OF A NOTE | | | | | | | |
| 0003 | LABROLL3 | MATCH | KJ03-9329 | 5779+14 P2 | 5802+08 P3 | 22+11 | 136.14 01:01:31:07 |
| OPTICAL ELEMENT – MATCH AT HEAD | | | | | | | |
| 0004 | LABROLL1 | C | KJ29-9011 | 5930+11 P3 | 5942+03 P3 | 11+09 | 148.07 01:01:38:29 |