

Table IV. Predicted Results of DPCM Encoding of NTSC Signals Sampled at Various Rates

Impairment grade	1.97	2.39	2.52
Sample rate	7.15 MHz	7.15 MHz	10.7 MHz
Bits/sample	6	5	4
Continuous bit rate	42.9 Mb/s	35.8 Mb/s	42.8 Mb/s
Active area bit rate	34.3 Mb/s	28.6 Mb/s	34.2 Mb/s

receiver. Thereafter, only the moving areas in the image are updated. In the network television environment, however, where there is a great deal of camera movement, zooming, scene changes, etc., it is not known whether these techniques will be useful.[†]

Conclusion

If the results obtained for PAL signals can be extrapolated to the NTSC environment, broadcast quality NTSC color television signals should be obtainable at bit rates as low as 42.8 Mbits/s. If some reduction in quality is acceptable, good quality NTSC signals should be possible at bit rates as low as 29 Mbits/s. Even lower bit rates may be achievable by the use of sophisticated transform coding techniques or by the use of frame-to-frame encoding.

[†] Note added in proof: Nippon Electric Co., Japan, has since demonstrated an interframe coder operating at 22 Mbits/s that reportedly gives good quality broadcast signals.

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Errata

USSR — Cinematography Addendum to the Progress Committee Report

By V. L. Trusko and V. G. Komar
September 1977 *Journal*, pp. 616-617

Two corrections were received after publication:

Page 616, third column, ninth line from the bottom, sentence should read:

"Fewer theaters are owned by the Trade Unions than by the State."

Page 617, first column, first sentence in the fifth paragraph should read:

"Television features currently being made by the film studios in the USSR make up 40% of the total number of features being produced by the studios."

And On p. 618, in a discussion of the "universal frame format," there was cited as a reference a 1973 *Journal* paper. There should also have been cited the paper "Using a Universal Negative Image Format for the Production of Films With Any Desired Aspect Ratio," by N. D. Bernstein, M. Z. Wysotsky, and B. N. Koplev, in the June 1977 *Journal*, pp. 422-426.

Distortion-Balance Tests for Motion-Picture Soundtracks

By Ralph R. Wells

September 1977 *Journal*, pp 622-3

Figures 5-10 on pages 622 and 623 were inadvertently transposed with respect to their captions. (The captions and text are correct; the illustrations were misplaced.) Thus, the illustration that belongs with the caption designated Fig. 5 is incorrectly shown at the left on page 623 and designated Fig. 9. Directions for finding the illustrations that belong with the appropriate captions are given below:

Location of illustrations for Wells' Figs. 5-10.

Illustration belonging to caption for Fig.	... was misplaced over caption for Fig.
5	9
6	5
7	6
8	10
9	7
10	8

Quintaphonic Sound

By John Mosely

January 1977 *Journal*, p. 26

The reference in the caption for Figure 8 was printed incorrectly. The correct citation is Fletcher.²³