

SOUND

RECORDING

FROM THE MAKERS OF "SCOTCH" BRAND MAGNETIC TAPE

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BIBLIOGRAPHY OF MAGNETIC RECORDING 1900-1953

- 1900
E. Ruhmer, "The Telephonograph," *Phys. Z.*, pp. 470-472, July; p. 554-556, Sept.
V. Poulsen, "The Telephonograph," *Ann. d. Phys.*, pp. 754-760, Nov.
- 1901
L. Rellstab, "The Telephonograph," *Elektrotech. Z.*, pp. 57-59, Jan.
H. J. West, "The Telephonograph," *Elektrotech. Z.*, pp. 181-184, Feb.
"The Telephonograph," *Electrician*, pp. 5-7, April.
- 1904
K. Strecker, "The Telephonograph," *Elektrotech. Z.*, pp. 14-15, Jan.
- 1909
C. K. Fankhauser, "The Telephonograph," *J. Franklin Inst.*, pp. 37-46, Jan.
- 1929
"Blattnerphone," *Electrician*, p. 472, Oct.
- 1930
K. Stille, "Electromagnetic Sound Recording," *Elektrotech. Z.*, pp. 449-451, March.
- 1932
S. J. Begun, "The Dictating Machine in Industry," *Elektrotech. Z.*, pp. 204-205, March.
E. Hormann, "On the Theory of Magnetic Sound Recording," *Elektrische Nachrichtentech.*, pp. 388-403, Oct.
E. Meyer and E. Schueller, "Magnetic recording on steel tape," *Z. f. tech. Phys.*, pp. 593-599, Dec.
- 1933
C. N. Hickman, "Delayed speech," *Bell Labs. Rec.*, pp. 308-310, June.
- 1934
"Magnetic Recording and Reproducing," *Wireless World*, pp. 8-10, Jan.
N. M. Rust, "Marconi-Stille Recording and Reproducing Equipment," *Marconi Rev.*, pp. 1-11, Jan.
H. A. Frederick, "Recording and Reproducing Sound," *Rev. Sci. Inst.*, pp. 177-182, May.
H. J. von Braunmuhl, "Magnetic Sound Recording in Broadcasting Service," *Funktech. Monatshefte*, pp. 483-486, Dec.
- 1935
R. F. Mallina, "A Mirror for the Voice," *Bell Labs. Rec.*, pp. 200-202, Mar.
T. Volk, "A.E.G. Magnetophone," *A.E.G. Mitteilungen*, pp. 299-301, Sept.
T. Volk, "Magnetophone—a New Sound Recording Apparatus," *Filmtechnik*, pp. 229-231, Oct.
W. H. Hansen, "The Magnetophone," *Elektrotech. Z.*, p. 1232, Nov.
E. Schuller, "Magnetic Sound Recording," *Elektrotech. Z.*, pp. 1219-1221, Nov.
H. E. Hamilton, "The Blattnerphone—Its Operation and Use," *Elec. Digest*, p. 347, Dec.
- 1936
K. Nagai, I. Nishimura and Y. Hamashito, "Delay Apparatus Using Magnetic Recording," *Nippon Elec. Comm.*, pp. 143-149, Feb.
- W. F. Schrage, "Sound Recording on Magnetic Materials," *Radio Craft*, pp. 537-562, Mar.
"Magnetic Recording of Sound," *Wireless Eng.*, pp. 175-178, Apr.
- H. Okuno, S. Fukunaga and R. Koyama, "On Magnetic Recording," *J. Inst. Elec. Engrs. Japan*, pp. 416-417, May.
- S. J. Begun, "The New Lorenz Steel Tone Tape Machine," *Elec. Comm.*, pp. 62-69, July.
- 1937
C. N. Hickman, "Sound Recording on Magnetic Tape," *Bell Syst. Tech. Jour.*, pp. 165-177, Apr.
S. J. Begun, "Recent Developments in Magnetic Sound Recording," *Jour. Soc. Mot. Pic. Eng.*, pp. 464-472, May.
S. J. Begun, "Magnetic Recording-Reproducing Machine for Objective Speech Study," *Jour. Soc. Mot. Pic. Eng.*, pp. 216-218, Aug.
K. Nagai, T. Nishimura, S. Sasaki and J. Endo, "Studies of Noise and Recording Materials for Magnetic Recording," *Nippon Elec. Comm.*, pp. 218-224, Aug.
C. N. Hickman, "Magnetic Recording and Reproducing," *Bell Labs. Rec.*, pp. 2-7, Sept.
H. v. Lubeck, "Magnetic Recording on Films with Ring Heads," *Akust. Z.*, pp. 273-295, Nov.
- 1938
T. J. Malloy, "A Magnetic Recorder," *Electronics*, p. 30, Jan.
H. Weber, "Magnetic Recording on Steel Tape for Broadcasting Purposes," *Tech. Mitt. Schweiz. Tel. & Tel. Verw.*, pp. 1-8, Feb.
A. E. Barrett and C. J. F. Tweed, "Some Aspects of Magnetic Recording and Its Application to Broadcasting," *Jour. Inst. Elec. Eng.*, pp. 265-288, Mar.
K. Nagai and S. Sasaki, "Experimental Considerations on the A.C. Erasing of a Magnetic Recording and proposition of a New Recording Method," *Jour. Inst. Elec. Comm. Eng. Japan*, Mar.
- S. J. Begun and S. K. Wolf, "On Synthetic Reverberation," *Communications*, p. 8, Aug.
S. J. Begun, "Magnetic Recording," *Electronics*, pp. 30-32, Sept.
H. v. Lubeck, "The Principles of the Magnetophone Method," *A.E.G. Mitteilungen*, pp. 453-459, Sept.
K. Nagai, S. Sasaki and J. Endo, "Experimental Considerations in Magnetic Recording," *Nippon Elec. Comm. Eng.*, pp. 445-447, Nov.
- 1939
D. W. Aldous, "Recording on Steel Tape," *Wireless World*, pp. 611-612, June.
- 1940
E. A. Nesbitt and G. A. Kelsall, "Vicalloy, a New Permanent Magnet Material," *Phys. Rev.*, p. 203, July.
- 1941
J. v. Braunmuhl and H. Weber, "An improved Magnetron process," *Z. Ver. deut. Ing.*, p. 628, July.
S. K. Wolf, "The Synthetic Production and Control of Acoustic Phenomena by a Magnetic System," *Proc. I.R.E.*, pp. 365-371, July.
S. J. Begun, "Magnetic Recording and Some of its Applications in the Broadcast Field," *Proc. I.R.E.*, pp. 423-433, Aug.
H. Heidenwolf, "Method for Microscopic Viewing of Magnetic Sound Recordings," *Lorenz Berichte*, pp. 119-122, Dec.
- 1942
A. Christeler and H. Wildbolz, "Problems in Electromagnetic Sound Recording," *Schweiz. Tech. Z.*, pp. 707-717, Dec.
- 1943
M. Caras, "A New Magnetic Wire Recorder," *Radio News*, pp. 3-5, 38 and 39, Nov.
- 1944
D. W. Pugsley, "Engineering Details of a Magnetic Wire Recorder," *Electronic Indust.*, pp. 116-118, Jan.
M. C. Selby, "Investigation of Magnetic Tape Recorders," *Electronics*, pp. 133-135, 302, May.
"Magnetic Wire Recorder," *Telephony*, pp. 20-21, June.
D. W. Aldous, "Magnetic Recording," *Electrician*, pp. 138-140, Aug.
G. L. Ashman, "Magnetic Recording," *Wireless World*, p. 226, Aug.
H. Toomim and D. Wildfeuer, "The Mechanism of Supersonic Frequencies as Applied to Magnetic Recording," *Proc. I.R.E.*, pp. 664-668, Nov.
- 1945
C. E. Winter, "Magnetic Tape Recording," *Radio News*, pp. 32-34, 138, 140-141, June.
"The Armour Magnetic Wire Sound Recorder," *Electronics*, pp. 360, 364, June.
L. C. Holmes and D. L. Clark, "Supersonic Bias for Magnetic Recording," *Electronics*, pp. 126-136, July.
H. B. Shaper, "Frequency-Modulated Magnetic Tape Transient Recorder," *Proc. I.R.E.*, pp. 118-121, Nov.
H. Davies, "Report on Wire Recording Developments," *Electronics*, pp. 374, 376, Dec.
L. C. Holmes, "High Quality Sound Recording on Magnetic Wire," *Communications*, pp. 44, 46, Dec.
T. H. Long, "A New Wire Recorder Head Design," *A.I.E.E. Tech. Paper 46-29*, Dec.
T. H. Long and G. D. McMullen, "A B-H Tracer for Magnetic Recording Wire," *A.I.E.E. Tech. Paper 46-30*, Dec.
R. H. Tinkham, "Multiple Wire Recording," *Communications*, p. 99, Dec.
D. E. Woodbridge, "Signal and Noise Levels in Magnetic Tape Recording," *A.I.E.E. Tech. Paper 46-31*, Dec.
- 1946
A. E. Javitz, "An Appraisal of Design Trends in Magnetic Sound Recorders," *Elec. Mfg.*, pp. 107-111, 228, 230, 232, 234, 236, 238, 240, 242 and 244, June.
R. A. Power, "The German Magnetophone," *Wireless World*, pp. 195-197, June.
D. W. Pugsley, "Wire Recording," *Elec. Eng.*, pp. 316-321, July.
M. Camras, "Theoretical Response from a Magnetic Wire Record," *Proc. I.R.E.*, pp. 597-602, Aug.
E. C. Crittenden Jr., C. S. Smith Jr. and L. O. Olsen, "B-H Meter for Samples of Small Cross-Sectional Area," *Rev. Sci. Inst.*, pp. 372-374, Oct.
R. B. Vaile Jr., "Report on Developments in Magnetic Recording," *Elec. Mfg.*, pp. 114-115, Nov.
A. B. Rosenstein, "Principles and Methods of Magnetic Recording," *Radio News*, pp. 3-6, 29, 30, Dec.

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S. J. Begun, "Recent Developments in the Field of Magnetic Recording," *Jour. Soc. Mot. Pic. Eng.*, pp. 1-13, Jan.

M. Camras, "Magnetic Sound for Motion Pictures," *Jour. Soc. Mot. Pic. Eng.*, pp. 14-28, Jan.

H. Chase, "Designing Wire Recorder Unit for Low-Cost Quantity Production," *Elec. Mfg.*, pp. 122-125, 172, 174 and 176, Jan.

H. A. Howell, "Magnetic Sound Recording on Coated Paper Tape," *Jour. Soc. Mot. Pic. Eng.*, pp. 36-49, Jan.

W. C. Miller, "Magnetic Recording for Motion Picture Studios," *Jour. Soc. Mot. Pic. Eng.*, pp. 57-62, Jan.

R. P. Potter, "Visible Speech," *Bell Labs. Rec.*, pp. 7-11, Jan.

A. W. Sear, "Wire Recorder Wow," *Jour. Acoust. Soc. Amer.*, pp. 172-178, Jan.

R. J. Tinkham and J. S. Boyers, "Magnetic Sound Recorder of Advanced Design," *Jour. Soc. Mot. Pic. Eng.*, pp. 29-35, Jan.

"Paper Tape Magnetic Recorder," *Tele-Tech*, pp. 88-89, Jan.

"Discussion on Magnetic Recording," *Jour. Soc. Mot. Pic. Eng.*, pp. 50-56, Jan.

M. Camras, "Recent Developments in Magnetic Recording for Motion Picture Film," *Jour. Acoust. Soc. Amer.*, pp. 322-325, Mar.

"Magnetic Sound for Amateur Movies," *Electronics*, pp. 140, 158, Mar.

"Magnetic Tape Recorder," *Radio News*, pp. 15, 23, Mar.

M. Camras, "Magnetic Sound for Motion Pictures," *Radio News*, pp. 12-14, 23, Apr.

J. H. James, "Magnetic Playback-Recorder Using Paper Disks," *Communications*, pp. 32, 55-56, 58, Apr.

"Remote Control Telephonograph," *Tele-Tech*, pp. 69, 108, Apr.

"Magnetophone Recorders," *Wireless World*, p. 128, Apr.

"Wire Recording: A Review of Recent Developments and Applications," *Electrician*, pp. 935-936, Apr.

H. A. Chinn, "Magnetic Tape Recorders in Broadcasting," *Audio Engng.*, pp. 7-10, 48-49, May.

L. C. Holmes, "Some Factors Influencing the Choice of a Medium for Magnetic Recording," *Jour. Acoust. Soc. Amer.*, pp. 395-403, May.

R. S. O'Brien, "Adapting Paper Tape Recorders for Broadcasting," *Audio Engng.*, pp. 10-14, 48, June.

J. A. Curtis, "Passenger Entertainment Systems for Railroad Use," *Tele-Tech*, pp. 34-37, 96-97, July.

O. Kornei, "Frequency Response of Magnetic Recording," *Electronics*, pp. 124-128, Aug.

R. H. Ranger, "Design of Magnetic Tape Recorders," *Tele-Tech*, pp. 56-57, 99-100, Aug.

D. V. R. Drenner, "The Magnetophone," *Audio Engng.*, pp. 7-11, 35, Oct.

N. M. Haynes, "Bibliography of Magnetic Recording," *Audio Engng.*, pp. 30-31, 44-45, Oct.

W. Lippert, "Stereophonic 2-Channel Transmission with the Magnetophone," *Funk U. Ton*, pp. 173-190, Oct. 1947, pp. 236-250, Nov.

R. H. Ranger, "Magnetic Tape Recorder for Movies and Radio," *Electronics*, pp. 99-103, Oct.

W. W. Wetzel, "Review of the Present Status of Magnetic Recording Theory," *Audio Engng.*, pp. 14-17, 39, Nov., pp. 12-16, 37, pp. 26-30, 46-47, Jan. 1948.

D. W. Aldous, "Bibliography of Magnetic Recording," *Electronic Engng.*, pp. 390-391, Dec.

M. Camras, "Magnetic Recording Tapes," *A.I.E.E. Tech. Paper* 48-75; Dec.

D. L. Clark and L. L. Merrill, "Field Measurements on Magnetic Recording Heads," *Proc. I.R.E.*, pp. 1575-1579, Dec.

P. T. Hobson, "Developments in Magnetic Recording," *Electronic Engng.*, pp. 377-382, Dec.

P. T. Hobson, "Measurements of Magnetic Properties of Fine Wire," *Electronic Engng.*, pp. 383-387, Dec.

D. E. Wiegand and R. E. Zenner, "A Turn-In Gap Erase Head for Magnetic Recorders Providing Intense High Frequency Fields," *A.I.E.E. Tech. Paper* 48-76, Dec.

"Standardization of Magnetic Recording," *Electronic Engng.*, p. 396, Dec.

H. A. Howell, "The Practical Application of Supersonic Bias in Magnetic Recording," *A.I.E.E. Tech. Paper* 48-77, Jan.

J. D. Goodell, "Sound on Tape," *Radio News*, pp. 3-5, 28-29, Feb.

L. S. Hicks, "Basic Amplifier for a Wire Recorder," *Radio News*, pp. 44-45, 169, Feb.

L. B. Hust, "Build Your Own Magnetic Tape Recorder," *Radio News*, pp. 39-42, 167, Feb.

H. Gunka and W. Lippert, "Arrangement for Note Location on Magnetophone Tape," *Funk U. Ton*, vol. 2, pp. 125-134, Mar.

R. E. Zenner and R. B. Vaile Jr., "Two-Channel Two-Way Drive Magnetic Tape Recorder," *Audio Engng.*, pp. 11-15, Apr.

J. S. Boyers, "Factors Affecting Frequency Response and Distortion in Magnetic Recording," *Audio Engng.*, pp. 18-19, 46-47, May.

G. S. Carter and R. Koontz, "Test Characteristics of Recording Wire," *Tele-Tech*, pp. 38-40, 74-75, May.

A. E. Javitz, "Magnetic Recording Media as Components in Product Design," *Elec. Mfg.*, pp. 82-87, 139-141, May.

F. Cicco, "Wire Recording," *Radio Tech. Dig. France*, pp. 175-177, June.

C. Oliveres, "Magnetic Tape Recording," *Radio Tech. Dig. France*, pp. 178-180, 259-260, June.

R. F. Bigwood, "Applications of Magnetic Recording in Network Broadcasting," *Audio Engng.*, pp. 31-33, 38, 40, July.

R. S. O'Brien, "The Edisport—A Spotting Device for Magnetic Tape Editing," *Audio Engng.*, pp. 11-13, 46, July.

M. J. L. Pullings, "Sound Recording as Applied to Broadcasting," *BBC. Quart.*, pp. 108-121, July.

A. A. McKenzie, "Stereophonic Sound," *Electronics*, pp. 88-89, Aug.

H. Lindsay and M. Stolaroff, "Magnetic Tape Recorder of Broadcast Quality," *Audio Engng.*, pp. 13-16, Oct.

R. H. Ranger, "Performance Features of New Magnetic Tape Recorder," *Tele-Tech*, pp. 40-42, 64-65, 72, Oct.

R. Baruch, "High Fidelity Tape Recording," *Communications*, pp. 16-17, 32-33, 37, Nov.

G. L. Dimmick and S. W. Johnson, "Optimum High Frequency Bias in Magnetic Recording," *Jour. Soc. Mot. Pic. Eng.*, pp. 489-499, Nov.

E. Masterson, "35mm Magnetic Recording System," *Jour. Soc. Mot. Pic. Eng.*, pp. 481-488, Nov.

D. O'Dea, "Magnetic Recording for the Technician," *Jour. Soc. Mot. Pic. Eng.*, pp. 468-480, Nov.

S. J. Begun, "Magnetic Field Distribution of a Ring Recording Head," *Audio Engng.*, pp. 11-13, 39, Dec.

A. Montani, "The Mechanism of the Supersonic Bias in Magnetic Recording," *A.I.E.E. Tech. Paper* 49-54, Dec.

R. H. Ranger, "New Tape Techniques," *FM & TV*, pp. 40-41, Dec.

B. Vinzelberg, "The Printing Effect in Tapes of Magnetophone Films," *Funk U. Ton*, pp. 633-639, Dec.

C. F. West and J. E. deTurk, "A Digital Computer for Scientific Applications," *Proc. I.R.E.*, pp. 1452-1460, Dec.

R. Herr, B. F. Murphey and W. W. Wetzel, "Some Distinctive Properties of Magnetic Recording Media," *Jour. Soc. Mot. Pic. Eng.*, pp. 77-87, Jan., pp. 87-88.

B. F. Murphey and H. K. Smith, "Head Alignment with Visible Magnetic Tracks," *Audio Engng.*, pp. 12-13, 38-39, Jan.

C. S. Thompson, "Application of Experimental Test Procedures and Methods of Analysis of Results to Research Problems in Magnetic Recording," *A.I.E.E. Tech. Paper* 49-107, Jan.

Th. Wroblewski, "Design Considerations for Magnetic Wire Recording," *Sylvania Technologist*, pp. 6-11, Jan.

"Wire Recorder Techniques," *Electronics*, pp. 160, 162, Jan.

F. Enkel, "Industrial Method of Measuring Variations in the Velocity of Magnetophone Tapes," *Funk U. Ton*, pp. 104-106, Feb.

A. Springer, "Advances in the Field of Magnetic Sound Recording," *Frequenz*, pp. 38-47, Feb.

I. L. Cooter, "Magnetic Fields Surrounding Recording Wires," *Elec. Engng.*, p. 433, Mar.

J. W. Gratian, "Noise in Magnetic Recording Systems as Influenced by the Characteristics of Bias and Erase Signals," *Jour. Acoust. Soc. Amer.*, pp. 74-81, Mar.

M. N. Olson, "Multiple Tape Recording," *FM & TV*, pp. 30, 32, Mar.

B. Vinzelberg, "The Dynamic of the Magnetophone," *Elektrotechnik, Berlin*, pp. 79-80, Mar.

"A New Professional Tape Recorder," *Tele-Tech*, pp. 34-35, 64, Mar.

M. Camras, "A Stereophonic Magnetic Recorder," *Proc. I.R.E.*, pp. 442-447, Apr.

W. Marsh, "Tape Recorder Time Clock Control," *Communications*, pp. 24, 34-35, Apr.

W. E. Stewart, "New Portable Tape Recorder Performs with Studio Quality," *Tele-Tech*, pp. 40-41, 50-51, Apr.

"Measurement Procedures for Magnetic Recording," *Audio Engng.*, pp. 19, 41-45, Apr.

"Mass Production Tape Recording," *Audio Engng.*, pp. 21, 47, Apr.

"Making Magnetic Recordings Visible," *Audio Engng.*, p. 23, Apr.

M. Camras, "Graphical Analysis of Linear Magnetic Recording Using High Frequency Excitation," *Proc. I.R.E.*, pp. 569-573, May.

O. B. Gunby, "Portable Magnetic Recording System," *Jour. Soc. Mot. Pic. Eng.*, pp. 613-618, June.

N. M. Haynes, "Magnetic Tape and Head Alignment Nomenclature," *Audio Engng.*, pp. 22-23, June.

S. W. Johnson, "Factors Affecting Spurious Printing in Magnetic Tapes," *Jour. Soc. Mot. Pic. Eng.*, pp. 619-628, June.

R. Marchant, "Duplicating Tape Recordings," *Electronics*, pp. 72-76, June.

W. A. Mueller and G. R. Groves, "Magnetic Recording in the Motion Picture Studio," *Jour. Soc. Mot. Pic. Eng.*, pp. 605-612, June.

R. Marchant, "Tape Characteristics for Audio Quality," *Tele-Tech*, pp. 30-33, 56-57, July.

"RMA Standards on Magnetic Recording," *REC* 131-133, July 1949, REC 134, August, Engng. Dept. R.M.A.

R. Herr, "Magnetic Tape Erasure by Permanent Magnets," *Audio Engng.*, pp. 14-16, 29-30, Aug.

M. J. Stolaroff, "Low-Cost Precision Magnet Recorder for Professional Use," *Audio Engng.*, pp. 17-18, 30-31, Aug.

"Magnetic Tape Recorder," *Engineer (London)*, pp. 198-199, Aug.

J. G. Frayne and H. Wolfe, "Magnetic Recording in Motion Picture Techniques," *Jour. Soc. Mot. Pic. Eng.*, pp. 217-235, Sept.

M. Alixant, "Magnetic Recording," *Radio Tech. Dig. France*, pp. 259-291, 294-301, Oct.

L. A. Fishoff, "New Type of Magnetic Recorder," *Radio Tech. Dig. France*, pp. 291-294, Oct.

L. C. Holmes, "Techniques for Improved Magnetic Recording," *Elec. Engng.*, pp. 836-841, Oct.

D. Roe, "Magnetic Recording Technique," *Wireless World*, pp. 362-364, Oct.

R. Herr, "Duplication of Magnetic Tape Recordings by Contact Printing," *Tele-Tech*, pp. 28-30, 57, Nov.

A. Jorysz, "Portable Tape Units," *FM & TV*, pp. 24, 30, Nov.

M. Camras and R. Herr, "Duplicating Magnetic Tape by Contact Printing," *Electronics*, pp. 78-83, Dec.

S. J. Begun, *Magnetic Recording*, Murray Hill Books Inc., N. Y.

J. G. Frayne and H. Wolfe, *Elements of Sound Recording*, J. Wiley and Sons, N. Y.

W. Guckenburgh, "Relations Between Ring Head and Magnetic Tape in Reproduction," *Funk U. Ton*, pp. 24-33, Jan.

"New Audio Trends," *Electronics*, pp. 68-70, Jan.

F. Grammelsdorff and W. Guckenburgh, "Ways for Immediate Frequency Correction of the Magnetic Response in the Reproducing Head Circuit," *Funk U. Ton*, vol. 4, pp. 66-75, Feb.

A. E. Javitz, "Magnetic Recording Systems Product Design," *Elec. Mfg.*, pp. 74-81, 186, 188, 190, 192, 194, 196, 198, 200, 202 and 204, Feb.

E. J. Middleton, "Magnetic Recording and its Application in the South African Broadcasting Corporation," *Trans. S. Afr. Inst. Elec. Eng.*, pp. 41-52, Feb.

W. Pauly, "Studio Tape Recorder," *FM & TV*, pp. 25-26, Feb.

R. E. Zenner, "Magnetic Recording of Meter Data," *Audio Engng.*, pp. 16-17, 33, Feb.

I. L. Cooter, "Pulse Packing in Magnetic Recording Wire," *U.S. Bureau Stds. J. Res.*, pp. 163-172, Feb.

P. E. Axon, "Overall Frequency Characteristic in Magnetic Recording," *B. B. C. Quart.*, pp. 1-8, Spring.

P. E. Axon, "Overall Frequency Characteristic in Magnetic Recording," *B. B. C. Quart.*, pp. 46-53, Spring.

G. R. Crane, J. G. Frayne and E. W. Tempelin, "Supplementary Magnetic Facilities for Photographic Sound Systems," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 315-327, Mar.

A. W. Friend, "Adjustments for Obtaining Optimum Performance in Magnetic Recording," *RCA Review*, pp. 38-54, Mar.

R. H. Ranger, "Sprocketless Synchronous Magnetic Tape," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 328-336, Mar.

M. Rettinger, "Magnetic Recording in Motion Pictures," *Audio Engng.*, pp. 9-12, 32-35, Mar., pp. 18-20, 42-43, Apr.

R. Oerding, "The Problem of Noise in Magnetic Tapes," *Funk U. Ton*, pp. 199-200, Apr.

C. P. Smith, "A New Technique for Reducing Distortion in Sound Recording," *Audio Engng.*, p. 28, Apr.

"Recorder Specifications," *Tele-Tech*, pp. 34-36, Apr.

"Tape vs. Disc Recording Trends," *Tele-Tech*, p. 63, April.

M. Camras, "Magnetic Sound on 8mm Film," *Tele-Tech*, pp. 25-27, May.

D. G. C. Hare and W. D. Fling, "Picture-Synchronous Magnetic Tape Recording," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 554-566, May.

J. Tall, "The Art of Tape Recording," *Audio Engng.*, pp. 13, 31-35, May, pp. 20-22, 43-45, June, pp. 22-23, 39-40, July 1950; pp. 16-18, 29-31, Aug. 1950; pp. 15, 42-45, Sept.

T. A. Hildebrand, "A Magnetic Tape Eraser," *Television Engng.*, p. 21, June.

C. A. Hissrich and A. Davis, "Phase Shift Method of Measuring Flutter," *Audio Engng.*, pp. 15-17, 38, July.

W. T. Selsted, "Synchronous Recording on 1/4-inch Magnetic Tape," *Jour. Soc. Mot. Pic. & Tel. Eng.*, p. 279, Sept.

H. W. Lindsay, "Precision Magnetic Tape Recorder for High-Fidelity Professional Use," *Elec. Mfg.*, pp. 135-139, Oct.

M. Rettinger, "A Magnetic Record-Reproduce Head," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 377-390, Oct.

- P. H. Werner, "Test on Magnetic Tapes Designed for a Running Speed of 15 inches per second," *Tech. Mitt. Schweiz. T. U. T. Verw.*, vol. 28, pp. 382-388, Oct.
- J. Blakesley, "Performance Plus Economy Tape Recorder," *Audio Engng.*, pp. 20, 47-48, Nov.
- K. B. Boothe, "Use of Magnetic Tape Recording in Telemetry," *Instruments*, pp. 1186-1188, Nov.
- F. Gallet, "Magnetic Recording of Sound," *Onde Elect.*, pp. 449-457, Nov.
- P. E. Green, "Magnetic Tape Recording for Very Low Frequency Phenomena," *Rev. Sci. Inst.*, pp. 893-895, Nov.
- L. B. Hust, "A Two-Channel Magnetic Recording Amplifier," *Radio and Tel.*, pp. 45-47, Nov.
- O. K. Kolb, "Magnetic-Sound-Film Developments in Great Britain," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 496-508, Nov.
- B. S. Lee, "Effects of Delayed Speech Feedback," *Jour. Acoust. Soc. Amer.*, pp. 824-826, Nov.
- K. M. Sano, "Synchronization of Tape and Film," *Tech. Wetenschappelijk Tijdschrift*, pp. 282-284, Dec.
- K. H. R. Weber, "Analysis of a Spectrum of Very Low Frequencies by Means of Magnetic Tone-Frequency Equipment," *Funk U. Ton*, pp. 619-627, Dec.
- F. D. Daniel and P. E. Axon, "Accidental Printing in Magnetic Recording," *BBC Quart.*, pp. 241-256, Winter 1950/1951.
- 1951
- E. S. Peterson, "The Automatic Time Announcer," *The Automatic Elec. Tech. J.*, pp. 148-153, Jan.
- D. C. Yarnes, "New Editing Machine for Professional Tape Recordings," *Tele-Tech*, pp. 32-33, 58-59, Jan.
- W. Puhlmann, "On the Magnetic Processes in Sound Tapes and Magnetic Heads," *Funk u. Ton*, pp. 65-75; Feb.
- K. E. Zenger, "Magnetic Recording with A.C. Bias," *Proc. I.R.E.*, pp. 141-146, Feb.
- G. R. Crane, J. G. Frayne and E. W. Templin, "A Professional Magnetic Recording System for Use with 35-, 17 1/2- and 16mm Films," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 295-309, discussion p. 309, Mar.
- H. G. Eidson, "Tricks in Tape Recording," *Television Engng.*, pp. 14, 16, 28-29, Mar.
- H. G. M. Spratt, "Magnetic Recording Tape," *Wireless World*, pp. 88-91, Mar. 1951, pp. 149-151, Apr.
- R. Herr, "Mixed Ferrites for Recording Heads," *Electronics*, pp. 124-125, Apr.
- M. Rettinger, "A.C. Magnetic Erase Heads," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 407-410, Apr.
- W. E. Stewart, "New Professional Tape Recorder," *Audio Engng.*, pp. 21-23, 36-37, Apr.
- M. Ullner, "A German Magnetic Sound Recording System in Motion Pictures," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 411-422, Apr.
- R. Biehl, "On the True Frequency Response in Recording and Reproducing Magnetic Tapes," *Z. j. angew. Physik*, pp. 161-165, May
- R. Oerding, "The Recording Process in Magnetic Tape Recording," *Funk u. Ton*, pp. 262-270, May 1951, pp. 297-299, June
- D. C. Yarnes, "An Editing Machine for Magnetic Tape Recording," *Broadcast News*, pp. 66-69, May
- M. Alixant, "Magnetic Recording," *Radio Tech. Dig. France*, pp. 147-161, June
- G. Lewin, "Special Techniques in Magnetic Recording for Motion Picture Production," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 653-663, June
- G. Lewin, "Synchronous 1/4-inch Magnetic Tape for Motion Picture Production," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 664-671, June
- D. R. Andrews, "Broadcast Tape Speed Control," *Electronics*, pp. 120-123, July
- J. A. Larsen, "Improved Kodachrome Sound Quality with Supersonic Bias Technique," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 60-62, July
- R. W. Lowden, "Recording on Tape," *Wireless World*, pp. 283-285, July
- J. R. Montgomery, "Tape Transport Theory and Speed Control," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 63-68, July
- O. W. Muckenhirn, "Recording Demagnetization in Magnetic Tape Recording," *Proc. I.R.E.*, pp. 891-897, Aug.
- R. L. Wallace Jr., "The Reproduction of Magnetically Recorded Signals," *Bell Syst. Tech. Jour.*, pp. 1145-1173, Oct.
- P. H. Werner, "A New Method for Measurement of the Speed of Magnetic Tapes," *Tech. Mitt. Schweiz. T. & T. Verw.*, pp. 390-392, Oct
- R. Lucia, "Tape Recorder Remote Control," *Audio Engng.*, pp. 76-77, Nov.
- P. Hemardinger, "The Magnetic Tape and its Applications," *Electricité*, pp. 298-304, Dec.
- R. P. Ledbetter, "A Tape Editing and Duplicating Machine," *Audio Engng.*, pp. 18-20, 44-45, Dec.
- E. E. Masterson, F. L. Putzrath and H. E. Roys, "Magnetic Sound on 16mm Edge-Coated Film," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 559-566, Dec.
- C. G. McProud, "The Interview Amplifier," *Audio Engng.*, pp. 13-15, 36-40, Dec.
- F. Duchateau, "Magnetic Sound Recording," *HF Brussels*, pp. 303-312
- C. J. LeBel, "Fundamentals of Magnetic Recording," *Audio Devices, Inc.*, New York.
- M. Camras, "New Magnetic Recording Head," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 61-66, Jan.
- A. L. Holcomb, "Film-Spool Drive with Torque Motors," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 28-35, Jan.
- D. J. White and W. H. Stutz, "Compacting Field-Type Magnetic Film Sound Recorder," *Elec. Mfg.*, pp. 100-103, Jan.
- "Super-Speed Tape Puller for Computer Memory," *Electronics*, pp. 222, 224, Jan.
- C. C. Davis, J. G. Frayne and E. W. Templin, "Multi-Channel Magnetic Film Recording and Reproducing Unit," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 105-118, Feb.
- L. L. Ryder and B. H. Denney, "Magnetic Sound Track Placement," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 119-136, Feb.
- K. Schwarz, "Explanation of the Inner Mechanism of Magnetic Recording," *Frequenz*, pp. 37-44, Feb.
- E. N. Dingley Jr., "An Instrument for Measuring the Time Displacement Error of Recorders," *Trans. I.R.E.*, PGA-6, pp. 37-40, Mar.
- R. Endall, "Magnetic Tape Data-Recording Systems," *Radio News*, pp. 3-6, 30, Mar.
- H. L. Daniels, "Boundary Displacement Magnetic Recording," *Electronics*, pp. 116-120, Apr.
- C. E. Hittle, "Twin-Drum Film Drive Filter System for Magnetic Recorder-Reproducer," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 323-328, Apr.
- M. Rettinger, "Azimuth Film Calibration," *Audio Engng.*, pp. 15-16, Apr.
- K. Singer and H. C. Ward, "A Technical Solution of Magnetic Recording Cost Reduction," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 329-340, Apr.
- G. A. delValle and F. L. Putzrath, "Optical-Magnetic Sound 16mm Projector," *Jour. Soc. Mot. & Tel. Eng.*, pp. 312-322, Apr.
- H. Vollmer, "Measurement of Pitch Fluctuations," *Funk u. Ton*, vol. 6, pp. 169-175, Apr.
- P. E. Axon, "An Investigation Into the Mechanism of Magnetic Tape Recording," *Proc. Instn. Elec. Eng.*, pt. III, pp. 109-124, discussion pp. 124-126, May.
- K. B. Boothe, "Tape Recording for Telemetry and Data Analysis," *Tele-Tech*, pp. 44-46, 116, May 1952, pp. 56-57, 90, 92, 94, June.
- E. N. Dingley Jr., "Measuring the Stability of Sonic Recorders," *Trans. I.R.E.*, pp. 20-23, May.
- F. Grammelsdorf and W. Guckenburg, "Classification of Magnetic Tapes," *Funk u. Ton*, pp. 247-257, May 1952, pp. 311-323, June.
- O. K. Kolb, "Some Aspects of Magnetic Recording," *Jour. Brit. I.R.E.*, pp. 307-316, May.
- J. Z. Menard, "A New Recording Medium for Transcribed Message Services," *Bell Syst. Tech. Jour.*, pp. 530-540, May.
- J. F. Sweeney, "A Method For Measuring the Changes Introduced in Recorded Time Intervals by a Recorder-Reproducer," *Trans. I.R.E.*, PGA-7, pp. 24-29, May.
- L. J. Wiggins, "Magnetic Print-Through. Its Measurement and Reduction," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 410-414, May.
- C. G. McProud, "Universal Amplifier for Magnetic Tape Recorder," *Audio Engng.*, pp. 17-19, May 1952, pp. 24-25, 34-36, June 1952, pp. 22-23, 41-42, July.
- J. Tall, "Using Hearing Characteristics in Tape Editing," *Audio Engng.*, pp. 15-16, 50-51, May.
- P. H. Werner, "The Mechanical Properties of Various Magnetic Recording Tapes and Their Influence on the Quality of the Recording," *Tech. Mitt. Schweiz. T. & T. Verw.*, pp. 173-180, May.
- F. Gallet, "Progress and Trends in High-Fidelity Magnetic Recording," *Onde elec.*, pp. 295-301, July.
- J. Greiner, "Experiments on the Anisotropy of the Magnetization of Magnetic Recorder Tapes," *Nachr. Tech.*, pp. 197-201, July.
- C. E. Hittle, "Automatic Torque Controller for Torque Motors," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 28-31, July.
- A. Lovichi and J. P. Deriaud, "Crystalline Structure and Electro-Acoustic Properties of Magnetic tapes," *Onde elec.*, pp. 275-288, July.
- D. W. Aldous, "Duplicating Tape Recordings," *Wireless World*, p. 320, Aug.
- R. Herr and R. A. von Behren, "Selective Erasure of Magnetic Tape Crosstalk," *Electronics*, pp. 114-115, Aug.
- N. LeEVERS, "Magnetic Recording in Film Production," *Jour. Brit. I.R.E.*, pp. 421-427, Aug.
- H. Schiesser and O. Schmidbauer, "Standardization of Magnetic Recording Technique," *Frequenz*, pp. 222-229, Aug.
- W. S. Latham, "Limitations of Magnetic Tape," *Audio Engng.*, pp. 19-20, 68-69, Sept.
- A. H. Mankin, "Interference Effects in Magnetic Recording Heads," *Trans. I.R.E.*, PGA-9, pp. 16-21, Sept.
- "Endless-Loop Magazine Speeds Tape Handling," *Tele-Tech*, pp. 199, 212, Sept.
- "Tape Duplicating Equipment," *Electronics*, pp. 220, 224, 228, Sept.
- A. D. Booth, "On Two Problems in Potential Theory and Their Application to the Design of Magnetic Recording Heads for Digital Computers," *Brit. Jour. Appl. Physics*, pp. 307-308, Oct.
- R. S. Houston, "Echo Effects with a Tape Recorder," *Audio Engng.*, pp. 52-54, Oct.
- O. Schmidbauer, "The Field of the Harmonically Magnetized Tape," *Frequenz*, pp. 281-290, Oct. 1952, pp. 319-324, Nov.
- K. Singer and J. L. Pettus, "A Building-Block Approach to Magnetic Recording Equipment Design," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 319-334, Oct.
- L. Guntner, Jr., "Engineering Considerations in the Use of Magnetic Recording Heads," *Trans. I.R.E.*, pp. 9-13, Nov.
- K. E. Gondesens, "U.E.R. Conference on Magnetic Sound Recording," *Hamburg*, Nov. 18-22, 1952, *Tech. Hausmitt. Nordw.Dtsch. Rdfunks.*, p. 230, Nov.
- O. W. Muckenhirn, "Magnetic Tape Recording Demagnetization for Simple Cyclic Excitations," *Trans. I.R.E.*, PGA-10, pp. 25-27, Nov.
- W. K. Westmijze, "Gap-Length Formula in Magnetic Recording," *Acustica*, p. 292, no. 6.
- 1953
- J. D. Bick, "Methods of Measuring Surface Induction of Magnetic Tape," *Jour. Audio Engng. Soc.*, pp. 4-9, Jan.
- O. C. Bixler, "A Practical Binaural Recording System," *Trans. I.R.E.*, pp. 14-22, Jan.
- D. H. Carpenter, "Universal Recorder-Reproducer," *Radio News*, pp. 14-17, Jan.
- A. A. Gerlach, "F.M. Recording in Guided Missiles," *Electronics*, pp. 108-111, Jan.
- O. Read, "A New Pocket Wire Recorder," *Jour. Audio Engng. Soc.*, pp. 22-26, Jan.
- E. Schmidt, "A New Professional Magnetic Recording Tape," *Jour. Audio Engng. Soc.*, pp. 10-16, Jan.
- D. A. Snel, "Magnetic Sound-Recording Equipment," *Philips tech. Rev.*, pp. 181-190, Jan.
- H. J. Tafel, "Print-Through Effect in Magnetic Tape for Sound Recording," *Fernmeldetech. Z.*, pp. 17-24, Jan.
- R. J. Tinkham, "Binaural or Stereophonic," *Audio Engng.*, pp. 22-24, 57, Jan.
- M. Camras, "Magnetic Recording," *Convention record I.R.E.*, pt. 3-Audio, pp. 16-25, Mar.
- J. M. Carter, "Designing a Tape Recorder," *Wireless World*, pp. 108-110, Mar., pp. 164-166; Apr. 1953, pp. 229-232; May.
- R. Cruel, "Report on Ferrite Magnetic Heads," *Tech. Hausmitt. Nordw.Dtsch. Rdfunks.*, pp. 60-65, Mar.
- F. Lennert, "Equalization of Magnetic Tape Recorders for Audio and Instrumentation applications," *Trans. I.R.E.*, pp. 20-25, Mar.
- L. B. Luck and W. W. Wetzel, "Performance of High-Output Magnetic Tape," *Electronics*, pp. 131-133, Mar.
- H. N. Morris, "Measuring Magnetic Tape Recorder Flutter," *Electronics*, pp. 230, 234, 238, 242, 246, 250 and 254, Mar.
- H. W. Nordyke, "Magnetic Tape Recording Techniques and Performance," *Joint A.I.E.E.-I.R.E.-A.C.M. Computer Conference*, pp. 90-95, Mar.
- D. E. Wiegand, "A Flux-Sensitive Head for Magnetic Recording Playback" (abstract) *Convention record I.R.E.*, pt. 3-Audio, p. 43, Mar.
- T. R. Dedell, "Magnetic Sound Tracks for Processed 16mm Motion Picture Film," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 491-499, discussion pp. 409-500, Apr.
- B. L. Kaspian, A. Roberts Jr., H. Robbins and R. L. Powers, "Magnetic Striping Techniques and Characteristics," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 470-482, discussion pp. 483-484, Apr.
- A. H. Persoon, "Magnetic Striping of Photographic Film by the Laminating Process," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 485-488, discussion pp. 489-490, Apr.
- E. Schmidt, "Commercial Experiences with Magna-Stripe," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 463-467, discussion pp. 468-469, Apr.
- E. Schmidt and E. W. Frank, "Manufacture of Magnetic Recording Materials," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 453-462, Apr.
- W. T. Selsted, "A Low-Noise F.M. Recording System," *Jour. Audio Engng. Soc.*, pp. 213-215, Apr.
- R. H. Snyder, "History and Development of Stereophonic Sound Recording," *Jour. Audio Engng. Soc.*, pp. 176-179; Apr.
- D. E. Taylor, "A Recorder Bias and Audio Level Measuring Instrument," *Electronics*, pp. 230, 232 and 234, Apr.
- G. A. delValle and L. W. Ferber, "Notes on Wear of Magnetic Heads," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 501-504, discussion pp. 505-506, Apr.
- W. K. Westmijze, "Studies on Magnetic Recording," *Philips Res. Rep.*, pp. 148-157, April; pp. 161-183, June 1953; pp. 245-269, Aug. 1953; and pp. 343-366, Oct.
- "Standards on Sound Recording and Reproducing: Methods of Measurement of Noise, 1953," *Proc. I.R.E.*, pp. 508-512, Apr.
- E. D. Daniel and P. E. Axon, "The Reproduction of Signals Recorded on Magnetic Tape," *Proc. Instn. Elec. Eng.*, pp. 157-167, May.
- E. D. Daniel, "The Influence of Some Head and Tape Constants on the Signal Recorded on a Magnetic Tape," *Proc. Instn. Elec. Eng.*, pp. 168-175, May.
- O. W. Meyer, "The Recording Process in Magnetic Recording," *Bild u. Ton*, pp. 134-138, May.
- A. M. Springer, "Apparatus for the Continuous Very-Long-Period Recording of Sound," *Fernmeldetech. Z.*, pp. 218-219, May.
- J. Racker, "Magnetic Transient Recorder for Radiation Pulses," *Tele-Tech*, pp. 92-94, June.
- H. Reed, "Top Tape Recording Performance," *Audio Engng.*, pp. 26-27, 59, June.
- "New Computer Tape Mechanism," *Tele-Tech*, p. 151, June.
- "Improved Tape Head," *Tele-Tech*, p. 169, June.
- "NARTB Recording and Reproducing Standards," June. The National Association of Radio

and Television Broadcasters.

R. C. Curtis, "Noise Test for Magnetic Recording Media," *Electronics*, pp. 216, 218, 220 and 222, July.

D. Eadie, "EDVAC Drum Memory Phase System of Magnetic Recording," *Elec. Engng.*, pp. 590-595, July.

O. Kornei, "Structure and Performance of Magnetic Transducer Heads," *Jour. Audio Engng. Soc.*, pp. 225-231, July.

A. H. Mankin, "Improving Response of Magnetic Playback Heads," *Electronics*, pp. 150-151, July.

K. Singer and M. Rettinger, "Correction of Frequency Response Variations Caused by Magnetic Head Wear," *Audio Engng.*, pp. 29, 46-48, July.

K. Singer and M. Rettinger, "Multiple-Track Magnetic Heads," *Audio Engng.*, pp. 34, 51-52, Aug.

M. Camras, "Magnetic Recording," *Tele-Tech*, pp. 81-83, 122, 124-125, 127-128, 132, 134 and 136, Sept.

H. Fletcher, "Stereophonic Recording and Reproducing System," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 355-361, discussion 361-363, pt. 2 of Sept.

J. G. Frayne and E. W. Templin, "Stereophonic Recording and Reproducing Equipment," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 395-405, discussion pp. 405-407, pt. 2 of Sept.

R. L. Miller, "Visual Monitor for Magnetic Tape," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 309-312, discussion pp. 313-315, pt. 1 of Sept.

"Portable Magnetic Recorder," *Wireless World*, pp. 409-411, Sept.

C. Andrews and H. R. Quick, "Magnetic Memory Inventory," *Elec. Mfg.*, pp. 124-129, Oct.

I. L. Auerbach, "Fast-Acting Digital Memory Systems," *Elec. Mfg.*, pp. 100-107, Oct.

R. F. Blinzler, "Complete Remote Control of an Ampex 300," *Audio Engng.*, pp. 23, 116-117, Oct.

E. S. Kinney, "Magnetic Tape Drive," *Machine Design*, pp. 219-221, Oct.

J. H. McGuigan, "Combined Reading and Writing on a Magnetic Drum," *Proc. I.R.E.*, pp. 1438-1444, Oct.

S. M. Oster and L. D. Wilson, "An Electromagnetic Clutch for High Accelerations," *Proc. I.R.E.*, pp. 1453-1455, Oct.

A. M. Skellett, L. E. Leveridge and J. W. Gratian, "Electron-beam Head for Magnetic Tape Playback," *Electronics*, pp. 168-171, Oct.

"Four-track Film For Stereo Sound," *Electronics*, pp. 200, 202, Oct.

K. W. Goff, "The Development of a Variable Time Delay," *Proc. I.R.E.*, pp. 1578-1584, Nov.

D. G. O'Connor, "Magnetic Drum Design," *Electronics*, p. 196, Nov.

L. R. Peaslee, "Tape-Controlled Machines," *Elec. Mfg.*, pp. 102-108, Nov.

J. A. Rodgers, "Projector for 16mm Optical and Magnetic Sound," *Jour. Soc. Mot. Pic. & Tel. Eng.*, pp. 642-665, Nov.

P. Whitney, "Expanding the Tape Recorder's Usefulness," *Tele-Tech*, pp. 78-79, Nov.

R. E. Zenner, "The Status of Magnetic Recording," *Elec. Engng.*, pp. 951-954, Nov.

D. W. Thomasson, "Wow Measurements," *Wireless World*, pp. 579-580, Dec.

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