

110th Technical Conference and Equipment Exhibit

October 3-8

Queen Elizabeth Hotel, Montreal



VILLE DE MONTRÉAL
CABINET DU MAIRE

MESSAGE DU MAIRE DE MONTRÉAL

On behalf of the citizens of Montréal and their municipal administration I extend a most cordial welcome to the delegates and their wives who will be attending the 110th International Convention of the Society of Motion Picture and Television Engineers in the Canadian metropolis.

Tous et chacun recevront la plus cordiale bienvenue et l'hospitalité la plus chaleureuse à Montréal.

I hope that you can all take the opportunity to tour our city and enjoy its natural and architectural attractions. Among other things, I am sure you will enjoy visiting our unique underground shopping galleries and riding on our comfortable rubber-tired Métro rapid transit system.

Il est malheureux que notre exposition permanente Terre des Hommes "Man and His World" soit fermée au temps où votre congrès s'ouvre mais nous serons très heureux d'organiser une visite de l'emplacement; les files d'Expo 67.

I wish you a successful convention and many happy memories of Montréal when you return to your homes.

Le maire de Montréal

Papers Program

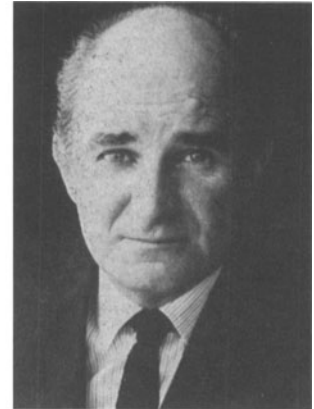
The Montreal Program has been well organized by the Program Chairman and the Symposium Chairman, assisted by the Topic Chairmen. The Program listing follows, by title, author and session of each paper. The international aspects of motion pictures and television have been stressed.

The Program Chairman, **Leslie H. Holmes**, Canadian Broadcasting Corp., Ottawa, was assisted by Deputy Program Chairman **Arnold C. Schieman**, National Film Board, Montreal. His Associate Program Chairmen include **Maurice Doucet**, Television; **Geoffrey R. Oliver**, Motion Pictures; **Réal Michaud**, Television and Film in Education; **Dr. Hans Chr. Wohlrab**, International Motion-Picture Papers; and **C. B. B. Wood**, International Television Papers. The Topic Chairmen are **Michael W. S. Barlow**, Television Systems; **Raymond W. Payne**, Laboratory Practices; **Laval Fortier** and **Jean Roy**, Motion-Picture Systems; **Roger J. Beaudry**, Sound Recording; **Alex R. MacGregor**, Television and Film in Education; **Donal L. Clayton**, Photo-Instrumentation; and **William C. Shaw**, Projection and Theater Design.

Symposium Chairman, **Stanley F. Quinn**, Canadian Broadcasting Corp., Montreal, was assisted by Deputy Chairman **Walter F. Bantin**. His Associate Chairmen were **Gerald G. Graham**, Perspective Session; **Alex R. MacGregor**, Utilization Session; **Lloyd C.**



Jean Drapeau
Montreal's Mayor



Gérard Pelletier
Guest Speaker

Harrop, Technical Session 1; **Eugene Prévost**, Technical Session 2; and **J. Lambert**, Publicity. The Symposium Committee consists of **Sandy Day**, **Paul Martell**, **Bruce M. Read** and **Jean L. Vandette**.

The Arrangements Committee was chaired by **Harold Greenberg**, Bellevue Pathé Ltd., Montreal with **Ken Hand** as Hotel Arrangements Chairman.

Advance Registration

Please register early for the SMPTE Conference to save time when arriving at the Hotel. Advance registration material has been sent to all members. Badges and tickets will be waiting for advance registrants at the Registration Desk. Findlay Quinn is in charge.

Registration Rates

Member: Weekly.....	\$35.00	Ladies: Weekly.....	\$10.00
Daily.....	10.00	Daily.....	4.00
Nonmember: Weekly..	50.00	Get-Together	
Daily... ..	15.00	Luncheon.....	6.00
		Banquet.....	15.00

Daily registration for the Symposium is \$10.00 per day for members and nonmembers.

Package registrations that include weekly registration, Get-Together Luncheon and Banquet, are available as follows:

Members..	\$56.00	Nonmembers..	\$71.00	Ladies..	\$31.00
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Equipment Exhibit

The 110th Conference will feature an Equipment Exhibit displaying the latest developments in professional motion-picture and television equipment. Featured will be cameras and accessories, and equipment for lighting, television, laboratories, projection and sound.

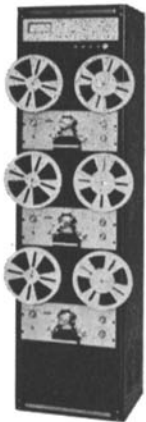
The Exhibit opens officially on Monday, October 4, at 5 p.m. with the Exhibitor's Open House. The ribbon-cutting ceremony will open the Exhibit, with Exhibit Chairman **Jean L. Vandette** and Conference Vice-President **Harry Teitelbaum** doing the honors. All Conference registrants and holders of exhibit passes will be invited to this opening event.

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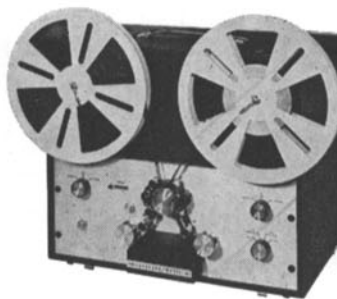
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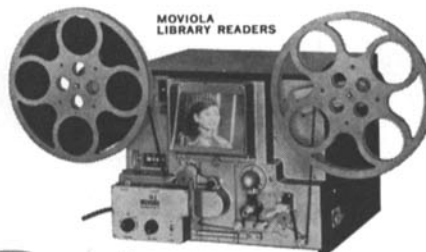
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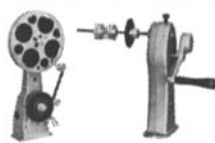


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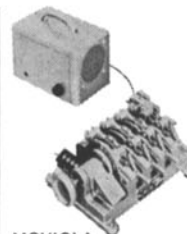


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This ultra-compact/lightweight 16mm camera is unequalled for handling ease and versatility. Ready-to-film, it weighs just over 8 lbs. with 100 ft. daylight spool, 3 lenses, motor and matte box! Famed throughout the world for its professional capabilities—hand-held, on tripod, in the studio and on location.

ARRIFLEX 16M/B

One camera, choice of three Quick-change (200-400-1200 ft.) magazines, makes the 16M/B ideal for the tough, long run jobs, the hand-held grab shots and anything in-between. Standard equipment includes a 60-cycle signal generator and automatic clapstick for location sound filming. Its broad capabilities are practically unlimited.

ARRIFLEX 16BL

A proven location sound camera—quiet, compact and lightweight—supremely capable in every area of professional sound filming. Operates DOUBLE SYSTEM and/or SINGLE SYSTEM—convertible by means of the ARRI Recording Module, without the use of special tools. The 16BL is also available with APEC—the truly professional built-in, thru-the-lens Arri Precision Exposure Control system.

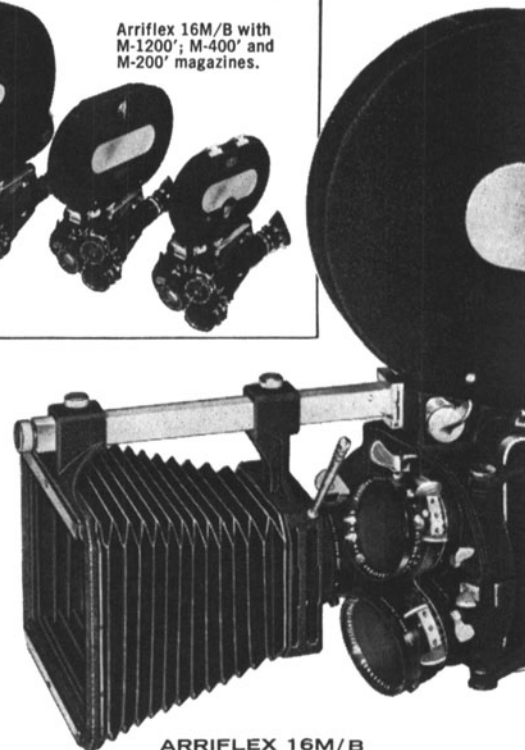
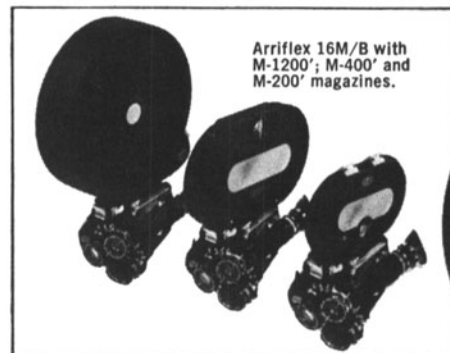
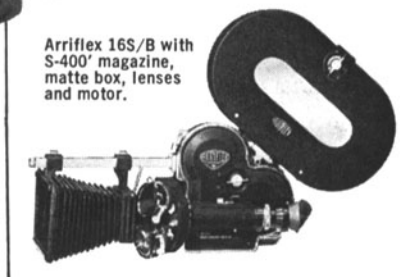
ARRIFLEX 35 2C/B

Filmmakers depend upon the Arriflex 35 2C/B series to deliver theatre-quality footage reliably and economically—on location or sound stage. Arriflex 35 cameras are first choice of professionals wherever motion pictures are used to teach, document, influence, entertain or sell.

Arriflex has all the

Which camera is best for the assignment? Arriflex's renowned line of 16's and 35's makes the choice easy. Because there's an ideally suited model for every kind of job—to do it better, faster and at less cost.

Arriflex has all the 'answers' for theatrical, TV, sports, news, documentary and research filming. There's no question about it. That's why Arriflex is the preferred motion picture equipment with professionals all over the world. Join the ranks.



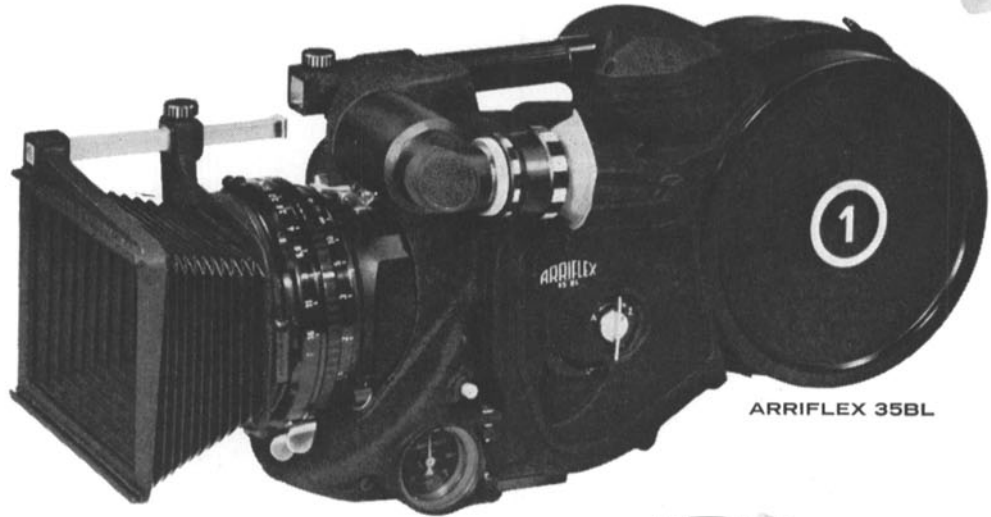
ARRIFLEX 35BL

This new, SILENT, hand-held light-weight 35mm represent a major technological achievement in motion picture camera design. As an all-purpose production camera, the 35BL provides the filmmaker with new efficiency, mobility and creative freedom. It is destined to be the leading 35mm production camera of the 1970's. Orders accepted now for 1972 delivery.

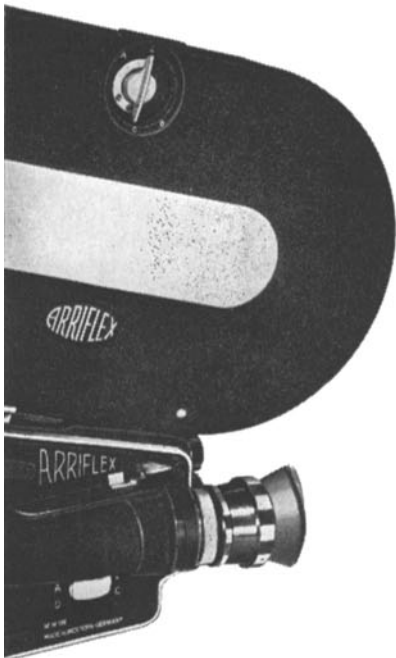
ARRIFLEX 35 2C/B



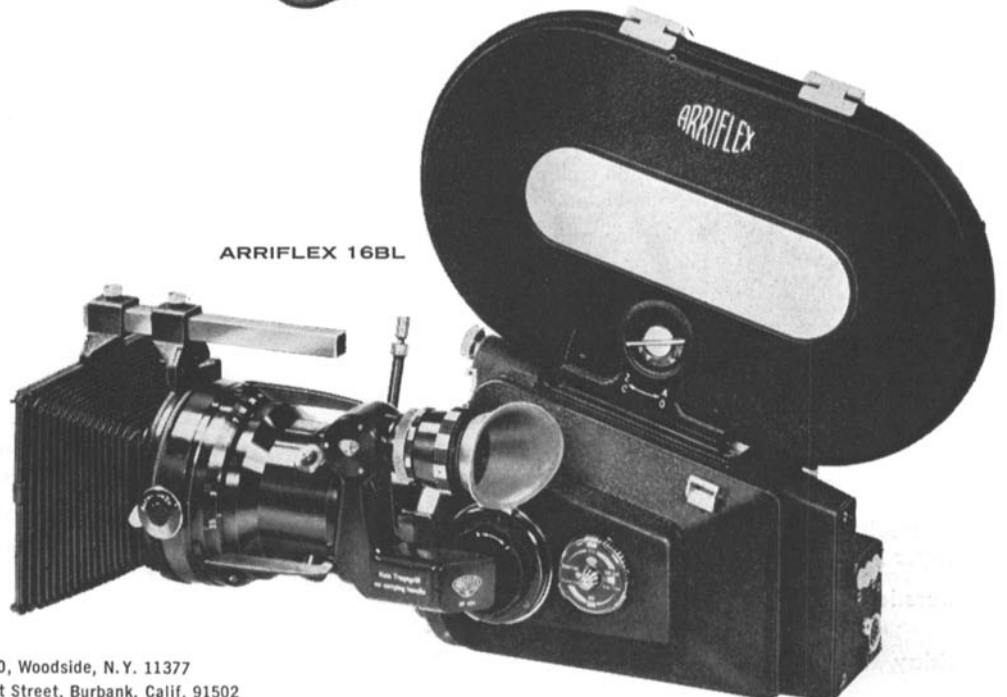
answers!



ARRIFLEX 35BL



ARRIFLEX 16BL



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On Tuesday afternoon, there will be a special session of Equipment Papers and Demonstrations. Exhibitors will present brief descriptions or demonstrations of new products.

The winner of the SMPTE Exhibit Award will be announced on Thursday, October 7, just prior to the Exhibit closing.

Conference registrants will be admitted to the Exhibit without charge upon showing the registration badge. Nonregistrants will be admitted upon presentation of the Exhibit Pass, available for sale at \$1.00 each at the Registration Desk.

A partial list of exhibitors follows the listing of papers. The complete directory will be published in the Final Program to be distributed at the Conference.

Hotel Reservations

The reservation card that has been sent to all members with their advance registration form should be used to reserve accommodations at The Queen Elizabeth Hotel. If you have not received your hotel reservation card, write to The Queen Elizabeth Hotel, 900 Dorchester Blvd., West Montreal 101, P.Q., Canada. Reservations should be made as early as possible. Be sure to mention the 110th SMPTE Conference when making reservations, since SMPTE participants will be receiving special rates. The rates are as follows:

- Singles.....\$24.00 + 8% tax
- Twins or doubles.....\$29.00 + 8% tax

Suite accommodations are available as follows: two-room suite (parlour and bedroom) from \$58.00 to \$110.00; three-room suite (parlour and two bedrooms)

from \$100 to \$165; Executive suite (parlour, two bedrooms and dining room) from \$170.00 to \$245.00.

The Hilton family plan is available. There is no charge for children in the same room as parents, no matter what age.

Get-Together Luncheon

The Get-Together Luncheon, SMPTE's traditional opening social event, is scheduled for Monday afternoon, October 4. The guest speaker will be Gérard Pelletier, the Canadian Secretary of State. The presentation of awards will take place. The Chairman for the Luncheon is Harvey Greenberg.

Coffee Club

The Coffee Club at the 110th Conference will be sponsored by the Philip A. Hunt Chemical Corp. Coffee Club hours will be from 9:00 to 11:00 a.m., Monday to Thursday.

Cocktail Party, Banquet and Dance

The SMPTE Banquet will be held Wednesday evening, October 6, at the Queen Elizabeth Hotel. A good dinner and an evening of entertainment are planned. Companies wishing to reserve tables should write to SMPTE, c/o Banquet Chairman, 9 East 41st St., New York, NY 10017. Payment of \$15.00 per ticket (10 to a table) should accompany each request. Banquet Chairman for the 110th Conference is Murray Briskin. Entertainment for the Banquet is being provided by the Canadian Broadcasting Corp. The Cocktail Party is being sponsored by Canadian Kodak Sales Ltd.

Message Center

A message center will be set up in the registration area for those attending to receive messages. The number for the center is (514) 878-2689. Incoming calls will be received from noon to 5:00 p.m. on Sunday, and from 9:00 a.m. to 5:00 p.m. on Monday through Friday.

Committee Meetings

Most SMPTE Engineering Committees will meet during the 110th Conference. Committee members will receive notice in the mail of the dates and times of the meetings. Editorial activities during the Conference will include meetings of the Publications Advisory Committee, the Board of Editors and the Editorial Luncheon.

Ladies Program

There is a full week of special activities for the ladies attending the 110th Conference. Events tentatively scheduled as of this printing include the Get-Together Luncheon and an afternoon Japanese tea, with entertainment, on Monday; a bus tour with lunch at Helene de Champlain and an evening wine and cheese party on Tuesday; luncheon and a fur show at the hotel plus the SMPTE cocktail party, banquet and dance on Wednesday; and a day-long trip to a reconstructed Canadiana Village on Thursday. Dunstan Russell is Chairman.

Association of Cinema Laboratories

The ACL will meet at The Queen Elizabeth Hotel on Tuesday and Wednesday, October 5 and 6. On

Program Outline

Sunday	12:00-5:00	Registration
Monday	8:00	Registration
	9:00	Laboratory Practices I Television Systems I
	12:00	Get-Together Luncheon Awards Presentation
	3:00	Laboratory Practices II Television Systems II Motion-Picture Systems
Tuesday	9:00	Projection and Theater Design Film for Television
	2:00	Equipment Papers and Demonstrations
	8:15	Wine and Cheese Party
Wednesday	9:00	Television Systems III Photo-Instrumentation I
	2:00	Photo-Instrumentation II Television Systems IV
	7:45	Cocktail Party, Banquet and Dance
Symposium on Video Cartridge, Cassette and Disc Player Systems		
Thursday	9:00	Perspective Session
	2:00	Technical Session I
Friday	9:00	Utilization Session
	2:00	Technical Session II

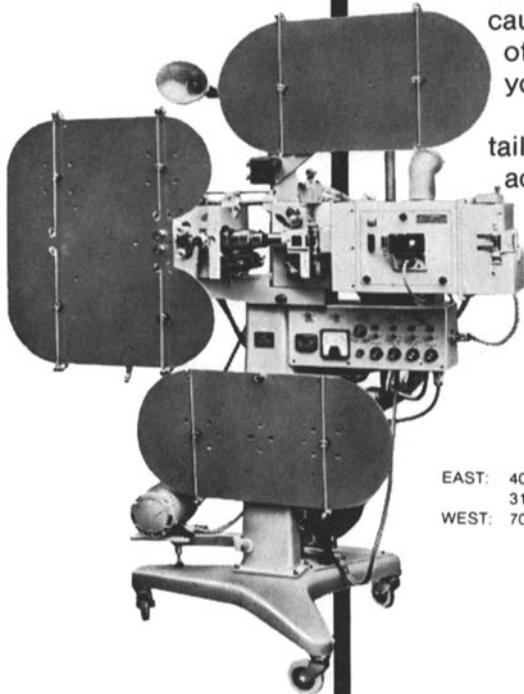
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Tuesday there will be a Board of Directors meeting at 4:00 p.m. followed by a dinner. On Wednesday there will be a meeting of all laboratory members followed by the Lab Equipment and Techniques Forum. SMPTE members are invited to attend the Forum which will begin at about 9:45 a.m. Because of the ACL meeting on Wednesday, the SMPTE Equipment Papers and Demonstrations session, normally held Wednesday morning, will be held Tuesday afternoon.

Synopses Booklet

There will be available at the 110th Conference copies of a Synopses Booklet containing two-page synopses of all the papers given during the week. This is given to weekly registrants, and sold to daily registrants for \$5.00. Copies are on sale from Society Headquarters as well, during and after Conference week, at the same price.

It is possible that the synopses booklet will be available at the Conference in French as well as in English.

Advance Program

This Program is the scheduling of papers within the sessions. It is as accurate and complete as possible. Before the Conference, however, papers may be removed or rearranged into other sessions. The sessions are firm. Questions about specific papers or sessions should be addressed to Society Headquarters, Att: 110th Conference—Elaine Itzkowitz, (212) 867-5410; Program Chairman Leslie H. Holmes, Canadian Broadcasting Head Office, P. O. Box 8478, Ottawa, Ont., K1G 3J5, Canada, (613) 731-3111, ext. 535; or Symposium Chairman Stanley F. Quinn, Canadian Broadcasting Corp. Development Dept., 7925 Cote St. Luc Rd., Montreal 267, P.Q., Canada, (514) 488-2551, ext. 359. The Final Program, listing titles of papers, will be available ten days before the Conference from Society Headquarters. The synopses booklet will be available at the Conference, and later from Society Headquarters.

SUNDAY — October 3

12:00–5:00 REGISTRATION

MONDAY MORNING — October 4

8:00 REGISTRATION

9:30 LABORATORY PRACTICES I
(Concurrent with Television Systems I)

Automatic Break Alarm and Digital Film Tachometer
Alan K. Fraser, Treise Engineering, Northridge, Calif., and
W. D. Carter, Carter Equipment Co., Inglewood, Calif.

A Frame-Counting Cuer
Andrew Balint, Bell & Howell Co., Chicago

Photometric Printing Machine Control
D. Hardon, Bellevue-Pathé Ltd., Toronto, and *W. D. Carter*,
Carter Equipment Co., Inglewood, Calif.

A New Reversal Print Film for Low Contrast Originals
J. D. Clifford, *R. W. Bauer* and *B. R. Hagenbuch*, Eastman
Kodak Co., Photographic Technology Div., Rochester

**Continuous Optical Reduction Printing and the Standards
of Picture Sizes**
Wolf Grau, Deutscher Normenausschuss, Berlin

**Design Considerations for a Super-8 Continuous Optical
Reduction Printer**
William W. Morris, Peterson Enterprises, Inc., Glenview,
Ill.

Type 903 — An Improved Gevachrome Print Film
Roger Huybrechts, Agfa-Gevaert, Antwerp, Belgium

9:00 TELEVISION SYSTEMS I
(Concurrent with Laboratory Practices I)

Two-Inch Return-Beam Vidicon Performance Evaluation
B. P. Miller, *G. Beck* and *J. Barletta*, RCA Astro-Electronics
Div., Princeton, N.J.

The Image Isocon for Nonbroadcast Purposes
R. D. Nixon and *W. E. Turk*, English Electric Valve, Essex,
England

A Color TV Receiver for CATV
A. Muma, Electrohome Ltd., Kitchener, Ont.

Medical Applications of Television
Bruce M. Read, H. K. Davis and Assoc., Ltd., Don Mills,
Ont.

**Some Aspects of Switched Subscriber Visual Telecommuni-
cations Systems**
J. L. Pearce, Bell-Northern Research, Ottawa, Ont.

**An On-Demand Educational Television Program Retrieval
System**
C. A. Billowes, Bell-Northern Research, Ottawa, and *M.*
Gailitis, Ontario Institute for Studies in Education,
Toronto, Ont.

**The Design and Performance of a Third Generation Qua-
druplex Videotape Recorder**
M. Glen Rose, Ampex Corp., Redwood City, Calif.

Cobalt Modified High-Coercivity Magnetic Tape
H. Lee Marks, 3M Co., St. Paul, Minn.

Cobaloy — A New Magnetic Particle
R. J. Deffeyes, Graham Magnetics, Graham, Tx., and *C. E.*
Johnson, Jr., Consulting Physicist, Weston, Mass.