

98th Semiannual Technical Conference Montreal — October 31 – November 5, 1965

IN WHAT WAS ONE OF the most well-balanced and the most internationally oriented as well as best attended Conference in Society history, the 98th SMPTE Technical Conference—the second Canadian Conference in recent years—boasted a program that satisfied members in practically every branch of motion-picture and television activity. Gerald G. Graham of Canada's Film Board was Program Chairman.

The Conference was honored by the presence of André Debric, who, with his wife, flew to Montreal to celebrate the tenth anniversary of his elevation to Honorary Membership in the Society. Monsieur Debric is one of the true patriarchal figures and pioneers of the film industry with 732 patents in 14 countries.

The Montreal Conference was a success in many ways. With the efforts of Mike Barlow, television received the greatest emphasis ever at an SMPTE Conference. More than 40% of the technical papers were on subjects dealing with the various aspects of television.

International representation in the Papers Program went beyond even the most optimistic expectations. More than 25% of the total number of papers were from countries other than the USA and Canada, with papers presented from Australia, Nigeria, Russia, England, Japan, Czechoslovakia, Brazil, Germany, Italy, France, The Netherlands, and The UAR. The Conference Program was bilingual, being printed in French and English.

As an indication of the increased stress on education by the Society, three sessions on education, presented both in English and French, highlighted the Conference. It was also appropriate that the SMPTE Education Committee, meeting during Conference week at the Queen

Elizabeth, voted to establish a scholarship program for undergraduate study in the photographic sciences, reported in the November *Journal*, p. 1032.

Subjects absent from recent Conference Programs found themselves on the Program of the 98th. Sound and projection received high priority on the Program, and cinema design attracted participation from such sources as Russia, Czechoslovakia, France and the USA.

In all, the Program of the 98th Conference marked an important milestone in the progress of the Society as the SMPTE prepares for its second half-century of activity.

The success of the equipment exhibit was evident. The largest number of booths at a SMPTE Conference (89) demonstrated equipment on all aspects of motion-picture and television technology, with much equipment from Canadian suppliers and manufacturers. Buttressed by the highest attendance in recent Exhibit history, the 98th SMPTE Equipment Exhibit was altogether successful. It was estimated that more than \$1.5 million worth of equipment was on display.

Total attendance for the Conference exceeded 3000.

Get-Together Luncheon—Awards Presentation

The 98th Semiannual SMPTE Technical Conference and Equipment Exhibit was formally opened Monday, November 1, at the Get-Together Luncheon. President Stifle presided and welcomed everyone attending the Conference. Luncheon Chairman Charles Frenette, speaking in French, also welcomed those at the Luncheon. More than 400 attended this opening event.

President Stifle's welcoming remarks included specific mention of those responsible for putting on the Conference at Montreal; they are cited throughout this report of the Conference. Mr. Stifle also introduced the present Officers of the Society and André Debric, an Honorary Member of the Society since 1955, who was an honored guest at the Luncheon. The Officers and Governors elected for terms beginning in 1966 have already been announced (November *Journal*, p. 1032).

President Stifle's report of Society affairs and activities is excerpted and published below. After this report, he conducted the ceremony of presentation of Society Awards; these are reported in later pages of this issue of the *Journal*.

Completing the Luncheon program was the speech by guest speaker Claude A. Giroux, abstracted and given below after President Stifle's report.

Remarks of President Stifle

"... in this great and beautiful city of Montreal, in this great nation of Canada, this meeting not only dramatizes the close relationship that exists between our members in Canada and in the United States, but between all our members all over the world.

"... I do want to emphasize the heavy contributions that our Canadian members have made in the advancement of the sciences and technologies with which we deal. I do not hesitate to say that these advancements have been much greater than the proportion of Canadian members in our Society would suggest.

"A word or two about the status and stature of our Society, ... we have increased our services to our members and to the industries that employ them. Our membership is 6,500 strong, world-wide and, after lagging for a few years, is showing



Exhibit Chairman H. Patrick Dickey, Conference Vice-President Kenneth M. Mason, Program Chairman Gerald G. Graham and Arrangements Chairman R. S. (Tex) Rekert at the Conference. (Staff Photo)



Film Pioneer André Debric, Film Board Chairman Guy Roberge, Q.C., Guest Luncheon Speaker Claude A. Giroux and President Stifle discuss the Conference at the Reception prior to the Get-Together Luncheon.

a steady growth—it is between 5 and 10% ahead of this time last year.

“We have a strong governing body of 10 dedicated officers and 15 dedicated governors . . . This body is being strengthened by the addition of five new vice-presidents just elected to start serving in 1966. . . the Affairs Vice-Presidents for Motion Pictures, for Instrumentation and High-Speed Photography, for Television, for Photo-Science, and for Education. I believe that this gives us the breadth of five societies, with the strength and efficiency of one. They have a partisan interest in seeing that their interest areas, or responsibility centers, if you wish, receive their share of attention in all our activities—in our *Journal* and other publications, in our Technical Conferences, in our Sections, and in our engineering activity.

“The recent highly successful one-day meeting in Rochester, N. Y. under the combined sponsorship of the Rochester, Toronto, and Detroit Sections, pointed up one area in which the Affairs Vice Presidents can be of inestimable value. They can help local Sections, or groups of Sections, to hold symposia in depth on



Luncheon Speaker Claude A. Giroux and Luncheon Chairman Charles Frenette.

subjects of deep interest to members in any geographic area. With the enlargement of these local meetings we may reach the goal, expressed by many over the years, that we hold only one general Technical Conference annually. In achieving this aim, we would also be strengthening our Society where we need it most—at the grass roots—in our local Sections.

“Since our Spring Meeting in Los Angeles, the color explosion has come upon us, triggered by the headlong rush of television to push dull monochrome into the background. This presages the practical demise of black-and-white from our theater and television screens, thus fulfilling in the last half of the Soaring Sixties the promise that was aborted in the Faltering Fifties. No one should shed salty tears over this belated event, even though it does put great pressure upon most of us in the jobs that bring our livelihood, as well as in all areas of our Society activity. This calls for special action on the part of all our Affairs Vice-Presidents. It would be my hope that these Vice-Presidents, working with our Sections, would plan at least one symposium each in 1966 to explore in depth matters of bread-and-butter interest to all our members. Color alone in its various aspects is a possible subject for each.



Michael Z. Wysotsky, Victor G. Komar, Saul Jeffee, Gordon S. Craig, President Stifle, and Dr. Deane R. White. (Staff Photo)

“ . . . Lastly, before coming to the Awards part of our program, I wish to point to two very recent events that dramatize our international stature. Our second delegation to the Soviet Union, under the U.S.-U.S.S.R. Cultural Exchanges Agreement, has just returned. As you perhaps know, the U.S. Department of State asked the SMPTE to sponsor the motion-picture delegation for the second time. As a member of the first delegation with Deane White, Frank Capra, and the late Bill Gephart, I know our new delegation, consisting of Herb Farmer, Saul Jeffee, Sid Solow, and Konstantin Pestrecov, shared our interesting experiences.

“And here I must stop to pay tribute to our dear friend, Bill Gephart, who died just two short months ago. Being with him constantly for 22 days on our Russian Journey, the other three of us came to appreciate more than ever his true greatness, as a man of great moral strength and compassion for his fellow man.

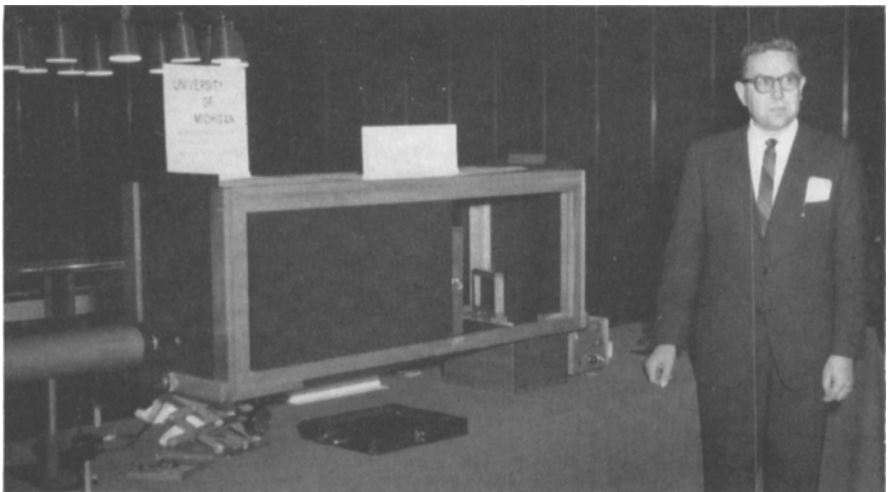
“The other event of great international importance was our participation in the

work of the International Standards Organization in Milan, Italy, during the past month. The SMPTE holds the prime position in the entire world in the standardization of motion-picture films and related practices. Our delegation this year was our strongest ever. (See the complete report, “International Standardization,” on earlier pages of this issue of the *Journal*.)

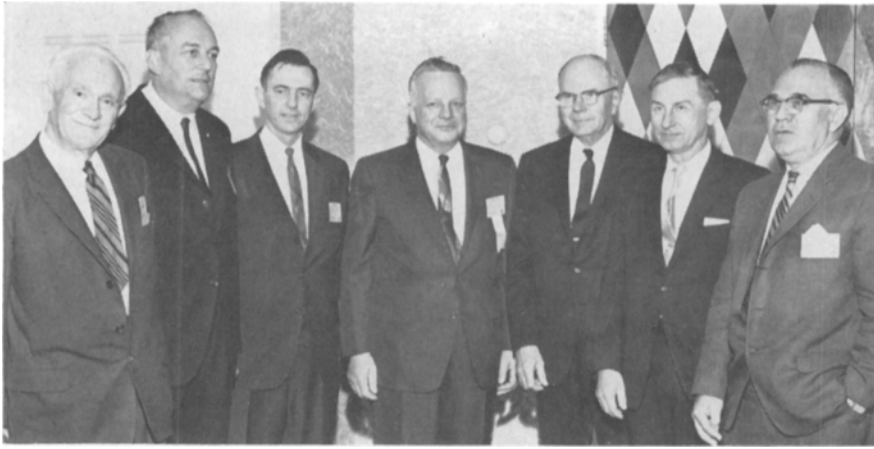
Remarks of Luncheon Speaker Claude A. Giroux

Claude A. Giroux, President, Director, and Chief Executive Officer of Allied Artists Pictures Corp., was the guest speaker at the Conference Get-Together Luncheon. A few excerpts from his speech follow.

“When preparing this address, I was reminded of the controversial speech made at your last Conference where, I understand, lack of technical progress in the industry and the antiquated methods preserved in the studios [were given attention]. Let me tell you at the start . . . I have little tech-



One of the special exhibits on view for those attending the Conference was this demonstration of Three-Dimensional Hologram Photography by Bernard Hildebrand, University of Michigan Institute of Science and Technology, Ann Arbor, Mich. This exhibit was located in the Queen Elizabeth Foyer and was on view in conjunction with the paper “Hologram Visual Displays” presented at the Conference. A related paper was presented at the 97th SMPTE Conference at Los Angeles and published in the *Journal* (Requirements for a Wavefront Reconstruction Television Facsimile System, SMPTE Jour., Oct. 1965, pp. 893-896). (Staff Photo)



Members receiving awards at the Monday afternoon Awards Presentation, posing with President Stifle, (center), were, left to right, John I. Crabtree, Honorary Member Award; Alfred Christian Schroeder, David Sarnoff Gold Medal Award; Charles W. Wyckoff, E. I. du Pont Gold Medal Award; Dr. Deane R. White, Progress Medal Award; Otto H. Schade, Sr., Journal Award; and Dr. Henry N. Kozaowski, Herbert T. Kalmus Gold Medal Award.

nical knowledge. I've always wondered why engineers use a tape measure on the set. But it never really bothered me greatly since it is standard equipment for the casting director too. My main interest has always been about the content of a film. . . .

"I am grateful for having been invited here on this important occasion. . . Canada is looking forward to becoming an international movie center. To build in the shadow of a giant is almost impossible; yet this is the challenge Canada has undertaken. This country has made surprising strides in the past. It is now successfully competing internationally in automobile manufacturing, and . . . the motionpicture industry will be even more of a challenge because it is a creative challenge. The new Canadian industry will have to find Canadians to write Canadian stories. To attract south-of-the-border talent is not creating a permanent Canadian image. To build a culture you must build with your own people. Canada is also coming in at a time when television will not be able to continue without taking its responsibility for the content of its programs.

"We live in an epoch of almost inconceivable physical courage. All over the world men and women are hurtling around outer and inner space performing calisthenics up there for the benefit of science, and the benefit of the television camera. People of sedate character spend their weekends away from the office skydiving . . . while everywhere we find the intrepid photographers immortalizing this by-now-routine romance with violent death which goes on around us by the minute. . . .

"Moral courage, on the other hand, is too often lacking. It is in this sphere that the arts are called upon to exert their most vital function—that of asking questions eloquently. Answers are not their strength since answers are dogmatic, and dogma is the antithesis of art. But asking questions is a job the arts do admirably—and is there not a way of asking a question which suggests what the answer should be? — To be or not to be?

"Of all the arts Cinema is certainly the one with the widest diffusion, and therefore the one with the heaviest burden of public responsibility. Owing to the amount of money involved, however, it is the



President Stifle (third from left, bottom) stands with several members elevated to the grade of Fellow at the Conference, including bottom row, left to right, Kenneth B. Curtis, Raymond W. Payne, Col. Samuel Robert Todd, Robert G. Neuhauser, Gordon H. Tubbs, Col. R. S. Rekert; top row, left to right, Allan F. Hilliard, Richard J. Goldberg, Jack P. Hall, Harold W. Kinzle, John J. Kowalak and John A. Pistor.

most exposed to idealistic corruption. . . .

"Lest it be thought that I am leveling an attack on Hollywood, I hasten to say that in spite of its comparative affluence, Hollywood has achieved some remarkable results, results which are not merely technical—natural for a Society which is changing, perhaps too rapidly for the comfort of its enemies, and also its friends—but results which are artistic as well. . . .

"What has all this to do with the cinema? In that the cinema is a reflection of life as it is lived, as it should be lived, it has everything to do with the cinema.

"Seated in a New York movie house watching Stanley Kubrick's film *Dr. Strangelove: or How I Learned to Stop Worrying and Love the Bomb*, Peter Ustinov relates that he was party to the following reaction by a member of the audience sitting right behind him. The film starts with a shot of a dangerous-looking aircraft high above the clouds, and the commentator reminds the audience in the tones of the most savage irony, that at every second of every day and night there is always a hydrogen bomb in the air capable of destroying a continent or two. The reaction of this solid neighbor to his female companion was, 'Makes you feel safe, don't it?' Upon hearing this, I am told, Mr. Ustinov went into shock. A little later in the film, when a colonel in the obvious throes of a nervous breakdown, to put it mildly, begins to ventilate his theories about Communists polluting the waterways in order to poison the population of the United States, the female companion suddenly said, 'I knew it. Haven't I said all along that that's what the Commies were up to?' After that one, Mr. Ustinov had to be carried out of the theatre; he was violently sick.

"Here is a depressing and classic example of how a couple of spectators—of petrified tendencies, as opposed to flexible tendencies—can sidestep a bulldozer of irony and convert even a deliriously subversive film into a patriotic tradition. People like the comfort of communal thinking. It is not only a question of keeping up with the Joneses but in keeping in tune with the Joneses. It is fascinating to see that a social comment of far-reaching satire very rarely succeeds in making the communal impact which had been hoped for. . . .

"Our function and the function of the cinema, ladies and gentlemen, is to entertain. But by entertainment I don't mean anything more than that we must acquire the technique for keeping our audience awake. Apart from that, we need to be flexible, as opposed to petrified. We must learn to accept nothing that we are told; believe nothing without examining it minutely. We must not be afraid of making ourselves confounded nuisances if the opportunity presents itself. . . .

"It is heartening to see the changes which have taken place in our societies and the part our industry plays in those changes.

"Being in Canada now, and feeling for Canada, I know you will join me in wishing them good luck and success in their new enterprise.

"The magic creative opportunity is here. It is up to them to respond to the challenge. The world can only gain by it. It's a magic challenge."

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Transportation and Messages Chairman Bernard McAllister, Arrangements Chairman Tex Rekert and Hospitality Chairman Harold Green. (Staff Photo)

Society Awards

Formal presentation of awards and honors took place at the Get-Together Luncheon on Monday, November 1, instead of at a special awards session. According to President Stifle, the change was made so that awards presentations could take place with the prominence and attention they deserve. The names, biographies and citations of the awards winners were contained in a brochure distributed at the Luncheon. The awards and citations were:

Progress Medal Award

Dr. Deane Rowland White, Associate Director of Research Division of Photo Products Department, E. I. du Pont de Nemours & Company, Inc., was awarded the 1965 SMPTE Progress Medal Award.

The progress Medal is the premier award of the Society and is awarded to an individual recognized by the Society for his outstanding technical contributions to the progress of engineering phases of the motion-picture and television industries. The award Committee Chairman is Robert M. Corbin of Eastman Kodak Co.

Dr. White was born in Berea, Ohio, and received his Ph.D in Physics from Columbia University in 1927. He is internationally recognized for his long and distinguished career in and contributions to photographic science. Noted for his guidance and leadership in the development of industry-accepted standards, Dr. White has long provided the necessary impetus to the overall, voluntary standardization so vital to today's complex and far-reaching photographic industry.

Dr. White assumed the office of Engineering Vice-President of SMPTE in 1960 and today still holds this significant position. Dr. White has long been Chairman of the American Standards Association's Committee on Standards for Motion Pictures, PH22, which the Society sponsors. He is also widely recognized for his professional leadership in the area of international standardization for motion-picture engineering. In 1964 he was awarded the Progress medal of the Photographic Society of America for his contributions as a physicist in both fundamental and applied research, as well as for his unique accomplishments in photographic standardization.

Dr. White's professional contributions to photography include his early work at du Pont on the drying of processed films, and

the development of improved sensitometers, densitometers, and developing machines. Under his able direction, the du Pont Research Laboratory markedly increased its contributions to fundamental and applied research. One outcome of this research was the development of Cronar polyester film base.

In the course of his professional and SMPTE activity, Dr. White has traveled extensively: Stockholm, Sweden, in 1955; Harrogate, England, in 1958; Garmisch-Partenkirchen, Germany, in 1961. In October of this year, he headed the USA delegation to ISO/TC 36 in Milan, Italy. In October 1963, Dr. White was leader of the U.S. Delegation to the Soviet Union to study that country's motion-picture industry.

Dr. White is a Fellow of SMPTE, a Fellow of the Society of Photographic Scientists and Engineers, a member of the Optical Society for America and a member of the American Chemical Society. In 1963, he received the Centennial Medal Award of the School of Engineering and Applied Science, Columbia University.

His activities have included Chairmanship of ISO/TC 42 in 1955, 1958 and 1961; member of USA Committee, ISO/TC 36; a member of SMPTE Engineering Committees since 1932; member of SMPTE Standards Committee since 1945; member of ASA Board of Review, ASA Standards Council, ASA Photographic Standards Board, ASA Acoustical Standards Board, and SMPTE Board of Editors. He is the author of numerous articles in technical journals.

E. I. du Pont Gold Medal Award

Charles W. Wyckoff, Senior Scientific Specialist, Edgerton, Germeshausen & Grier, Inc., Boston, was awarded the 1965 E. I. du Pont Gold Medal Award Committee.

Mr. Wyckoff, a Fellow of the Society, attended Dartmouth College and M.I.T. and holds a degree of Bachelor of Science. This award was conferred upon Mr. Wyckoff for his outstanding contributions in the development of new techniques and equipment which have resulted in the improvement of the engineering phases of instrumentation and high-speed photography. Contributions to the field attributed to Mr. Wyckoff include the Rapatron camera, MK V1 sensitometer, XR film for both black-and-white and color, shockwave re-

ording methods, as well as many others. He has designed mobile processing labs for the Atomic Energy Commission and lunar film for NASA.

Mr. Wyckoff, during his twenty years of SMPTE membership, has always participated actively in Society affairs. He has served on the Board of Governors, the Board of Editors, the Instrumentation and High-Speed Photography Committee, and his local Boston Section. In 1963, he was General Arrangements Chairman of the 94th SMPTE Technical Conference.

Honorary Member Award

John I. Crabtree received this distinguished honor of this Society, of which he has been a member since 1922, in recognition of his many years and his manifold contributions to both the expansion of photographic science and to the growth of the Society. He was a Life Fellow prior to his elevation to Honorary Member. Mr. Crabtree was Assistant Superintendent of Research, Eastman Kodak Co., Rochester, N.Y., at the time of his retirement in 1957.

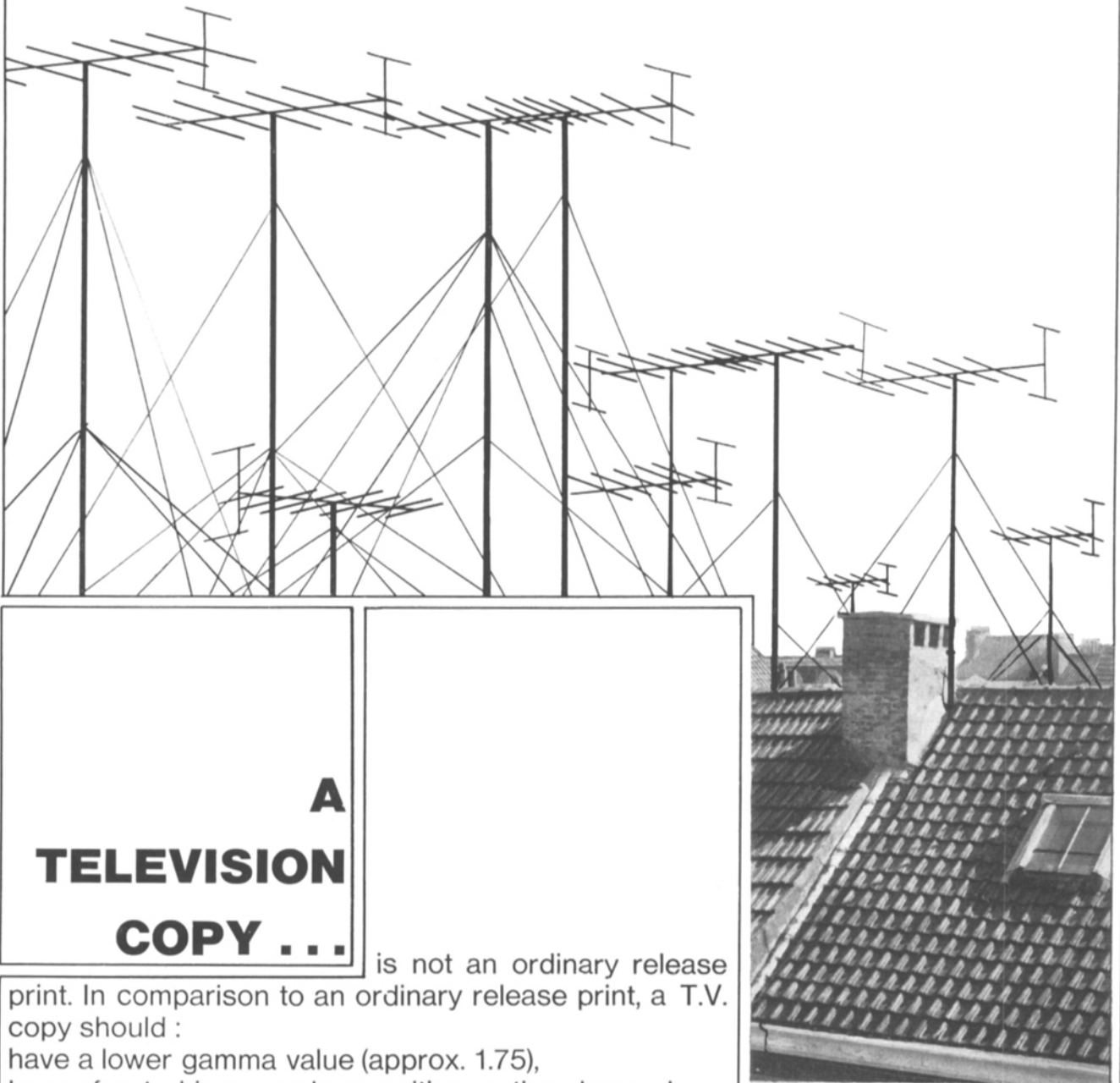
Born in Clayton-le-Moors, Lancashire, England, in 1891, he received his Bachelor of Science degree with honors and his Master of Science degree from Victoria University, the latter in 1913.

Mr. Crabtree was employed by Eastman Kodak Co. at Rochester in August 1913, working with the late Dr. C. E. Kenneth Mees. His research and that of associates under his supervision established the specialized fields of photographic chemistry and film processing. He was also a leader in the development of such photographic equipment as portable apparatus for the development of motion-picture film at high temperatures, laboratory apparatus, rapid processing equipment and pneumatic squeegees.

While Mr. Crabtree's principal scientific contributions have been in the field of photographic processing and are known around the world, his contributions to the SMPTE and to the ASA have also been extensive. An extensive Biographical Note was published in the *Journal* for February 1957, pages 78-80.

Journal Award

Otto H. Schade, Sr., Electron Tube Div., Radio Corp. of America, was the recipient of the SMPTE Journal Award, presented



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annually to the author of the most outstanding paper originally published in the *Journal* of the SMPTE during the preceding calendar year. The Journal Award Committee, T. Gentry Veal of Eastman Kodak Co., Chairman, selected Dr. Schade's paper entitled "An Evaluation of Photographic Image Quality and Resolving Power" which appeared in the February 1964 *Journal*.

Two papers were also cited with honorable mention:

"Format Factors Affecting 8mm Sound-Print Quality" by E. A. Edwards and J. S. Chandler of Eastman Kodak Co., published in the July 1964 *Journal*.

"Factors Affecting Determination of Monochrome Television Film Exposure and Speed Indexing" by Harold Wright, published in the April 1964 *Journal*.

Herbert T. Kalmus Gold Medal Award

Dr. Henry N. Kozanowski, Manager, Television Advanced Development, Broadcast & Communications Div., Radio Corp. of America, Camden, was awarded the 1965 SMPTE Herbert T. Kalmus Gold Medal Award. This award was established in 1955 in honor of the developer of the Technicolor process and recognizes outstanding achievement in color motion-pictures for theater or television use. Chairman of the Award Committee is Saul Jeffee, President of Moviellab, Inc., New York City. The citation reads:

"Some of the advanced developments in color TV for color film credited to Dr. Kozanowski include: 3-vidicon color TV equipment for 16mm and 35mm color film; completely stabilized 3-vidicon color TV film reproduction equipment; demonstration of live pickup separate luminance 4-tube color camera; completely transistorized separate luminance channel 4-vidicon color film chain using modular construction and including transistorized colorplexer and color bar generator; and many others."

David Sarnoff Gold Medal Award

Alfred Christian Schroeder, member of the Technical Staff, RCA Laboratories, Princeton, received the 1965 David Sarnoff Gold Medal Award which is given in recognition of meritorious achievement in television engineering. Chairman of the Committee was Richard E. Putman of General Electric Co., Syracuse.

The Award was conferred upon Mr. Schroeder:

"... for his many contributions to the fundamental concepts and decisions which have gone into the development and refinement of color picture tubes and of the NTSC color systems."

Fellows

Eighteen members were elevated to the grade of Fellow of the Society. This honor has been bestowed upon the eighteen individuals in recognition of their outstanding contributions to the industry and to the Society. SMPTE Past-President Reid H. Ray is Chairman of the Committee. Fellow Award Certificates were presented during the Get-Together Luncheon Awards Presentation. The new Fellows of SMPTE are:

Samuel E. Brown, Assistant Executive Director, Academy of Motion Picture Arts

and Sciences, Los Angeles. He coordinates all scientific and technical activities of the Academy's Technical branches and administers their Academy Awards voting procedures.

Gordon J. Craig, Manager, Motion Picture Div., Kodak Limited, London, England. He is a silver medallist in Photography, City and Guilds of London Institute. From 1934-1937 Mr. Craig did photographic research with Baird Television Ltd. and in 1937 he joined Kodak Ltd. Research Labs. During World War II he served as Chief Photo Officer, RAF Photo Reconnaissance Unit, 1942-45, operating in India and Burma. Mr. Craig is an Officer of the Order of the British Empire and a Fellow of the British Kinematograph, Sound, and Television Society.

Kenneth B. Curtis, a Design Engineer of Motion Picture Printing and Processing Equipment, Calvin Productions, Kansas City, is the author of four papers published in the SMPTE *Journal*—in February 1952, September 1959 and August 1961. Two of his papers were published in the August 1961 *Journal*. Mr. Curtis attended Lathrop Trade School and Kansas City Junior College.

Dr. Richard J. Goldberg, formerly Director of Research, Technicolor Corp., was Program Chairman of the 97th SMPTE Technical Conference in Los Angeles.

He received his Ph.D. in chemistry from the California Institute of Technology and did post doctoral work in chemistry at the University of Wisconsin. He has been most concerned with the field of chemical research on the dye transfer process. Dr. Goldberg resides in Sherman Oaks, Calif.

Jack P. Hall, West Coast Technical Director, DeLuxe Laboratories, Inc., Hollywood, received special commendation from the Society in 1960 for his contributions to the SMPTE publication *Control Techniques in Film Processing*. He has been active in the SMPTE Hollywood Section for the past three years, serving as a Section Manager in 1963-64 and Chairman of the Section, 1965. He was local Arrangements Chairman of the 97th Technical Conference, held in Los Angeles last spring, and is a member of the SMPTE Laboratory Practice Committee and the SMPTE Board of Governors. He was guest instructor of two USC-SMPTE Courses at the University of Southern California.

Allen F. Hilliard, Technical Information Director, Geo. W. Colburn Laboratory, Inc., Chicago, provides technical laboratory information to producers of industrial, commercial, and educational motion pictures. He also prepares and presents informational programs for professional photographic associations and societies. Mr. Hilliard's SMPTE activities have included serving as Chairman of Conference Exhibits.

Harold W. Kinzle, Vice-President of Production Services, Wilding, Inc., Chicago, is Past-Chairman of the Chicago Section of SMPTE. In his present position with Wilding, Inc., he is technical supervisor of the color and black-and-white laboratories and production department facilities and has general supervision of the personnel.

Allan M. Koerner, Assistant Director, Photographic Technology Div., Eastman Kodak Co., was affiliated with Bell Telephone Laboratories from 1928-1932; and, from 1943-1945, with the Manhattan Project. In his present position, he is responsible for the direction of development projects in photographic processes with primary emphasis on color.

Mr. Koerner received his B.S. degree in Electrical Engineering from the University of Minnesota.

John J. Kowalak, Vice-President, Moviellab, N.Y., was Program Chairman of the 96th SMPTE Technical Conference in New York and member of various SMPTE committees including the Color Committee, Lab Practice Committee, the Kalmus Award Committee and the Membership Committee of the Hollywood Section.

Mr. Kowalak joined the Research Dept. of Ansco in 1946, then transferred to Hollywood in 1950 as Technical Supervisor, Color Motion Picture Program, assigned to M-G-M, CFI and other west coast laboratories including government motion-picture facilities. In 1954 he set up the first professional color motion-picture laboratory in Mexico City.

Mr. Kowalak is a 1943 graduate of Canisius College; he was in the Navy for 2½ years. He is an associate member of the American Society of Cinematographers.

Robert G. Neuhauser, Senior Engineer, Camera Tube Development, Radio Corp. of America, Lancaster, Pa., has been involved for sixteen years with the development and application engineering of television camera tubes. He developed and promoted the methods and techniques of utilizing the vidicon camera tube in a TV camera to produce both black-and-white and color motion-picture films on television. As leader of a group of engineers, he guided the development of a product line of both image-orthicon and vidicon TV camera tubes for monochrome and color TV cameras.

Mr. Neuhauser has written or collaborated in the authorship of 23 technical publications on camera tube design, operation and performance. In addition, he is the author of chapters in three technical reference books. In 1964, he was awarded the David Sarnoff Award of the Society of Motion Picture and Television Engineers for his work in television camera tube design.

Raymond W. Payne, National Film Board, Montreal, Canada, is Chief of Laboratory Services and Senior Technical Officer under the Director of Technical Operations, performing Lab, Sound, Camera, and Engineering Service Research. Mr. Payne has served as Chairman of a subcommittee of the SMPTE Laboratory Practice Committee, and he is a member of the SMPTE Film Dimensions Committee.

John A. Pistor, Director of Motion Picture Trade Relations, Motion Picture and Education Markets Div., Eastman Kodak Co., Rochester, began his career with Eastman Kodak as a trainee in 1938. His first appointment was in the physics division of the Research Laboratories at Kodak Park. After a few months, he was transferred to the finished film department. In 1946 he began working in the motion-picture sales

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department. In 1956 Mr. Pistor took a leave of absence from Kodak to join W. J. German, Inc., in an executive capacity, returning in December 1963 as general manager of Eastman's East Coast Div., Motion Picture Products Sales Dept. In February 1965, he was appointed Sales Manager, Motion Picture and Education Markets, New York City Region, and has been in his present position since March 1965.

Mr. Pistor was graduated from Cornell University in 1938 with a B.S. degree in Administrative Engineering. He is a member of the Joint Studio-Laboratory Sound Committee, SMPTE; a member of the American Society of Cinematographers; a member of the Academy of Motion Picture Arts and Sciences and the Academy of Radio and Television Society, Inc.

Col. R. S. Rekert, Chief Purchasing Agent, National Film Board, Montreal, served with the British and Canadian Armed Forces from 1915 to 1946 and served in the European Theatre during the First and Second World Wars.

Enlisting at the age of 13, Col. Rekert resorted to private tuition and Military Schools for Academic qualifications which led to graduation as a Mechanical Engineer. In the second World War Col. Rekert was primarily concerned with proving out fighting vehicles, initiating modifications, and subsequently setting up training syllabi for all classes of military technical personnel. Since 1946 he has been with the National Film Board of Canada in the capacity of Chief Purchasing Agent. He is primarily responsible for, on behalf of National Film Board, procuring and advising on motion-picture, photographic and audio-visual equipment for all other Canadian Federal Government Branches.

Robert D. Shoberg, President, Red Lake Laboratories, Inc., Santa Clara, Calif., is a designer and manufacturer of high-speed motion-picture cameras and has developed a new concept for rotating-prism cameras. He was awarded a U.S. patent for his invention of a Photographic Enlarging Easel in June 1964. He is also a member of the Society of Photo-Optical Instrumentation Engineers (SPIE) and serves on its National Board of Governors.

Col. Samuel Robert Todd, Consulting Electrical Engineer, received his B.S. degree in Electrical Engineering, Armour Institute of Technology (now Illinois Institute of Technology), Chicago in 1913. For many years he was electrical inspector of 521 motion-picture theaters in Chicago. He is presently Consulting Engineer for design, construction, specifications, and operation of motion-picture theaters in Chicago; also, for construction, equipment specifications, and operational methods in The U.S., Canada, and The United Kingdom.

Col. Todd was a graduate of the First Signal Officers School, U.S. Army, Fort Leavenworth, Kansas and was commissioned a Captain. From 1917-1919 he served in France as Advisor to Chief of Staff, 81st Infantry Division, on all communication matters. On December 1, 1940, he was ordered to active duty and placed in charge of all Signal Engineering.

He was President of the "Electric Club of Chicago" in 1925 and elected Honorary Member of the I.A.E.I. in 1933. In 1947

Inspect every foot before it leaves your plant with the HFC High Speed Heavy Duty Inspection Projectors -- 16mm & 35mm models now available.

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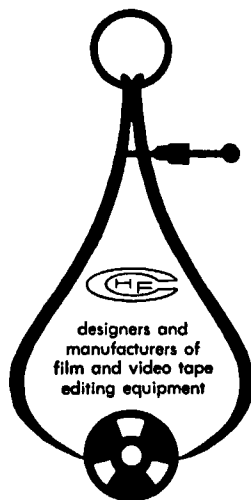
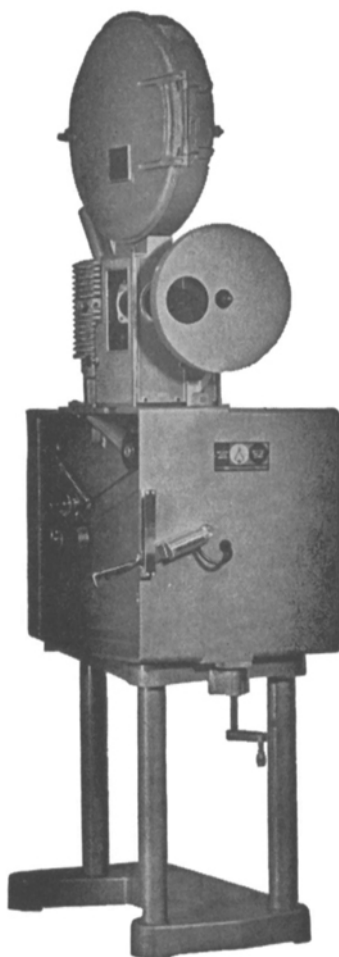
The projector is a converted front shutter Simplex with a two pin intermittent. 16mm or 35/32 film runs at a speed of 144 ft. per minute while 35mm film runs at a speed of 165 ft. per minute.

1. A variac controls the light intensity.
2. A 500 watt lamp is used for 16mm and a 1,000 watt for 35mm (a blower is used to cool the lamphouse).
3. A 2½ inch projection lens is furnished with each unit.
4. A start-stop lever controls the power to the lamp and motor.
5. The magazine and take up core takes up to 3,000 ft. of film.
6. Upper guide rollers are made to handle the film from either direction of the feed reel.
7. A free wheeling take off flange is provided in the magazine.
8. A lamp near the takeup reel permits hand inspection of the film prior to takeup.

NOUVEAU

Le projecteur contient un obturateur Simplex antérieur transformé avec deux clavettes intermittente. Les films de 16mm ou 35/32 tournent avec une vitesse de 144 pieds à la minute, tandis que les films de 35mm tournent avec une vitesse de 165 pieds à la minute.

1. Le regulateur de voltage d'intensité d'éclairage.
2. La lampe de 500 watt est nécessaire pour les films de 16mm, et de 1000 watt, pour les films de 35mm (un ventilateur est mise pour rafraichir la chambre de la lampe).
3. L'objectif de 2½ est installé.
4. La manette de mise en marche et d'arrêt controle en meme temps la lampe et le moteur.
5. La boite de films avec noyau peut contenir 3000 pieds du films.
6. La roue supérieure est construite de manière de recevoir le film dans les deux directions, nourrie par la bobine centrale.
7. Une roue est installée pour libérer rapidement le film de la boite.
8. La lampe se trouve pres de la bobine recepteuse, et donne toute facilité pour inspecter le film a main dans le projecteur.



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NUOVO

Questi proiettori sono Simplex trasformati, otturatore al fronte, meccanismo di scatto di due punte. La velocità di proiezione in 16 o 35/32mm è di 144 piedi per minuto, e in 35mm, di 165 piedi per minuto.

1. Controllo manuale della luminosità della lampada.
2. Lampada di 500 watt per 16mm e di 1000 watt per 35mm.
3. Obiettivo di proiezione di 2½".
4. Maniglia per controllo di motore e lampada di proiezione.
5. La cassetta porta pellicola puo contenere 3000 piedi.
6. I rulli superiori di guida sono costruiti per operare con film proveniente di ambedue i lati della bobina svolgitrice.
7. Disco con montatura sporgente nel magazzino.
8. Una lampadina illumina la bobina avvolgitrice, permettendo l'ispezione manuale del film prima che si avvolga nel proiettore.

NUEVO

Esta máquina es un proyector simplex convertido, obturador al frente y movimiento intermitente a doble grifa. Para 16mm o 35/32mm, la velocidad fija de proyección es de 144 pies por minuto, para 35mm es de 165 pies por minuto.

1. Un reostato controla la intensidad de la lampara de proyección.
2. Para 16mm se usa una lampara de 500 watt, y una de 1000 watt para 35mm (un chorro de aire ventila las lámparas en ambos casos).
3. Cada unidad está provista de un lente de proyección de 2 pulgadas y media.
4. Una palanca de control opera el motor y la lampara simultáneamente.
5. Capacidad de proyección: rollos de hasta 3000'.
6. Los rodillos de guía superiores operan con la película en ambas direcciones.
7. La tapa de la bobina de carga es desenroscable.
8. Una lámpara ubicada junto a la bobina de toma permite la inspección manual de la película antes que se rebobine en la bobina superior del proyector.

the "Legion of Merit" was conferred on him by the U.S. Army for outstanding communications operations in World War II. In 1949 he was the sole representative of the United States as a member of an International "Committee of Electrical Experts" from 32 nations assembled in Geneva, Switzerland, to write a new Electrical Safety Code for Constructing Factories and Industrial Plants in Europe.

Gordon H. Tubbs, Director of Education Markets Development, Motion Picture and Education Markets Div., Eastman Kodak Co., Rochester, began his career with the company in the sensitometric section of the film testing department in 1941. In March 1947, he transferred to the motion picture film department, East Coast Div., New York City. He returned to Rochester to become a member of the motion-picture film department at the Kodak Office in February 1951. In December 1963, Mr. Tubbs was appointed manager of engineering service, Southern Div., motion-picture products sales department. He has been in his present position with Kodak since March of this year.

Mr. Tubbs was graduated from the University of Rochester with a B.S. degree in chemical engineering and Pace College with a B.B.A. degree. Mr. Tubbs is a member of divers organizations: Rochester Chamber of Commerce; the Rochester Academy of Science; the American Ordnance Association and the American Science Film Association; the Society's Laboratory Practice Committee; the Rochester Chapter, SPSE; a Member at large of the Society of Photo-Optical In-



Publicity Chairman Thomas Johnston and Hotel Arrangements Chairman Kenneth Hand discuss the arrangements shortly before the Conference opening. (Staff Photo)

strumentation Engineers; the Rochester Audio-Visual Association; and a Privileged Member of the Radio and Television News Directors Association.

Alfred R. Ulmer, Sound Recording Engineer, RCA Service Co., Huntsville, Ala., was sent in 1936 to Argentina by the RCA International Div. to make the first permanent installation of sound recording equipment used in that country. From 1937 to 1942 he performed quality-control work for the RCA Sound Recording Studio in New York. From 1942-1960 Mr. Ulmer was RCA Licensee Contact Engineer, contacting RCA Licensees in the Central and

Eastern U.S.A. to do installation and maintenance on sound recording equipment. His present position includes installation, maintenance, and operation of all types of motion-picture sound recording equipment. In April 1949, he was awarded a U.S. patent for a particular type of sound recording system and aperture. He has been awarded the RCA 30-year Service Award.

Otto Wittel, Consultant on Development of Cameras, Projectors and Accessories, Eastman Kodak Co., earned 140 patents on still and motion-picture cameras, projectors and accessories, dating from 1926 to the present. In 1956 he retired from his position as Superintendent of Development at the Kodak Camera Works, and has since been engaged by Kodak as a consultant. He is also a member of the Optical Society of America.

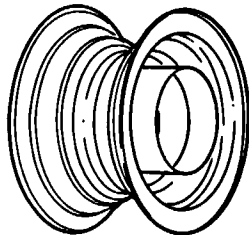
Conference Arrangements

The multiple aspects of Conference arrangements were in the hands of R. S. (Tex) Rekert, of the National Film Board, Montreal, serving as General Arrangements Chairman. Assisting Tex in his formidable task was Arrangements Vice-Chairman R. W. Payne, National Film Board, Montreal.

Taking care of arrangements at the Queen Elizabeth Hotel was Hotel Arrangements Chairman Kenneth H. Hand, Canadian National Railways, Montreal. Harold Green, Park Photo Supplies Inc.,

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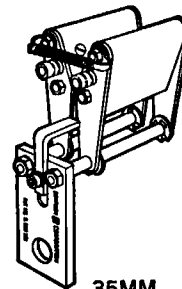


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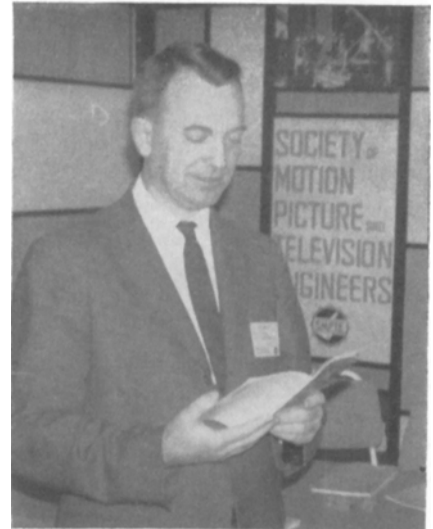
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Associate Program Chairman and Television Topic Chairman Michael W. Barlow. (Staff Photo)

Montreal, was in charge of Hospitality and members of his Hospitality Committee were Mrs. H. Green, Mrs. A. C. P. Schieman, Mrs. S. L. Cole, and Mrs. N. Clavier.

Chairman of the Membership Committee was William A. O'Farrell, Crawley Films Ltd., Ottawa, Ont., assisted by J. R. DeBow and N. J. Valin. Charles Frenette, Canadian Broadcasting Corp., Montreal, was Luncheon Chairman; Norman R. Olding, Canadian Broadcasting Corp., was Banquet and Entertainment Chairman.

As Registration Chairman, Kenneth P. Davies, Central Dynamics Ltd., Pointe Claire, Que., was responsible for setting up and maintaining the Registration Desk. Members of the Registration Committee were Donald W. Dixon and A. Dunstan Russell, assisted by Bruce Prentice.

A. Dunstan Russell, Alex L. Clark Ltd., Montreal, was also Ladies' Program Chairman; Mrs. G. G. Graham was Ladies' Program Vice-Chairwoman. Members of the Ladies Program Committee included



SMPTE Registration Desk with Registration Chairman Kenneth Davies behind the desk. (Staff Photo)

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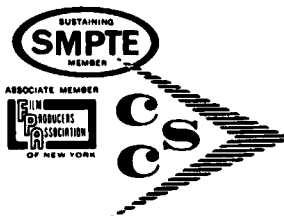


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Mrs. N. R. Olding, Mrs. R. R. Epstein, Mrs. F. Gavsic, Mrs. A. D. Russell and Mrs. C. Frenette.

Chairman of the exceedingly important Projection, Public Address and Recording Committee was John Burman, Omega Productions Inc., Montreal. He was aided by Committee members John J. Kilcullen and Lorne M. Simpson. The Author's Reception Committee Chairman was Ralph Curtis, National Film Board, Montreal, with James Buist and Nat Clavier as members of his committee.

Thomas L. Johnston, National Film Board, Montreal, was Publicity Chairman; Bernard McAllister, Minnesota Mining and Mfg. of Canada Ltd., Montreal, was

Transportation and Messages Chairman. The Motion-Picture Record was under the chairmanship of Henri Michaud, Omega Productions Inc., Montreal. In addition to his responsibilities as Hotel Arrangements Chairman, Kenneth H. Hand was Photography Chairman.

Auditor for the 98th Semiannual Technical Conference was G. Flohr; Administrative Assistants were Findlay J. Quinn, E. W. Hamilton, Jean Meunier, Pierre Harwood and André Préfontaine.

Recognition is also due to Lorne M. Simpson and Pierre Handfield of the National Film Board, Montreal, who acted as projection service coordinators throughout the week.

The Papers Program

One of the goals of the 98th Conference Program Committee was to achieve a large international participation. In this respect, the Conference Program was an unprecedented success.

The Papers Program itself was quite large, containing some 113 technical papers exclusive of the Wednesday morning equipment papers and demonstrations. Of this impressive total, about 30, or more than 25%, of the papers were from countries other than the USA and Canada. Six continents were represented with particularly high participation from Australia, England, Germany, and France.

Canada, the host country, was exceptionally well represented, with approximately 27 papers on the Program. This figure even exceeded Canada's degree of representation in the Toronto Conference by ten, indicating Canada's increasing role in the motion-picture and television industries, and in the Society.

Program Chairman Gerald G. Graham, National Film Board, Montreal, overcame the major obstacle of a Canadian mail strike to organize a Program of 16 papers sessions, ten of which were pairs of concurrent sessions. In addition, there was a special session Thursday evening at the National Film Board where a panel discussion on Education was held.



Program Chairman Gerald G. Graham. (Staff Photo)

Leading the panel discussion, which was built around an in-depth analysis of the relationship of the engineer and the educator in developing techniques to meet the new educational needs, were: John A. Maurer, JM Developments, New York; Louis Forsdale, Columbia University Teacher's College, New York; and William Sager, Ontario College of Education, Toronto.

A growing interest in engineering for education was evidenced, not only by the stimulating and thoughtful papers presented at the educational sessions and the in-depth panel discussion, but by the growing emphasis in the technical exhibits on audio-visual equipments and devices used for educational purposes.

The success of the Society in this area is due to special efforts made by the entire group working to put on the Montreal Conference.

Another impressive element of the Pro-

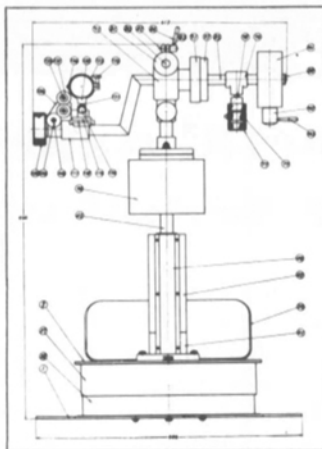
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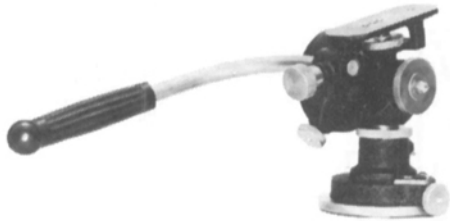
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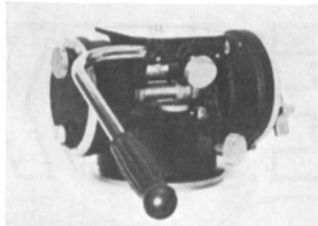


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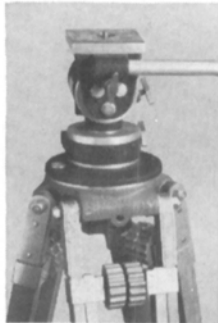
TRIPOD HEADS AND ACCESSORIES



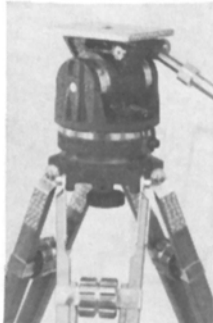
CM 101—O'Connor Model C Fluid Head. Perfectly controlled pan and tilt action for cameras weighing up to 20 lbs. Fully adjustable drag— independently set for both pan and tilt. Counterbalanced head in tilt position.



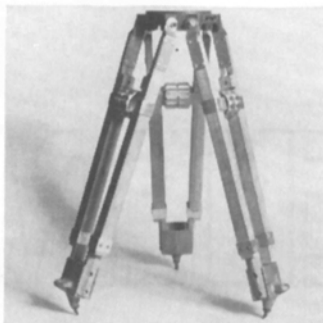
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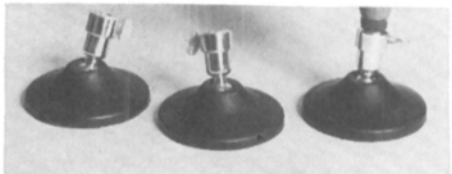
CM 103—Miller Model D Fluid Action Tripod Head. Precision built on a semi-hydraulic principle for use where smooth panning and tilting is essential. No slack, no bounce, no backlash.



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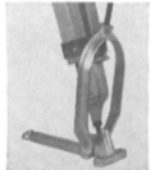
CM 110—Camart Sta-Sets. Fits easily and securely into tripod leg. Provides non-slip, quiet, vibration free support.



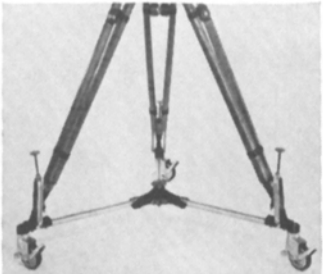
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Projection, Public Address and Recording Chairman John Burman and committee member Lorne M. Simpson. (Staff Photo)

gram was the arrangement throughout Thursday of three bilingual sessions (French-English) on Education (including the above-mentioned panel). Abstracts of all papers on the program were also printed in French and English in the Conference Program.

Program Topic Chairmen for the Montreal Conference and their respective topic areas were: Cinema Design, William Szabo; Cinematography, Wally W. Gentleman; Industrial and Small Format Films, Thomas W. Hope; Current International Developments, Lloyd Grant; Laboratory Practice, R. W. Payne; Motion Pictures in Science and Medicine, Irving Dooh; Short Film Subjects, Fred Gavsic; Sound and Projection, Rudolph R. Epstein; Television, Michael W. Barlow; Television and Motion Pictures in Education, Anson Moorhouse and A. B. Moore (associate); Test Methods in the Motion-Picture Industry, Ralph W. Curtis.

Assisting Chairman Graham were Mrs. Dorothy Masse and Mrs. Gai Richer, of the National Film Board.

The Advance Program for the 98th SMPTE Technical Conference and Equipment Exhibit was published in the September, 1965, *Journal*. Papers were presented as published, with the following changes.

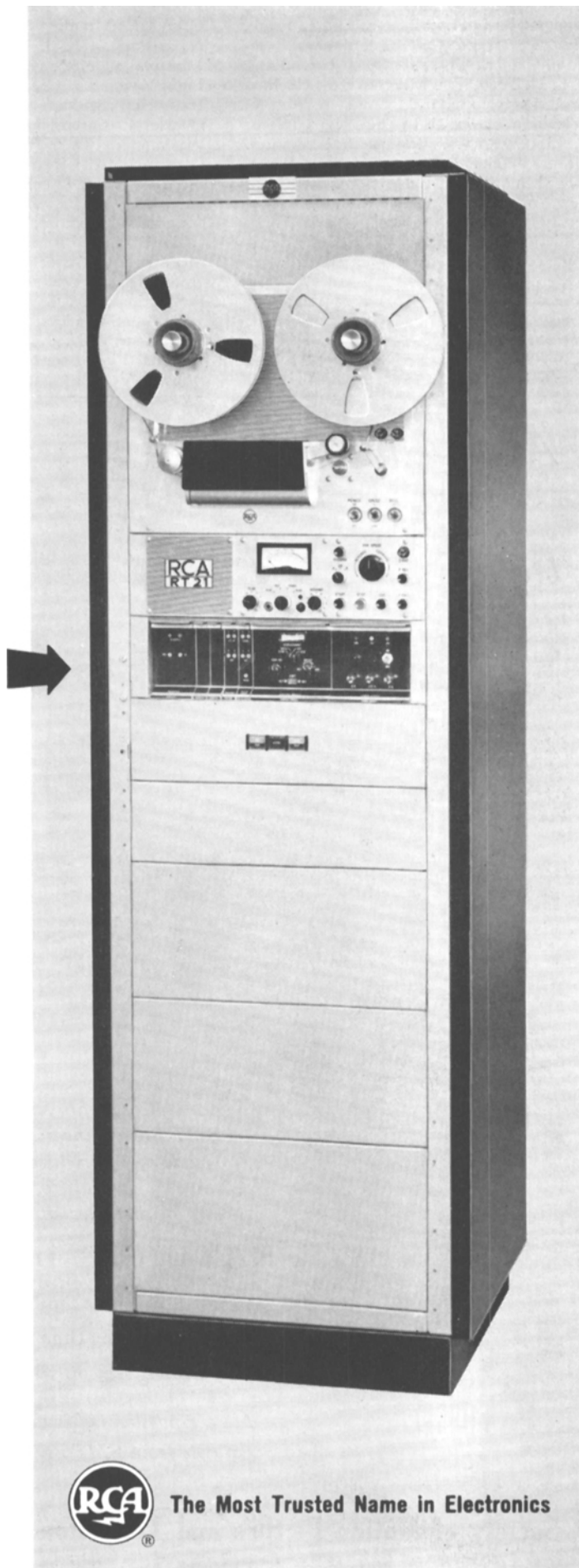
Papers added to the program after the Advance Program was published in the September *Journal* are:

The Use of Radar and Aerial Photography in Design and Survey of the 3,060-mile CENTO Telecommunications Network, William C. Eddy, Television Associates, Michigan City, Ind.; Informal Report on SMPTE Visit to Russian Film institute, Herbert E. Farmer, Dept. of Cinema, University of Southern California, Los Angeles, Calif.; Electronic Splicing in RCA Television Tape Recorders, M. B. Finkelstein, Electronic Recording Products, Radio Corp. of America, Camden, N.J.; The Mariner IV Photographic Mission, Alan Herriman, and Clayton LaBaw, Jet Propulsion Laboratory, California Institute of Technology, Pasadena, Calif.; TV Broadcasting Facilities for Developing Areas, S. Oyama, T. Katsuta, M. Okazaki, T. Oshima, Nippon Electric Co., Tokyo,

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Japan; The Techniques of Large-Capacity Motion-Picture Theaters, Victor G. Komar, Cinema and Photo Research Institute, Moscow; "Hands Off" Technique of Television Camera Operation, S. J. Lecson and C. F. H. Teed, The Marconi Co., Chelmsford, Essex, England; Some Aspects of Television Coverage in the New Nations, A. Lindener, N. J. Pappas & Associates, Montreal, Que., Canada; Education Panel, John Maurer, J. M. Developments, Inc., New York; Louis Forsdale, Columbia University Teacher's College, New York; William Sager, Ontario College of Education, Toronto, Ontario; plus contributors to the Education sessions program; A UHF Television Transmitter, W. J. Morcom and J. Sutton, The Marconi Co., Chelmsford, Essex, England; Aerials For UHF Television Broadcasting, S. U. Nolan, The Marconi Co., Chelmsford, Essex, England.

These papers were also added: Television Planning for Developing Nations, P. L. Grant, P. Mundie, I. W. Campbell and N. J. Pappas, N. J. Pappas & Associates, Montreal, Que., Canada; Making Available Light Available, George Gill, Color-Tran Industries, Middle Village, N. Y., and Charles E. Sorensen, Brenner Photo Co., Washington, D. C.; Specific Trends of Construction of Cinemas in Czechoslovakia, Frantisek Pilat, Czechoslovak Film Corp., and Jiri Struska, Research Institute of Sound and Picture, Prague, Czechoslovakia; Technical Report of the Semiannual Meeting of the Association of Cinema Laboratories, Inc., William P. Hedden, Calvin Productions, Inc., Kansas City, Mo.; Color and Printed Leaders, Ely Todorow, Starex, Inc., Kearny, N. J.; Development of the National Film Board Animation Division, Robert Verrall, National Film Board,

Montreal, Que., Canada; From the Cinema to the Cinema-Theater, Jean Vivié, Secretary, Standardization Committee of the Motion-Picture Industry, Paris; Water Conservation in Motion-Picture Film Processing, Lloyd E. West, Photographic Technology Div., Eastman Kodak Co., Rochester, New York; Educators Need to Know About Engineering, Raymond Wyman, University of Massachusetts, Amherst, Mass.; Methods of Producing Different Release Prints from 35mm Conventional, Anamorphic and 70mm Motion Pictures, Michael Z. Wysotsky, Mosfilm Studios, Moscow; and Network Transmission Coordination in U. S. and Canada: Panel Discussion of Technical and Operational Matters of Mutual Concern to Broadcasters and Common Carriers, J. T. Stephens, AT&T; H. T. Dunlap, AT&T; R. W. Gast, N. Y. Tel. Co.; H. C. Gronberg, NBC; R. A. O'Connor, CBS; J. Serafin, ABC; C. B. Dowden, Bell Telephone Co. of Canada.

Papers listed in the September *Journal* and subsequently cancelled were: High-Speed Additive Color Printer, Hans Christoph Wohlrab; Display System Criteria for Rooms for Instruction and Conference Activity, A. L. Terlouw; Direct Cine Micrography With the Electron Microscope, J. L. Daniel and W. C. Mace, Jr.; Versatile Mixing Console for Sound Service Studio, L. A. Green; Television Engineering—The Amateur Point of View, C. Grant Dixon; A Study of Detectors for Automatic Control of Radio and Television Transmitter Centers, Jean Guillermin; Application of Digital Techniques to Automatic TV Programming, K. P. Davies and F. Jackson; Specification for a Standard Television Demodulator for the Australian National Television Service, Peter D. Barnes; The Influence of the Steepness of the Nyquist Slope and the Position of the Carrier on the Distortions Caused in the Case of VSB Transmission, H. Dobesch; M Format 8mm, Robert Rheineck.

Preprints

For the second consecutive time, more than 40 papers appearing on the Conference Program were available as preprints during Conference week. A special booth was maintained in the Foyer adjoining the sessions where preprints were made available. According to Editorial Vice-President Herbert E. Farmer, approximately 3,600 preprints were distributed at the Conference. The remainder will be available as long as the supply lasts, until the next Conference, or until published in the *Journal*—whichever comes first.

It is anticipated that the Preprint Program will continue at future Conferences.

International Publication Display

To emphasize the international character of the 98th SMPTE Technical Conference in Montreal and to give members and visitors an opportunity to familiarize themselves with the professional publications of other countries, the Society authorized Rudolph R. Epstein of the National Film Board to provide this new service.

A total of 27 publishers in Canada, the United States, France, England, Germany, Japan and the USSR supplied sample copies of their journals. The material

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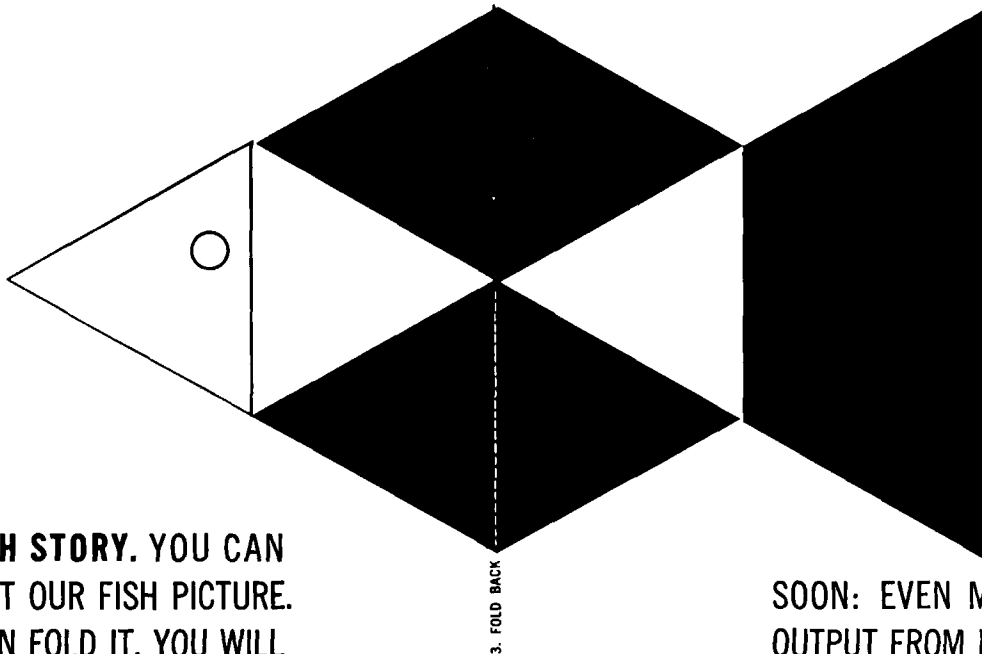
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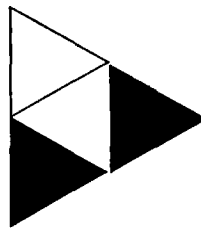
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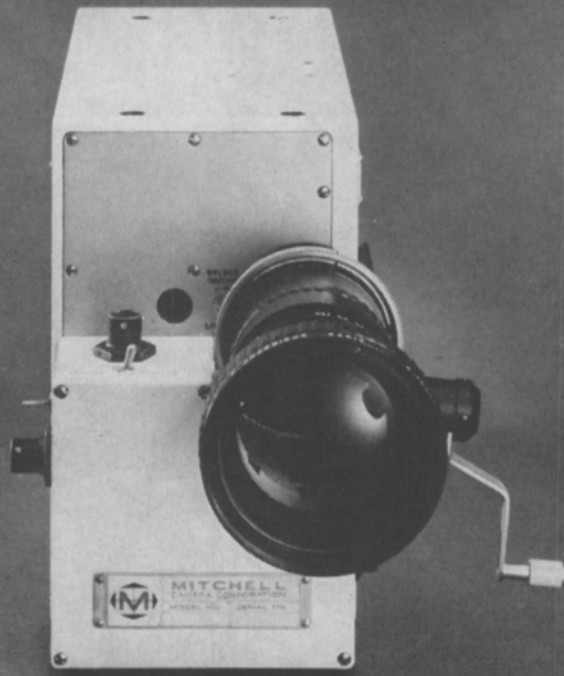
HAZELTINE INSTANTANEOUS COLOR FILM ANALYZER PRE-VIEWS THE COLOR FILM ON A CLOSED-CIRCUIT TELEVISION SYSTEM. ELIMINATES DELAYS OF TRIAL AND ERROR IN MAKING ANSWER PRINTS. AND

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André Debric (left) discussing the film business with Robert Richter. Mr. Debric is President of Etablissements André Debric, Paris, France; Mr. Richter is President of Arnold & Richter KG, Munich, Germany. (Staff Photo)

covered the entire field of motion-picture and telecommunications engineering. Over 100 sample copies were distributed directly off the display table; 141 additional requests for specific journals were received in form of filing cards supplied at the desk.

There were 110 written requests fulfilled during the Technical Conference from the sample stock by direct delivery to the Hotel Rooms or through the mail; and 36 additional requests were forwarded to the publishers for follow-up. The cooperation of the publishers and the interest in this project by SMPTE members and visitors are gratefully acknowledged.



Editorial Vice-President Herbert E. Farmer discussing his visit to the Soviet Union. (Staff Photo)

Report on SMPTE-Soviet Visit

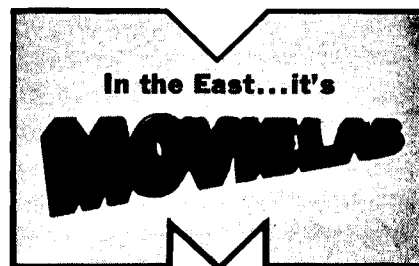
On Tuesday evening, Editorial Vice-President Herbert E. Farmer reported on the second U. S. State Department-sponsored cultural exchange visit to the Soviet Union, organized by the SMPTE. Farmer who was accompanied by Saul Jeffee, Sid Solow and Konstantine Pestrecov (see *Journal*, October, 1965, p. 944), toured Russia for three weeks studying aspects of motion-picture production and exhibition, involving laboratory problems, optics and education.

During his presentation, Farmer showed more than 150 slides, less than 20% of the total number taken on the trip. The presentation was descriptive, not comparative or evaluative. The overall facets of the visit to Russia will be described in a paper now being prepared for early publication in the *Journal*.

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Exhibit Chairman H. Patrick Dickey and Conference Vice-President Kenneth M. Mason cut ribbons of 70-, 35-, 16- and 8-mm film to open the 98th Conference Equipment Exhibit.

Cocktail, Party, Banquet and Dance

The Queen Elizabeth Hotel was the scene of the traditional SMPTE Wednesday evening Conference activity, the Reception, Banquet and Dance. The National Film Board was host at the reception which was

held in the Marquette and Jolliet rooms. Following the reception, members and guests adjourned to the Grand Salon where the banquet and dance were held. A special entertainment program was provided by the Canadian Broadcasting Corp.



Above some of the SMPTE Equipment Exhibit; below booth of Canadian Marconi, winner of the Exhibit Award.



Visit to the National Film Board

On Thursday evening, members and guests boarded buses and were driven to the National Film Board for a full evening's activities. The program included a welcome by Film Commissioner Guy Roberge, Q.C.; a brief talk about the development of the Board's animation division by one of its members, Robert Verrall; the opportunity to tour the Board's studios and laboratories; a program of National Film Board Films; and refreshments featuring "Dégustation de Vins et Fromages." In addition, many persons participated in an Education Panel Discussion which was also held at the Film Board.

Each afternoon, members had the opportunity of touring the facilities of the Canadian Broadcasting Corp., which is located only a few blocks from the Queen Elizabeth Hotel.

Equipment Exhibit

The 98th Conference Equipment Exhibit was the largest and best attended Equipment Exhibit ever recorded at a SMPTE Conference. The Exhibit was so popular that in the few hours was open on opening day, that more than 1,000 visitors had filed through the multiplicity of Equipment booths.

The success of the Equipment Exhibit can be directly attributed to H. Patrick Dickey, Anglophoto Ltd., Montreal, who made sure every one of the 88 booths available at the Queen Elizabeth was taken. In fact, he was so successful, he had to add one more booth for an enthusiastic exhibitor — in the hotel parking lot.

The official opening of the Exhibit, a ribbon cutting, was held Monday afternoon with Pat Dickey and Conference Vice-President Kenneth M. Mason cutting ribbons of 70-, 35-, 16- and 8-mm film.

During the week, a special committee picked the outstanding display of the Equipment Exhibit, in terms of general interest, imagination and effectiveness. The winner was Canadian Marconi Co., which will be awarded a plaque. The level of excellence at the Exhibit at Montreal was so high, that two honorable mention awards were voted: one to Anglophoto Ltd., and the other to the National Research Council of Canada. Both will receive special certificates.

As an indication of the interest generated by the Exhibit in Canada, a complete 10-minute film was produced by CBC News for airing on the French television program *Aujourd'hui*.

The CBC crew, with the cooperation of the exhibitors, used equipment which was on display, e.g. cameras, lights and light meters, and completed the project through shooting, developing, editing, etc., to the final stages, until the film was ready to be shown on TV. The film was telecast Thursday evening.

The exhibitors, many of whom had more than one booth were:

- Accessories Ltd.
- Amega Corp.
- Ampex of Canada
- Anglophoto Ltd.
- Applied Electronics Ltd.
- Atlantic Films Ltd.
- E. J. Barnes & Co., Inc.

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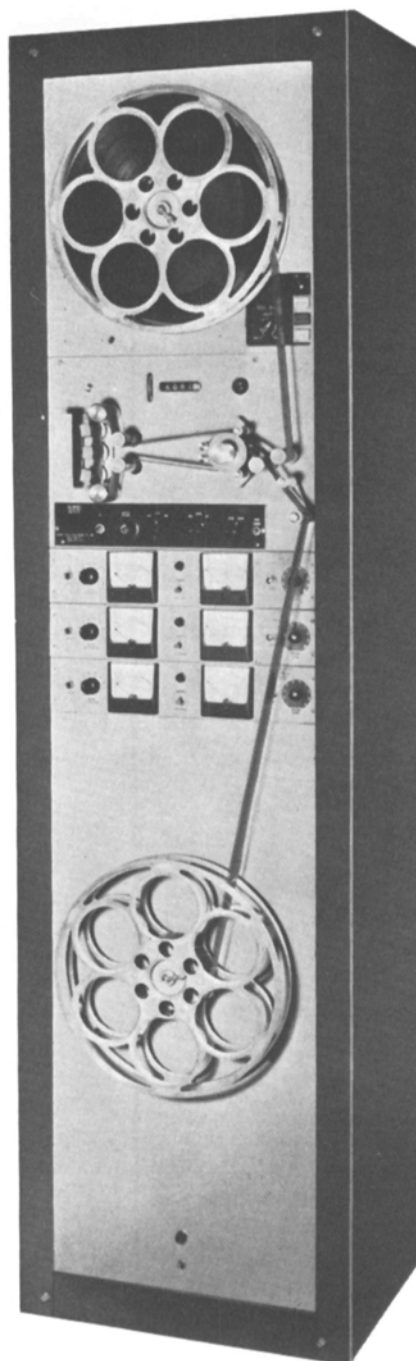
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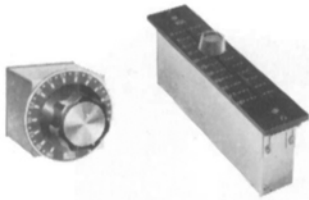
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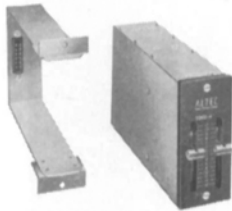
December 1965 Journal of the SMPTE Volume 74

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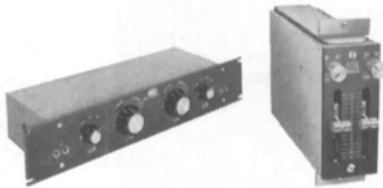
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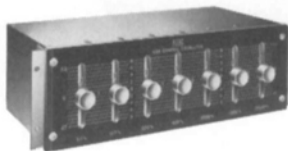
ALTEC ATTENUATORS, MIXERS, VU EXTENDERS AND STEREO PAN POTENTIOMETERS provide less than 1-milliohm contact resistance, lower noise, easier upkeep, and longer life. Choose from more than 300 types, either rotary or straight-line. New rotaries use pure silver dual brushes, independently sprung to eliminate "stumble."



ALTEC 9060A MICROPHONE EQUALIZER provides up to 12-db equalization, and 16-db attenuation at 100 cycles and 10 kc. Straight-line controls are precisely calibrated in 2-db steps. Passive L/C/R bridged "T" network circuit. Compact plug-in design. 3½"H x 1½"W x 5½"D.



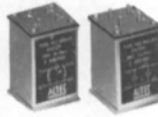
ALTEC 9061A & 9063A PROGRAM EQUALIZERS provide continuously variable equalization at selectable frequencies; up to 12-db boost at 40 or 100 cycles, and 3, 5, 10 or 15 kc; 16-db attenuation at 100 cycles and 10 kc. Passive circuitry. 9061A, for plug-in mounting, features straight-line controls. 3½"H x 1½"W x 5½"D. 9063A, for standard rack mounting, has rear-mounted input and output terminals normaled through front-panel jacks and rotary control switches. 3½"H x 19"W x 5¼"D.



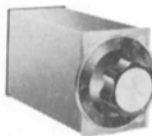
ALTEC 9062A & 9073A GRAPHIC EQUALIZERS have completely passive circuitry which induces no hum or distortion at levels from -70 to +24 dbm. The 9062A provides quiet, positive variable boost or attenuation in 1 db steps at seven critical frequencies. The 9073A boosts or attenuates six different frequencies of +8 or -8 db in 1 db steps. Precise slider controls have an accuracy of ±0.5 db per step, enabling a frequency overlap for an essentially flat response. Escutcheon plates available for rack mounting. 9062A, 3½"H x 10"W x 5¼"D. 9073A, 3½"H x 8¾"W x 5¼"D.



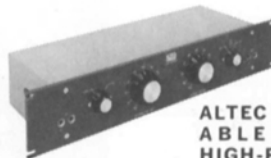
ALTEC 9064A NOTCH FILTER eliminates unwanted narrow-band frequencies with negligible effect on program material. The 9064A is made to your specification with notch frequencies from 50 to 20,000 cps. Available as single or dual notch filter. 2"H x 3"W x 2-15/16"D.



9065A FIXED LOW-PASS and 9066A FIXED HIGH-PASS FILTERS provide 18 db per octave attenuation from selected cut-off point. (30-db per octave units also available.) No insertion loss. The 9065A may be ordered to any cut-off point from 50 to 20,000 cps; the 9066A from 40 to 20,000 cps. 1½½"H x 1½½"W x 2½½"D.



ALTEC 9068A VARIABLE LOW-PASS FILTER AND 9069A VARIABLE HIGH-PASS FILTER provide 18 db per octave attenuation with 10 positions of LF and HF cut-off. With toroidally wound inductances, units may be used in extremely low-level circuitry without noise or hum pick-up. Zero insertion loss. 9068A LOW-PASS FILTER is 3"H x 2¼"W x 5½"D. 9069A HIGH-PASS FILTER is same size.



ALTEC 9067A VARIABLE LOW- AND HIGH-PASS COMBINATION FILTER combines the 9068A and 9069A for rack mounting. Rear-mounting input and output terminals normaled thru front panel jacks. 3½"H x 19"W x 5¼"D.



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EXPO 67 Luncheon

At Wednesday noon, EXPO 67 was host to SMPTE members at a special luncheon at which Col. Edward Churchill, Director of Installations, EXPO 67, spoke. Col. Churchill described, orally and visually, plans for the upcoming 1967 Exposition to be held in Montreal in celebration of Canada's centennial. All pavilions and exhibitions will relate to the general Expo theme of "Man and His World." Col. Churchill also described the Expo policy and program for noise control by areas on the grounds.

Committee Meetings

Throughout Conference week, eight engineering committees met at various times including Film Projection Practice, Laboratory Practice, Education, Television, 16 and 8mm, Color, Standards and PH22 and Film Dimensions.

In addition, meetings were held by several committees including the Public Relations Advisory Committee, Membership Committee, Sections Committee, and a committee for planning the 99th Technical Conference in Washington, D. C.

There were also meetings of the Publica-

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1. Dom Notto, V. P. Engineering, 19 yrs; 2. Ray Emeritz, Chief Engineer, 30 yrs; CAMERA REPAIR: 3. Vic Riva, Supervisor, 23 yrs; 4. Charlie Theurer, Supervisor, 32 yrs; 5. Henry Michelin, 15 yrs; 6. Pete Weiss, 26 yrs; 7. Hans Gahr, 9 yrs; LENS REPAIR: 8. Willy Holtz, Supervisor, 22 yrs; 9. Kurt Schlund, 10 yrs; 10. Fred Hummel, 25 yrs; MACHINE SHOP: 11. Kurt Voight, 35 yrs; 12. Joe De Luca, 14 yrs; MOVIOLE REPAIR: 13. Tom Hill, Supervisor, 15 yrs; 14. Joe Malavenda, Asst. Supervisor, 29 yrs; 15. Jack Kici, 7 yrs; MOVIOLE RENTAL: 16. Bob Montalvo, Supervisor, 15 yrs; SOUND DEPT.: 17. Bernie Zuch, Supervisor, 11 yrs; 18. James Sabat, Asst. Supervisor, 6 yrs; CAMERA RENTAL: 19. Carl Porcello, Supervisor, 15 yrs; 20. Tony Girardo, Asst. Supervisor, 10 yrs; 21. Frank Suarez, 13 yrs; LIGHTING RENTAL: 22. Ed Kalinowski, Supervisor, 10 yrs; 23. Ruby Grossman, Asst. Supervisor, 5 yrs; 24. James Moses, Asst. Supervisor, 9 yrs; 25. Tony Robinson, 7 yrs; LIGHTING REPAIR: 26. Fred Spiess, 8 yrs; 27. Karl Heermeir, 14 yrs.

tions Advisory Committee, the Board of Editors and the Papers Committee.

At the Color-Television Joint Committee meeting, the final specifications for a new Color-TV Test Film were approved. Details about the new test film will be published later.

The Education Committee of the Society met during the Conference at the hotel and announced the establishment of a \$25,000 scholarship program (November *Journal*, p. 1032).

Ladies Program

The 98th Conference Ladies Program was arranged by the Ladies Committee under the co-chairmanship of A. D. Russell and Mrs. G. G. Graham. Members of the

Ladies Committee included Mrs. N. R. Olding, Mrs. R. R. Epstein, Mrs. F. Gavsie, Mrs. C. Frenette and Mrs. A. D. Russell.

Assisting with the Ladies Program was the Hospitality Committee under Chairman H. Green, with Mrs. S. L. Cole, Mrs. A. C. P. Schieman and Mrs. N. Clavier as members.

A Ladies Lounge was set in the hotel in the Harricana Room where ladies signed up for the various activities and relaxed during the day. The Ladies Program began on Monday with morning coffee in the Lounge, followed by the Get-Together Luncheon. In the late afternoon, the ladies attended the Ladies Get-Together Tea in the Panorama Room atop the hotel, through the courtesy of L. B. Russell

Chemicals, Inc. and its associate Canadian company.

There was a daily bus tour to the site of EXPO 67.

Tuesday the ladies were treated to a tour of the city and lunch at Hélène de Champlain, courtesy of the City of Montreal. The following day they were invited back to sign Montreal's Golden Visitors' Book and drink a champagne toast. On Wednesday evening the ladies joined their husbands at the Cocktail Party, Banquet and Dance at the hotel.

An exclusive fashion show was held for the ladies on Thursday at Raoul Jean Foure, through the Courtesy of the 3M Co. Thursday evening, the ladies attended the National Film Board program and partook in the Dégustation de Vins et Fromages.

Coffee for the Ladies Lounge and Coffee Bar was supplied through the courtesy of Canadian Kodak Sales Ltd. Other contributors to the Ladies Program were 3M Company, Lipsner-Smith Corp., C.T.V. Network, and Pathe-DeLuxe Laboratories.

Short Film Subjects

A short film was shown at the beginning of each technical session at the Conference. Fred Gavsie, Canadian Broadcasting Corp., Montreal, was responsible for the Short Film Subjects Program. The films and producers were:

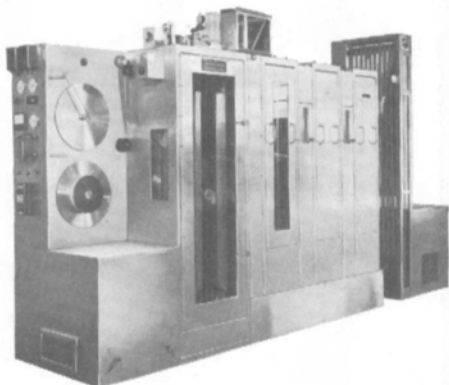
- Chuckwagon, Chetwynd Films Ltd., Canada;
- An Oscar for Signor Rossi, Bruno Bozetto, Italy;
- Christmas Lights, Moreland-Latchford Productions, Canada;
- Schlieren, Shell Oil Co., England;
- An Essay in Science, National Film Board, Canada;
- Anniversary, National Film Board, Canada;
- The Emperor's Oblong Pancake, John Wilson, U.S.A.;
- The Hat, John and Faith Hubley, U.S.A.;
- The Bargain, Larkin Studios, England;
- Seal Hunt, Crawley Films Ltd., Canada;
- Music in Motion, Bell Telephone Co., U.S.A.;
- The Frog, New York University, U.S.A.;
- The Revealing Eye, Shell Oil Co., England;
- The Legend of Jimmy Blue Eyes, Robert Clouse, U.S.A.;
- Secam, Compagnie Général de Télégraphie Sans Fil, France;
- Seven Keys to Greater Creativity, Flag Film, U.S.A.;
- Manufacture of the Image Orthicon, English Electric Valve Co., England;
- Sky, National Film Board, Canada

Acknowledgments

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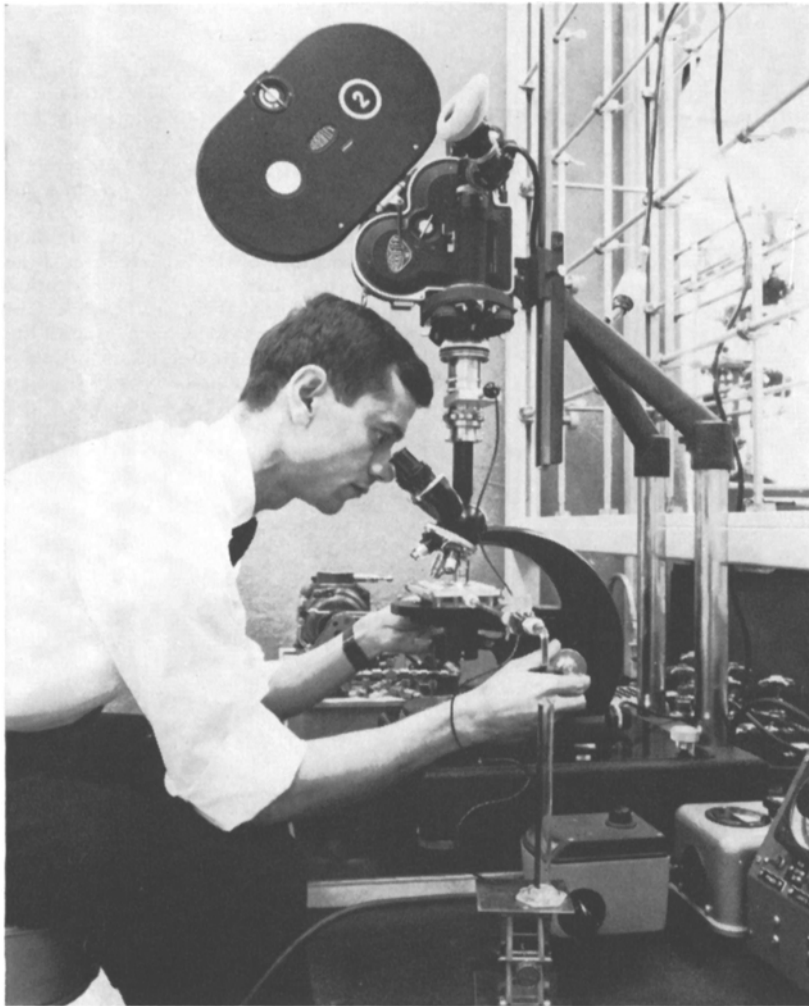
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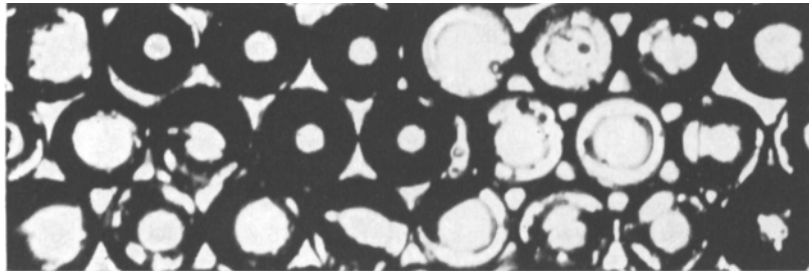
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Dr. Mungan of Sinclair Research Inc. studies a micromodel of porous reservoir rock.



Microphotograph of a section of glass bead packed model used in fluid movement studies.

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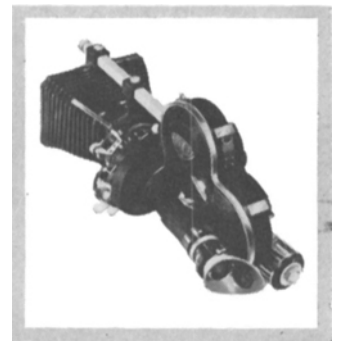


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