

96th Semiannual Technical Conference

New York — September 28 — October 1, 1964

ANY OBJECTIVE APPRAISAL OF THE Society's Fall Technical Conference would surely term it a success. The meeting was held in New York City for the first time in five years. The World's Fair in progress in New York was a special influence. The Papers Program, to be described at the end of this report, included a special session, "New Techniques for World's Fair Projection," held on Wednesday afternoon; early that evening "the Conference" traveled by two boats from Manhattan to the World's Fair, having a buffet supper en route, to visit a number of industrial pavilions.

More than 1,800 attended the Conference and participated in papers sessions whose subjects ranged from instrumentation and high-speed photography and space technology through motion pictures and television in medicine, with the Society's many other interests between. The registrants also attended the equipment exhibit, many committee meetings and an awards presentation program, all of which will be reported in some detail below.

The Conference was formally opened at the Monday noon Get-Together Luncheon. Guest speaker was Ralph Hetzel, Acting President of the Motion Picture Association of America, who commented on the close working relations between personnel for production of motion pictures for both television and theaters. Preceding Mr. Hetzel's talk, outgoing SMPTE President Reid H. Ray spoke to the Society.

Remarks of President Ray

"In 1916, when the Society of Motion Picture Engineers was founded, little did those 16 founders imagine that the motion-picture industry would grow to the huge proportions it reached in a few years. And in 1950, when the word 'television' was added to the name of the



Past-President John W. Servies, President Reid H. Ray, Luncheon Speaker Ralph Hetzel and President-Elect Ethan M. Stifle.

Society — another new industry had reached unexpected heights. Other engineering areas have also grown to sizable activity in SMPTE. Particularly the number of engineers in the field of instrumentation and high-speed photography has grown steadily within the Society.

"In the 25 years of my association with this Society, remarkable achievements of engineering have occurred, and I am convinced that today, more than ever, SMPTE faces a challenge to provide encouragement, inspiration, and a sounding board for a large group of both young and seasoned engineers in the fields represented here.

"The diversity of the Society's areas of interest is suggested by the August issue

of the *Journal of the SMPTE*. In that one issue were papers on endoscopic photography using fiber optics, cineradiography, cinefluoroscopy, cinephotomicrography, stereocineradiography, photooptical instrumentation and time-lapse cine techniques in the life sciences. Then in the same issue followed a paper on an objective method for rating picture sharpness; two papers on special problems in instrumentation and high-speed photography; a paper on the use of a computer program for lens design; a paper on non-additive mixing of television signals; and one on a method of audio level control. The nontheatrical film, its continued growth and importance in production and exhibition, is reported statistically with the 1963 figures at more than 638 million dollars spent, including 9,680 film productions. And in that same issue were published three proposed American Standards in the field of motion pictures. This is another important responsibility of SMPTE — the responsibility of leadership in the development of standards and recommended practices through its active engineering committees.

"Our Society has 6,100 members with residence from Alaska to Yugoslavia. Among these members are many who have made noteworthy engineering contributions to the fields of motion pictures, television, instrumentation, recording, and chemistry. I would like to urge



Conference Vice-President Geo. W. Colburn and 96th Conference Program Chairman John J. Kowalak.

those of you who have the future of this Society at heart to abet, admonish, exhort, invite, yes, even 'incite,' activity within our ranks. Let us keep SMPTE the focal point that men with vision can look to for encouragement, recognition and support.

"As this is my last appearance before a Technical Conference audience as President of SMPTE, I would like to express my sincere thanks for all the assistance and cooperation I have received from the Officers, Governors, Advisors, Committeemen and the Headquarters staff of the Society. And, not least, for the tolerance my wife, Roxanne, has shown me for the hours of homework. It has been, to me, a *short* two years, two years during which I've been very proud of the singular honor to have been your President. May the future of SMPTE be even brighter than its past."

Get-Together Luncheon Speaker Ralph Hetzel

Noting the exceptional film business of the past summer, Mr Hetzel stated: "Already this year an extraordinary record has been rolled up in motion-picture theaters. The first eight months of 1964 showed an average increase in the United States domestic film rentals for our member companies of about 20% over 1963. Of course, some companies did better than others. That's the rule in our highly competitive business.

"In London early this month (September) I heard that in Great Britain, where drastic declines in theater attendance have occurred, boxoffice returns increased during the first six months of 1964 at a percentage not much lower than that in the United States.

"I think the resurgence in the United States, as well as abroad, is far more than a flash in the pan. As an economist, I see ahead a long secular upward sweep

of population and economic developments that promise to lift our business in the same direction."

Mr. Hetzel further emphasized the broad scope of the recent upward surge of film business when he stated: "The new vitality and freshness of films and the production of films aimed at special audiences have attracted more and more people back to the movies. The quality of product today is, in my judgment, superior to any we have enjoyed at any time. Film makers still make mistakes - it is notoriously hard to predict the taste of the American public in advance, but the producers are obviously doing a better job of matching public taste with appropriate product than ever before.

"This is a very subjective area, and hard to evaluate. However, a leading exhibitor publication reported last week that a five-year record has been set this summer in the number of films which have won exceptional public acclaim. . . .

"New trends in exhibition," Mr. Hetzel continued, "point up the fact that there is new confidence among all members of the industry." He pointed out that "exhibitors have done their share to spark motion-picture resurgence, by making theater-going more attractive. Last year, 320 new motion-picture theaters were opened, or were announced or under construction, at a total cost of almost \$100 million. Most of them were small or medium-sized houses in shopping centers - located, needless to say, where the people are and where it is most convenient for people to go.

"In addition, 670 older motion-picture theaters were remodeled, 150 old ones were closed, and 170 which had been closed were reopened."

Mr. Hetzel added: "To me, the most exhilarating prospect of all is the excitement and growing interest among young people in motion pictures as a medium

of expression. I feel that we have evidence that alert and intelligent young people, especially at colleges and universities, are looking to motion pictures for new ways of expressing their ideas and emotions. If the young people, while in school and later, have this growing interest in films, they will build a great new audience that will call forth more creative films and greater films.

"Just last week, the American Council on Education, the top coordinating body for the colleges and universities of this country, held a conference at Lincoln Center to encourage the development of the study of film at the collegiate level. It was an exciting occasion and will, I truly hope, sow the seed of greater interest in this field."

Society Awards

Formal presentation of awards and honors took place Tuesday evening, September 29. President Reid H. Ray presided, and Harold Jones was responsible for arrangements.

Guest Speaker

Guest speaker at the awards session was Dr. George R. Seidel, education manager of the Du Pont Company. Dr. Seidel won a doctorate in physical chemistry at the Johns Hopkins University in 1931. He then taught mathematics and chemistry at Susquehanna University, and joined Du Pont in 1936. He is a member of the American Assn. for the Advancement of Science, the National Science Teachers Assn., Sigma Xi honorary scientific research society, and the Scientific Research Society of America.

Drawing on the experiences of a long career as a research scientist, Dr. Seidel discussed the role of the individual in meeting the challenges of changing times.

"The technological advances and material progress of the past few decades," Dr. Seidel concluded, "have created serious



Edward H. Reichard, Earl L. Arnold, Dr. Pierre Mertz and Robert G. Neuhauser.



Dr. Sigmund J. Jacobs, Harold Jones and Carlos H. Elmer.



Program Chairman Kowalak and General Arrangements Chairman C. Russell Dupree.



Financial Vice-President Joseph T. Dougherty, Sections Vice-President Wilton R. Holm, Engineering Vice-President Deane R. White and Treasurer Byron Roudabush.

new problems for Americans as fast as they have solved some of the older ones. Men work fewer hours which, in some cases, creates the problem of properly using one's leisure time. Abundance of material possessions may pose moral and spiritual problems unknown to a more austere way of life. If scientific discovery and technological developments move even faster during the next ten years than during the past ten, then the need for . . . social responsibility and individual morality will be proportionately greater. . . ."

Fellows

Fifteen members were elevated to the grade of Fellow of the Society in recognition of their outstanding contributions. The new Fellows, who were nominated by a committee headed by Past-President John W. Servies and elected by the Board of Governors, are:

Alex E. Alden has been staff engineer of SMPTE for the past three years. Previously, he was employed for 15 years in the research and development division of 20th Century-Fox Film Corp., and in 1962 was a co-recipient of the Academy Technical Award given to 20th Century-Fox for a

decompression printer for TV release of CinemaScope pictures. Mr. Alden attended the University of Southern California before the outbreak of World War II.

Wallace F. Bischof is project manager for RCA Redstone Pictorial Services, Huntsville, Ala. A founder of SMPTE's Huntsville Section, he is a graduate of The Colorado College and did graduate work in chemistry at the University of New Mexico.

James P. Corcoran is sound director for 20th Century-Fox Film Corp., in Los Angeles. He is a graduate of the University of Washington and has been with Fox since 1938. Mr. Corcoran has served on the Society's Sound Committee and has contributed papers to the *Journal*.

C. Russell Dupree is development engineer for J. A. Maurer, Inc., in Long Island City, N.Y. Previously, he was an engineer at the Army Pictorial Center in Long Island City, N.Y. Mr. Dupree is chairman of the SMPTE New York Section and was general arrangements chairman of the 96th Technical Conference.

George R. Groves is sound director for Warner Brothers Pictures, Inc., in Burbank, Calif. An engineering graduate of Liverpool University in England, he joined Bell Telephone Laboratories in 1923 and

went to Warner Brothers three years later. He has served on a number of SMPTE committees, and has contributed technical papers to the *Journal*.

William G. Hyzer is a consulting engineer in the field of instrumentation and high-speed photography, with offices in Janesville, Wis. The author of many papers and books in his field, Mr. Hyzer holds a degree in electrical engineering from the University of Minnesota and a degree in physics from the University of Wisconsin. He is chairman of the Society's Instrumentation and High-Speed Photography Committee and is a member of the SMPTE President's advisory committee in that area.

Saul Jeffee is President and Chairman of the Board of Movielab, Inc., in New York. He founded Movielab, Inc., in 1930, and is a charter member and president of the Association of Cinema Laboratories.

Harry W. Knop, Jr., is technical services group supervisor, motion picture products, for E. I. du Pont de Nemours & Co. in Parlin, N.J. Dr. Knop received his bachelor's degree from Ripon College and earned a doctorate in physics at the University of Wisconsin. He has participated in and supervised research work on physical and electrical (static) characteristics of film base, on image stability and measurement



Sidney P. Solow, Dr. Rudolf Kingslake, President Ray and Dr. White.



Awards Session speaker Dr. George R. Seidel.

in color photography, and on the measurement of spectral sensitivity. Dr. Knop has been active in the work of SMPTE engineering committees.

Orlando S. Knudsen has been director of motion pictures at the State University of Iowa since 1945. He holds bachelor's and master's degrees from Iowa Teachers and Iowa University respectively. Mr. Knudsen is advisor on education to the SMPTE President and is president of the University Film Foundation and past-president of the University Film Producers Assn.

Anthony H. Lind is manager, TV studio equipment engineering, at Radio Corp. of America in Camden, N.J. He holds bachelor's and master's degrees in electrical engineering from the University of Wisconsin and has made substantial contributions to the development of TV tape recording and reproduction. Mr. Lind has been active in the engineering committees of the Society and has presented four papers at SMPTE technical conferences.

Albert S. Pratt is chief engineer at the

Atlantic Missile Range, Cape Kennedy, Fla. He was formerly chief of the pictorial engineering and instrumentation office of the Army Pictorial Service in Long Island City, N.Y., and was a founder of SMPTE's Cape Kennedy Section.

Edward A. Winkler is a sales service engineer for the Eastman Kodak Co. motion-picture film department in New York City. A graduate of Columbia University, he has been engaged in the development of improved color motion-picture film and processes. Among his many activities in the Society, Mr. Winkler is currently chairman of the National Membership Committee.

Honor Roll

The late *Alexander Ferdinand Victor*, a pioneer in the nontheatrical motion-picture industry, was named to the Society's Honor Roll. Mr. Victor, who died in 1961 at the age of 82, was founder of the Victor Animatograph Co. A paper by Samuel G.

washing machines). Shortly thereafter he began the manufacture of motion-picture projectors and stereopticons in Davenport, calling the company the New Victor Animato-Graph Company. This was later changed to the Victor Animatograph Company in 1915. During his 52 years of activity in this manufacturing phase, Mr. Victor created more than 150 models of cameras and projectors, and applied for 86 patents — all but a few of which were issued.

Mr. Victor was truly a pioneer in the nontheatrical field. He was one of the leaders in promoting the use of non-inflammable films in the home, schools, churches, etc., and was instrumental, in the early 1920's, in achieving the adoption of the safety standard for 28mm film. He designed and built the Victor Safety Cinema, a portable projector for use with this new safety film.

Mr. Victor was long an active member of the Society. He joined the parent organization, the Society of Motion Picture Engineers, in 1916, the year the Society was founded. Many of his accomplishments were made working through the channels of our Society.

One of Mr. Victor's greatest assets was his ability to forecast and appraise in advance the requirements of this new nontheatrical field. He showed remarkable ability to design and build new equipment to meet the needs in a rapidly changing market. Some of his personal designs included equipment to handle both disc and optical sound tracks in 1929 and 1930. Earlier than this, in about 1925, he had produced a spring-driven camera for 16mm film. Some of his other accomplishments include a camera three-lens turret, variable-speed drives and reversal action for 16mm film cameras, and stationary sound drums in sound film projectors.

To illustrate specifically his unselfish desire to see the nontheatrical field grow and prosper, Mr. Victor offered to the industry, without restriction, the first 35mm to 16mm continuous reduction printer which he had designed. Many other similar types of equipment were developed in the following years.

The name of Alexander Ferdinand Victor stands high on the list of those men who contributed so extensively to the 16mm nontheatrical film field. It is for his unselfish interest and many outstanding accomplishments in these lines that he has been recommended for placement on the Honor Roll of our Society.



Panel on education in instrumentation and high-speed photography: left to right, Prof. Cass Hurc, Secretary, Wisconsin Registration Board for Professional Engineers; William G. Hyzer, Consultant; Dr. J. S. Courtney-Pratt, Bell Telephone Labs.; Dean C. B. Neblette, College of Graphic Arts and Photography, Rochester Institute of Technology; Max Beard, U. S. Naval Ordnance Laboratory; Dr. N. T. Grisamore, Asst. Dean of Research, George Washington Univ., School of Engineering and Applied Science.

Rank Organization plant at Mitcheldean, Gloucestershire, England. He holds several British patents in the fields of sound recording, optics and magnetic recorders. Among his organizational affiliations, Mr. Pratt is a Fellow of the British Kinematograph Society.

Alex S. Quiroga is color coordinator for National Broadcasting Co. in Burbank, Calif. A graduate of Realgymnasium "Meerstern" in Switzerland and of Filmakademie Berlin-Ufastadt, Mr. Quiroga is a pioneer in the field of color television and last year won the Society's Herbert T. Kalmus Gold Medal Award. He has been concerned most recently with such problems as the objective balancing of TV color monitors.

Roderick T. Ryan is a motion-picture engineer at Eastman Kodak Co. in Hollywood. He holds bachelor's and master's degrees from the University of Southern California, and has been an instructor for four SMPTE-sponsored evening courses. Mr. Ryan is one of the authors of *Control Techniques in Film Processing*, published by the Society in 1960.

William M. Sheahan is manager of range photography for RCA Service Co. at the

Rose on Mr. Victor's contributions to the industry appeared in the August 1963 issue of the *Journal*. He was nominated for the Honor Roll by a committee headed by Kenneth M. Mason. The citation was prepared by the Society's Historical and Museum Committee of which Glenn E. Matthews is Chairman.

Citation for Alexander F. Victor

As an outstanding motion-picture pioneer, Alexander Ferdinand Victor has been recommended for placement on the Honor Roll of the Society of Motion Picture and Television Engineers. Mr. Victor was actively engaged in the motion-picture industry, with particular emphasis on the design and manufacture of equipment for nontheatrical motion pictures, for 65 years.

With his interest first stimulated by a demonstration of the Lumiere Cinematographe in Paris in 1896, Mr. Victor entered a profession in which he was active for the remainder of his life.

In 1909 Mr. Victor built the first model of a portable camera and projector with the backing of the White Lily Company, Davenport, Iowa (a manufacturer of clothes

Journal Award

J. S. Courtney-Pratt, J. H. Hett and *J. W. McLaughlin*, all of Bell Telephone Laboratories, received the 1964 Journal Award for their paper, "Optical Measurements on Telstar to Determine the Orientation of the Spin Axis, and the Spin Rate," which appeared in the June, 1963, issue of the *Journal*.

The Journal Award Committee, headed by *H. Theodore Harding*, also named an honorable mention winner, *William C. Livingston* of the Kitt Peak National Observatory. Dr. Livingston's paper, "Resolution Capability of the Image-Orthicon Camera Tube Under Nonstandard Scan Conditions," was published in the issue of October 1963.



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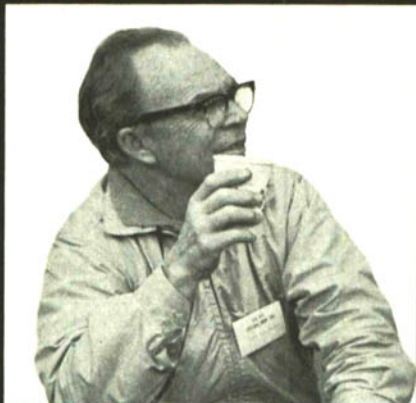
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Herbert T. Kalmus Gold Medal Award

Earl L. Arnold, manager of the Film Emulsion and Plate Manufacturing divisions of Eastman Kodak Co., received the Herbert T. Kalmus Gold Medal Award, which recognizes outstanding technical achievement in color motion pictures for theater or television use. A Fellow of SMPTE, Mr. Arnold has been engaged in the development of improved photographic emulsions since the mid-1920's. Mr. Arnold was nominated for the award by a committee under the chairmanship of Edward H. Reichard.

E. I. du Pont Gold Medal Award

The E. I. du Pont Gold Medal Award, which recognizes outstanding contributions to the engineering phases of instrumentation

David Sarnoff Gold Medal Award

Robert G. Neuhauser, leader of the camera-tube product engineering group at the Radio Corp. of America installation at Lancaster, Pa., won the 1964 David Sarnoff Gold Medal Award. Mr. Neuhauser's citation notes that his contributions to improvements in camera-tube design and techniques of operation "have constituted one of the outstanding elements of progress in the television art of the last few years."

Dr. Pierre Mertz was chairman of this award committee.

Progress Medal Award

The Progress Medal Award — the premier award of the Society — was presented to Dr. Rudolf Kingslake, director of optical design for Eastman Kodak Co.

A Fellow of SMPTE, Dr. Kingslake has

Kingslake came to the United States in 1929 to join the faculty of the University of Rochester as assistant professor of geometrical optics. He joined Kodak in 1937 and became head of the lens design department two years later.

Chairman of the award committee was Sidney P. Solow.

Dr. Kingslake accepted the medal with these remarks:

"It is a very great and unexpected honor indeed to be awarded the Progress Medal of the Society of Motion Picture and Television Engineers. On an occasion such as this, it is of interest to look back and follow the steps by which we were led to take up our life's work.

"I think that my first interest in photographic lenses was aroused at the age of 13 or 14 by reading a book which I found on my father's bookshelf entitled *Photographic*



Equipment Exhibit

Lenses, by Beck and Andrews. This book had been sold in about 1905 for one shilling, and it was basically an advertisement for Beck and Beck-Steinheil lenses. Among other useful data it contained excellent and simple descriptions of many lens types including the 6-element Steinheil Orthostigmat, which was regarded at that time as a climax of the optical designer's art. I remember studying a cross-section diagram of this lens and wondering why all those elements were necessary and how one would proceed to design a lens of this type. Consequently, when the time came to go to college, I had no difficulty in deciding to go to the recently established Technical Optics department at the Imperial College in South Kensington. There I was fortunate enough to be able to attend Conrady's lectures on lens design, and I have never lost this major interest in my life.

"Besides my interest in lenses, I had always felt that I would like to be a teacher, and when in 1929 I was offered a position on the faculty of the newly-formed Institute of Applied Optics at the University of Rochester, I jumped at the opportunity of combining two interests in one. In order to teach one must understand, and it is well known that in all cases the teacher learns more about the subject than the class. Teaching and writing both fall in this category, and I still enjoy them both.

and high-speed photography, went to Dr. Sigmond J. Jacobs, a senior research physicist at the U.S. Naval Ordnance Laboratory at White Oak, Silver Spring, Md. His recent work on the use of precision focal-plane scanning to increase the information content of high-speed motion pictures was cited by the award committee, which was headed by Carlos H. Elmer.

been awarded 10 patents in the field of optics, and is the author of numerous scientific papers. He is noted for his ability to write lucidly on technical subjects. He has contributed articles to several encyclopedias and is the author of the book, *Lenses in Photography*, now in its second edition. A graduate of the Imperial College of Science and Technology in London, Dr.



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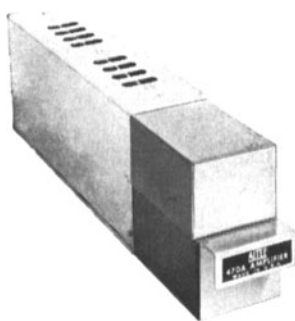
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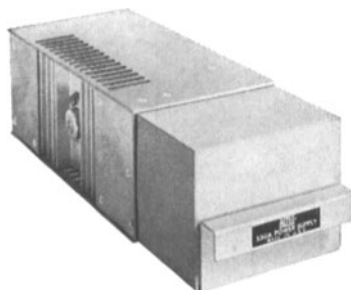


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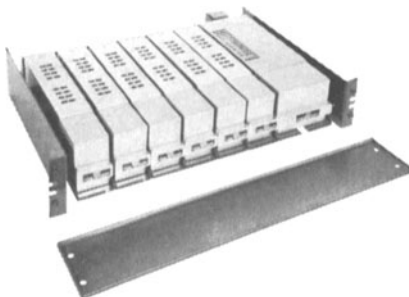
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"In 1937, Dr. Mees, head of the Kodak Research Laboratories, called me into his office and explained that Kodak's chief lens designer, Mr. C. W. Frederick, was soon to retire, and he invited me to be his successor. I could not possibly refuse this magnificent opportunity so I transferred to Kodak as a lens designer. I have, however, been fortunate enough to continue teaching an evening course on lens design at the University ever since.

"After joining Kodak I soon discovered that I had a lamentable ignorance of the techniques of motion-picture engineering and production. I thereupon proceeded to collect a set of the Transactions and Journal of this Society, which in itself was no light task. I then worked steadily through it, reading all the articles that dealt with cameras and lenses, projectors, arc lamps, screens, printers and particularly sound recording and reproduction. This was time very well spent as it enabled me to understand the problems of the motion-picture industry and to talk to motion-picture engineers in their own language.

"I have greatly enjoyed my contacts with members of this Society and the opportunity of serving on several of your technical committees. Thank you again for awarding me this magnificent medal."

Conference Arrangements

Local arrangements for the 96th Conference were under the direction of the New York Section Chairman, C. Russell Dupree of J. A. Maurer, Inc., with Arthur J. Miller, Du Art Film Laboratories, serving both as general arrangements Vice-Chairman and Publicity Chairman. General supervision of the arrangements was by Conference Vice-President Geo. W. Colburn.

An important function of the technical sessions was under Projection Chairman Jack Haber, Mecca Film Laboratories, and his assistant, James Pierce, also of Mecca. The projectionists were Paul Levy and Jerry Meyers.

Robert Nothdurft of the U.S. Army Pictorial Center was Chairman for Public Address and Recording, and was assisted by APC personnel: Capt. Robert M. Franks, Lt. William M. Spry, James F. Thomas, Stephen M. Cooper and Randall L. McLain.

Other Conference organization was handled by Hotel Arrangements Chairman Frank Bucci of Pathé Laboratories, Membership Chairman Donald H. Horton of Eastman Kodak Co., Registration Chairman John E. Asher of LAB-TV, Luncheon Chairman Herbert De Groot of National Broadcasting Co., Awards Session Chairman Harold Jones, Transportation Chairman Harold J. Freedman, Auditors Peter P. Cardasis and Pat Mulc, and Administrative Assistants Edward A. Winkler and Alan Vickers.

A novel and successful Wednesday evening entertainment feature was the inspiration of Buffet and Entertainment Chairman Saul Jeffee of MoviLab, Inc. Instead of the customary banquet, registrants and their guests (about 540) boarded two excursion boats for a two-hour trip to the World's Fair. On board, there were cocktails, a hot buffet dinner and entertainment. At the Fair itself, the group got VIP treatment at

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Material contributions to the success of the 96th Conference included the loan of projection equipment by Eastman Kodak and Bell & Howell, and the donation of magnetic recording tape by Eastman Kodak.

Engineering Activities — Reported by the Staff Engineer

During the week of the Conference, nine of the 13 SMPTE engineering committees met at the Commodore Hotel; the Video-Tape Recording Committee met the week before the Conference.

Color

The Color Committee, under the chairmanship of J. M. Waner, having completed one of its subcommittee reports, is deeply

involved in the preparation of a new color television test film. A joint subcommittee (with the Television Committee) under the chairmanship of Dr. F. H. Gerhardt has completed photographing the pictorial material, and it is anticipated that it will not be too long before the color reels and slides will be available to the industry.

The one completed item, report on "Infrared Transmission Characteristics of Various Color Release Prints and Their Effects on Color Television Transmission" by Dr. H. N. Kozanowski was published in the November issue of the *Journal*.

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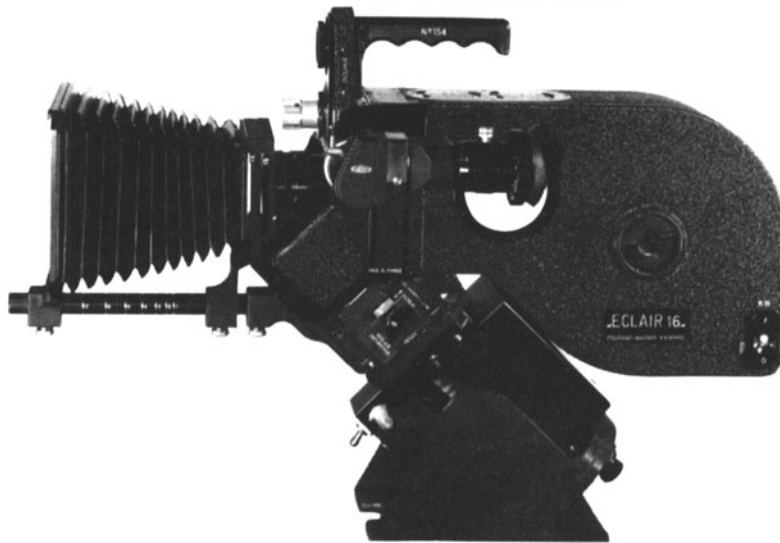
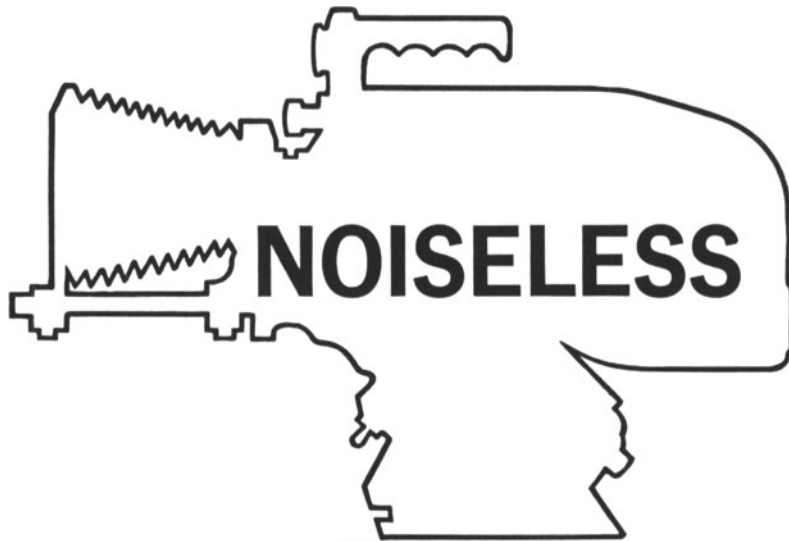


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Film Dimensions

The Film Dimensions Committee, chaired by Dr. W. C. Brandsma, having completed the re-editing of the film dimension standard, is now studying the possible standardization of recently established films such as the 35mm film perforated with five rows of 8mm perforations.

Film Projection Practice

Included among the many projects in the active status under the Film Projection Practice Committee is a rather interesting development. Approximately a year ago, R. Haven Falconer of M-G-M asked SMPTE to consider a new theater test reel. Mr. Falconer offered the services of the M-G-M organization in facilitating the completion of a reel that could be shown to the non-technical persons in theater management to "check out" a theater prior to the showing of a new release. Dr. F. J. Kolb of the Film Projection Committee undertook the task, and at the recent meeting the first work print of the subjective test reel was reviewed.

Instrumentation and High-Speed Photography

The Instrumentation and High-Speed Photography Committee, headed by W. G. Hyzer, is continuing its work toward the establishment of a professional degree in the field. Once again the effort of the group has been enlisted to ensure the success of an international high-speed congress to be held in Zurich, Switzerland. Max Beard has been appointed SMPTE representative and chief U.S. delegate to the Congress.



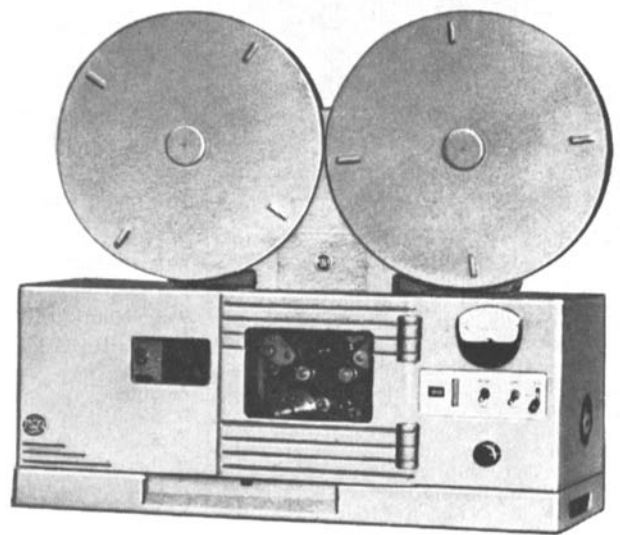
President Ray and President-Elect Stifle.

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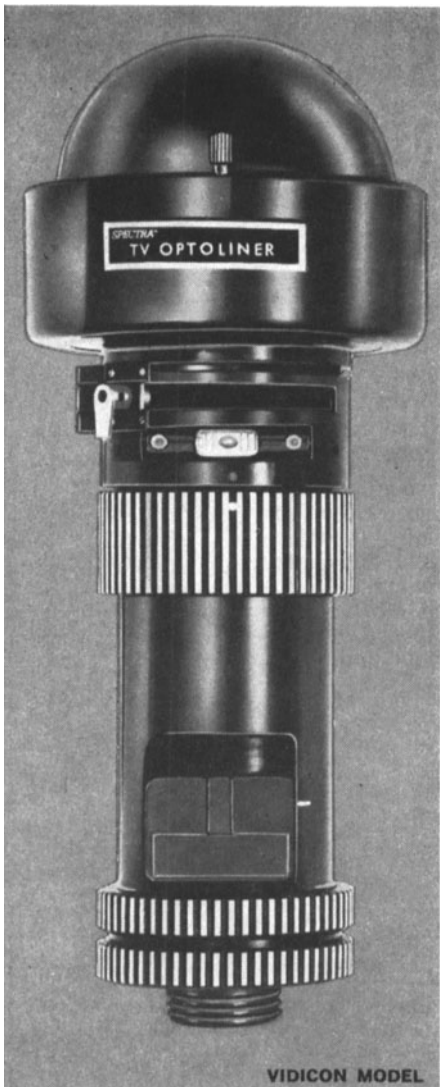
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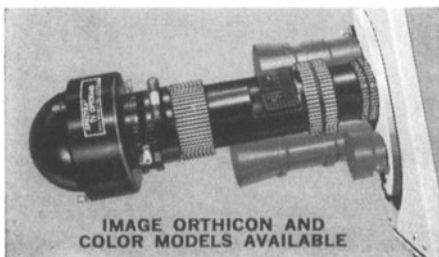
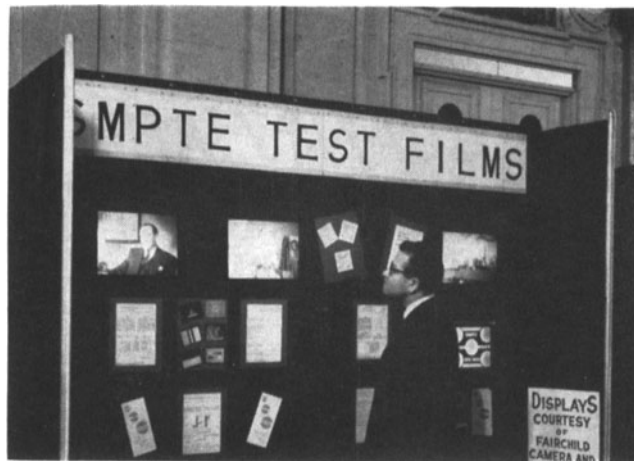


IMAGE ORTHICON AND
COLOR MODELS AVAILABLE



New SMPTE test film booth (Staff Photo).

Laboratory Practice

The Laboratory Practice Committee, under the leadership of W. D. Hedden, is engaged in more than a dozen projects, including the preparation of standards covering the SMPTE test films known as the Reg 8 and Reg 16. Also of great interest to everyone is the completion of work on the long awaited Universal Leader. The preparation of the Leader was accomplished by N. R. Olding of the Television Committee, and will be described in a forthcoming *Journal*. The Leader will be made available concurrently with the publishing of the *Journal* report.

One other point of interest is the fact that the popular Flow Sheets, long out of print, are being updated by J. P. Hall and will again be made available.

16mm and 8mm Motion Pictures

Dr. H. W. Knop, chairman of the 16 and 8mm Committee, not only has his group busy updating many of the current American Standards, but has started on the task of reviewing the 1941 report of the Committee on Nontheatrical Equipment.

Television

The Television Committee, chaired by Dr. H. N. Kozanowski, although having completed the review of current standards, is being kept busy with a volume of new projects. The sub-committee under J. A. Flaherty is continuing the work of preparing all the EIA (RETMA) television charts to be released as American Standards and, eventually, as 2 by 2 slides for testing television systems.

Video-Tape Recording

The Video-Tape Recording Committee, although not meeting during the Conference week this year, has held a meeting about every two months, with an attendance record of well over 80%. This group headed by A. H. Lind, is continuing the preparation of Standards for submission to ASA Sectional Committee C98.

Much of the work is divided into two subcommittees. The first, chaired by F. M. Remley, is preparing standards that will specify test tape for the alignment of video-tape recording equipment. The second, under H. W. Town, is studying the possibility of establishing standards in the new area of slant-track recording.

Television Studio Lighting

The Television Studio Lighting Committee has once again been brought into action by R. G. Williams, chairman, and has started work in areas dealing with dimmer-control systems, light-output curves, heat-control filters, luminaire suspension devices and many other problems facing studio lighting directors. — Alex E. Alden.

Test Film Exhibit Booth

For the first time ever, the Society exhibited a booth of its own at the Conference — it was received with great enthusiasm.

The booth, a projection wall with four rear-screen projectors, demonstrated 16mm (both sound and visual) and 8mm test films. The equipment used in the booth was lent by Victor Animatograph Corp., a division of the Kalart Co., Plainville, Conn.; and the Fairchild Camera and Instrument Corp., Plainview, L.I.

In addition to the projection wall, the booth contained a side display of a closed-circuit motion-picture (16mm) projection chain which was used to demonstrate SMPTE TV test films. This equipment was lent by GPL division, General Precision, Inc., Pleasantville, N.Y.

The Society exhibit was conceived, designed, and built by Joseph Stiffl, Assistant Staff Engineer at Society Headquarters. Stiffl was at the booth at all times answering questions on test films and demonstrating the various test films available through the Society.

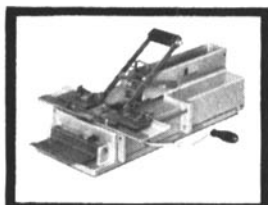
Test film catalogs, other literature and test film pictorial aids were distributed, e.g., Recommended Practices and enlargements of test film targets.

The following assisted at the booth: Robert A. Colburn, Geo. W. Colburn Laboratory, Inc.; Miss Shirley Turner and Miss Mary Kuhlman, SMPTE staff; Alfred Leichman and Mrs. Elaine Stiffl. Mort Golberg, Kalart Co., aided in maintaining smooth operation of the booth.

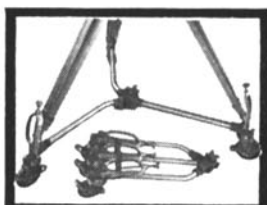
Ladies Program

The Ladies Program was under the co-direction of Calvin M. Hotchkiss of Eastman Kodak Co., who also served as Hospitality Chairman, and Robert Crane of Color Service Co.

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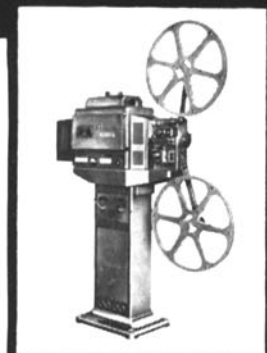
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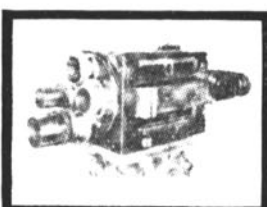
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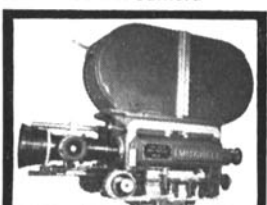
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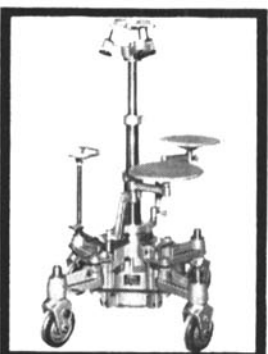


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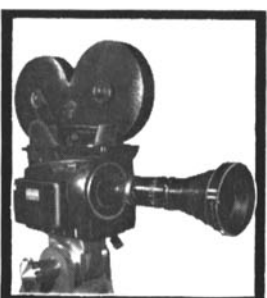


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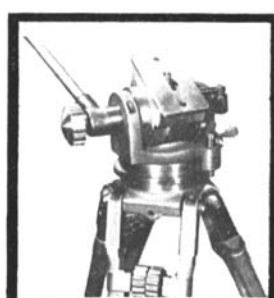
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Official hostesses were Mrs. Noel R. Bacon, Mrs. Alfred E. Bruch, Mrs. C. Russell Dupree, Mrs. John J. Kowalak, Mrs. Arthur J. Miller, Mrs. Robert C. Rheineck, Mrs. Ethan M. Stife and Mrs. Edward A. Winkler. In addition to maintaining a ladies headquarters where the distaff side could meet and relax, the committee made available tickets for network television shows and motion-picture theaters. Another feature of the ladies program was the Thursday tour of NBC facilities, followed by a cocktail party in the Rainbow Room at Rockefeller Center.

Equipment Exhibit

The highly successful Equipment Exhibit was organized by Dominick J. Capano, S.O.S. Photo-Cine-Optics, assisted by Sheldon Kaplan of Hollywood Film Co.

The winning exhibit — picked by a special committee as outstanding for general interest, imagination and effectiveness — was that of F&B/Cecco, Inc.

Special exhibits were set up by the Naval Ordnance Laboratory at White Oak, Silver Spring, Md., and by the Will Rogers Memorial Hospital.

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

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Arriflex Corp. of America

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Camera Service Center, Inc.

Cine Electronics Systems, Inc.

Cine 60 Motion Picture Equipment

Comprehensive Service Corp.

Dage Television Co.

Dalto Electronics Corp.

Andre Debrie of New York

DuKane Corp.

Eclair Corp. of America

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F&B/Cecco Inc.

Fairchild Camera and Instrument Corp.

Filmline Corp.

Frigidheat Industries, Inc.

General Camera Corp.

The Harwald Corp.

Heico, Inc.

Karl Heitz, Inc.

Hi-Speed Equipment, Inc.

Hollywood, Film Co.

MGM Telestudios, Inc.

Macbeth Corp. and Subs.

Machtronics, Inc.

Magnasync Corp.

Magna-Tech Electronic Co., Inc.

Metro/Kalvar, Inc.

Motion Picture Enterprises, Inc.

National Cine Equipment, Inc.

Neumade Products, Inc.

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Oxberry Corp.

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Photo Lectronic Research, Inc.

Photoinstrumentation Corp.

Plastic Reel Corp. of America

Precision Laboratories Div.

Quick-Set, Inc.

Red Lake Laboratories, Inc.

3M Co./Revere-Wollensak Div.

Richmark Camera Service, Inc.

Roanwell Corp.

S.O.S. Photo-Cine-Optics, Inc.

Sol-Lux Cinema Electronics

Sylvania Electric Products, Inc.

Thomas J. Valentino, Inc.

Short Film Subjects

A group of outstanding short films was on the Conference program once again. These excellent examples of the filmmaking art shown before the technical sessions were selected under the chairmanship of William P. Howard of Movielab, Inc. The films were:

Before It's Too Late, 15 min, 16mm color. Produced by Audio Productions, Inc. Shows the use of seat belts to prevent accidents.

H. S. Denison Sea Trials, 13 min, 16mm color. Produced by Grumman Aircraft Corp., this film deals with the battle of survival of the Denison, through gale winds and towering waves.

Fastaxation, 18 min, 16mm color. Produced by Minnesota Mining and Mfg. Co., Revere-Wollensak Division. This film uses military and industrial footage to illustrate the use of a high-speed camera in research, production, and quality control.

431 Plus 2, 17 min, 16mm color. Produced by Dynamic Films, Covers the "Indianapolis 500" of 1964, and investigates one of America's great problems — death on the highway.

Golden Fish, 10 min, 16mm color. Distributed by Columbia Pictures, Golden Fish is an award-winning color short, without dialogue. Tells the story of a day in the life of a goldfish and a cat.

Inside Mr. Magoo, 8 min, 16mm color. Produced by U.P.I. for the American Cancer Society, this film is an animated cartoon on cancer — its discovery, and methods of arresting and curing this disease.

Morris Electronic Central Office, 12 min, 16mm. color. Produced by Bell Telephone Laboratories, the film shows the electronic magic of a new central office.

My Financial Career, 7 min, 16 mm color. Produced by National Film Board of Canada for Sterling Educational Films, this short is based on an essay by Canadian humorist Stephen Leacock about a young man who is prospering and decides to open a bank account.

Ski Sense, 18½ min, 16mm color. Produced by Aetna Life Insurance Co., this short illustrates the importance of safe ski equipment, and demonstrates pitfalls which should be avoided in order to maintain one's physical well being when on the slopes.

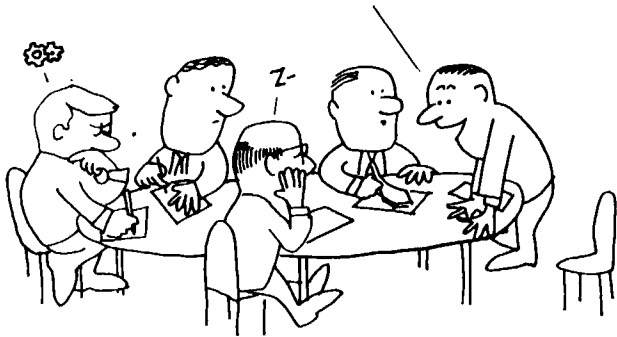
Spring in Scandinavia, 15 min, 16 mm color. Produced by Justin Herman of Lumberville, Pa. The title is self-explanatory.

The Papers Program

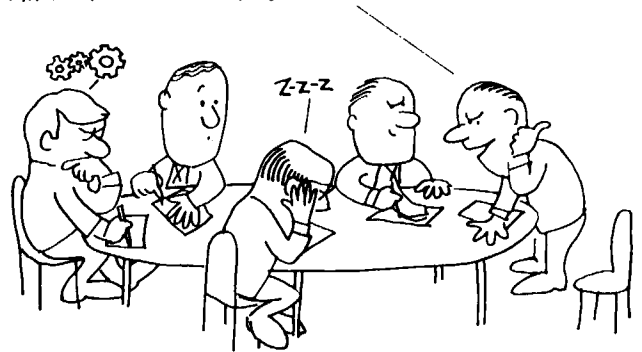
The papers program was organized into a format of 12 technical sessions, including two concurrent sessions, by Program Chairman John J. Kowalak of Movielab, Inc. In addition, there was a special presentation by the National Aeronautics and Space Administration on Monday evening, along with tours of the new CBS Broadcast Center on Thursday evening.

Mr. Kowalak's accomplishment of such a substantial Papers Program was a major feat because it was done through the summer months to meet an early deadline for the August *Journal* and to make a Final Program in mid-September for such an early Conference.

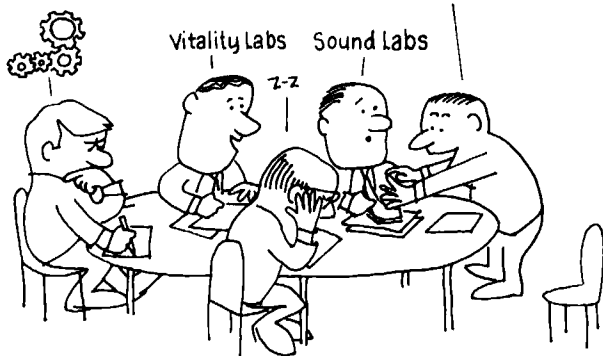
1. Now, gentlemen! Let's get to it. Business is fine, but it's been brought to my attention that there is a lack of recognition of Tri Art as the name of Du Art's color lab, and I propose to do something about it!



2. I'm going to change the name of Tri Art! It will confuse the hell out of anybody who tries to appease us by learning that name tomorrow. They'll wake up and start screaming Tri Art!... And we won't be there.



3. Now, I want you to come up with a brand new name for our color operations that will convey our new image. It's got to reflect the vitality of our young management and the soundness of our 40 years of experience. The new name must make clear that we have made a tremendous investment in new equipment in the last 10 years.



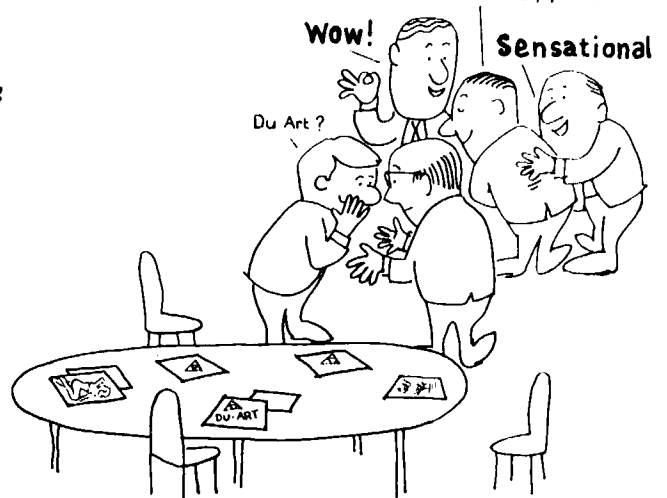
4. You're not getting the idea! It must have wham-o! Why with our new editing rooms for our customers, our new fiber optics color printing, our tightened inspection and absolute quality control, we can beat anybody for service, quality and facilities! Let's try some more!



5. I've got it! I just thought of it! Just the name to say everything! It reeks of speed, our fantastic equipment, personalized, sensational service, and dynamic follow-up combined with the knowledge based on our unsurpassed 40 years of experience! Brace yourselves... Here it comes! "Du Art Color Corporation."



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Mr. Kowalak served under the direction of Papers Committee Chairman C. Loren Graham of Eastman Kodak Co. and SMPTE Editorial Vice-President Herbert E. Farmer of the University of Southern California. Again serving as Associate Chairman for Papers from Abroad was Rodger J. Röss of the Canadian Broadcasting Corp.

Topic Chairmen for the 96th Conference program were: *Cinematography*—Fred J. Scobey, Deluxe Laboratories; *8mm and Small-Format Films*—Everett C. Hall, Cine Magnetics, Inc.; *Instrumentation and High-Speed Photography*—William E. Hyzer, Consultant; *Laboratory Practices*—Raymond J. Wulf, Eastman Kodak Co.; *Medical Motion Pictures and Television*—Lowell Wentworth, Bay State Film Productions; *Motion Pictures and Television for Education*—Louis Forsdale, Columbia University Teachers College; *New Techniques for World's Fair Projection*—Boyce Nemece, Reevesound, Inc.; *Sound Recording*—Homer Elder, Elliot, Unger & Elliot; *Space Technology*—William M. Sheahan, RCA Service Co.; *Special Effects and Optics*—Maurice Levy, Eastern Effects; *Television Engineering Production*—Paul F. Wittlig, CBS-TV.

The 79 technical papers, plus equipment

papers/demonstrations, were presented as published in the August issue of this *Journal*, with the following changes:

Papers added: "Technological Applications of Optical Masers," J. S. Courtney-Pratt, Bell Telephone Laboratories; "Precision Range-Gated Imaging Technique," Don B. Neumann, U.S. Air Force; "Investigation of Brittle Fracture in Steel by Means of Ultra-High-Speed Photography," J. G. A. de Graaf and C. A. Verbraak, Central Technical Institute T.N.O.; "A Nanosecond Single-Exposure Integrated Camera for Use With Interchangeable Kerr-Cell or Image-Converter Shutters," S. M. Hauser and W. J. Schenck, Electro-Optical Instruments, Inc.; "High-Intensity Lighting for Photography of Launch Operations," Maxwell A. Kerr, General Electric Co.; "Multi-Screen Techniques for the IBM Show," Arthur E. Fury, Audio-Visual Consultant; "Cine-Endoscopy and Cine-Fluoroscopy," John E. Rayl, M.D., and Jack W. Briggs, Veterans Administration Hospital, Lake City, Fla.

Papers cancelled: "A New Universal Synchronizer," Don McLaughlin, Radio Corp. of America; "Animation on TV Tape," Norman F. Bounsall, Ampex Corp.

Copies of the Program as published two weeks before the Conference are available from Society Headquarters on request.

F & B/CECO Receives SMPTE Exhibit Award



Staff Photo

Arthur Florman, President of F & B/CECO, Inc., was recently presented by SMPTE President Reid H. Ray with the Exhibit Award plaque for the best display at the 96th SMPTE Technical Conference and Equipment Exhibit at the Commodore Hotel, New York, last fall. The presentation was made at Society headquarters.

The Award is given in recognition of exhibitors' effort in preparing effective and instructive displays as a worthy supplement to the technical program of the Conference. Interest, imagination and attractiveness are the prime qualities that distinguish award-winning displays, and these were well exemplified in the F & B/CECO exhibit. The chief problem of a

company handling a great number of individual items is to avoid the appearance of clutter and confusion; this was solved successfully by F & B/CECO by subdividing the 40-ft display area into five areas of major interest—splicing equipment, projection equipment, editing equipment, cameras and proprietary products. There was an additional area set aside with comfortable chairs, for the footsore.

Credit for designing and arranging the F & B/CECO display should go to Lou Girola, Chief Sales Engineer of the company, who only did the preliminary planning but was also in charge of the display during the Conference, under the general supervision of Mr. Florman.