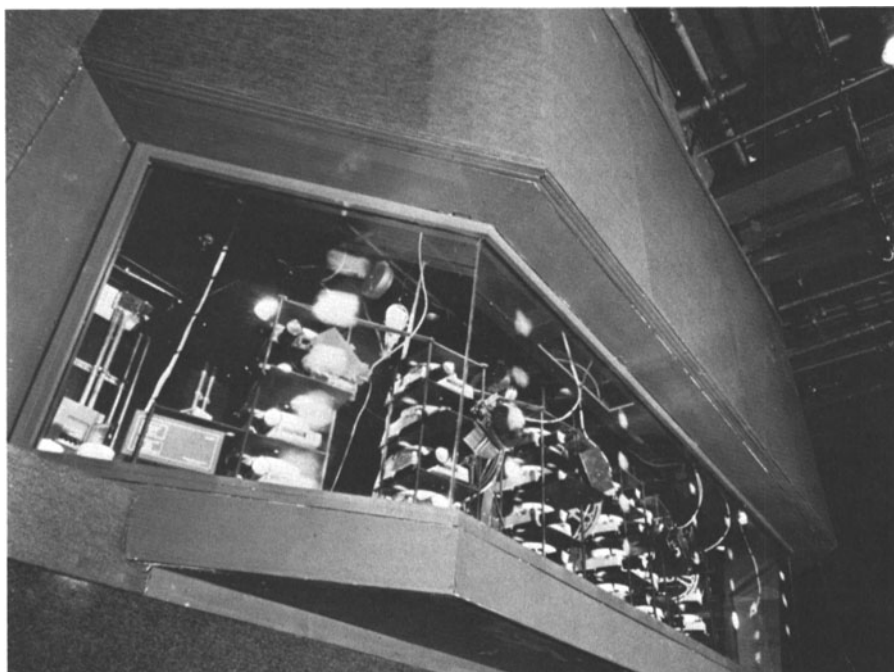


Puerto Ricans, German, Polish, Chinese, Japanese — every nationality impinging on the City's beat. They *ARE* the City!

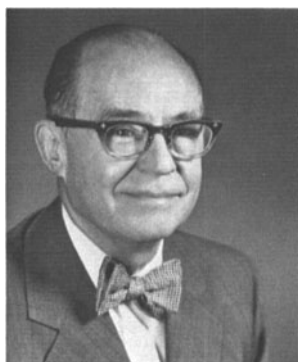
Throughout the show, the observer savors the experience as if he were actually there, perhaps atop the RCA Building choosing for himself the vantage from which he would view the vast panorama before him. There below he might zero in on a lone taxi driver in the midst of a massive traffic jam. He's hurling salty expletives at no one in particular. The real horns, the sirens, the exasperated drivers ring familiar chords.

In visiting "The New York Experience," a spectator will become keenly attuned to the temper of the City. He will be right alongside its people as they live, work and play — and pass on to their rewards. He will see New York as even New Yorkers rarely see it. He will understand why native and newcomer alike are willing to pay the high price they do — physically, emotionally and economically — to call themselves "New Yorkers."



Projection booth as seen from the auditorium.

Biographical Notes



Allen Stimson

Allen Stimson, who retired 1 November 1974 from the post of Senior Supervising Engineer, Consumer Products Engineering, Kodak Apparatus Div., Eastman Kodak Co. (a post he had held since 1957), has been made an Honorary Member of the Photographic Society of America (PSA), the organization's highest honor, for "his many services to the Society and to photography."

A Life Fellow of the SMPTE, he has been granted some 65 patents and has had published some 37 technical papers. He has contributed chapters to two books and sections to

two encyclopedias and is the author of a recently published (1974) book, *Photometry and Radiometry for Engineers*.

A native of Terre Haute, Ind., he was graduated in 1931 from Rose-Hulman Polytechnic Institute with a BS degree in Mechanical Engineering with high honors. Subsequently he did some graduate work and joined General Electric Co. in 1931. (He had worked the previous summer as an engineer for Bell Telephone Laboratories in New York.) He remained with General Electric through 1956 and in 1957 he joined Eastman Kodak Co.

Technical Developments

Developments for which he has been granted patents include the first log-scale exposure meter; the first single-vane exposure control; an automatic focusing system; a luminous diode battery condition indicator for the camera; and many others of equal significance. He developed a method of calibrating automatic cameras by measuring the exposure in the focal plane. He also developed the concept of photometric-lens aperture or G-number — a development report by Mr. Stimson in the February 1965 issue of the *Journal* ("The G-Number: A Photometric Lens-Aperture Designation"). He is also the author (with J. F. Scudder and C. M. Nelson) of "Reevaluation of Factors Affecting Manual or Automatic

Control of Camera Exposure" in the January 1968 issue of the *Journal*. An earlier *Journal* paper by Mr. Stimson is "Color and Reflectance of Human Flesh" in the May 1953 issue.

Among other accomplishments he designed and supervised the Photometric Engineering Laboratories of General Electric's Instrument Div. and of Kodak's Consumer Products Engineering Dept.

Professional Organizations

Mr. Stimson is a member of a number of professional organizations (other than the SMPTE and the PSA), among them the Society of Photographic Scientists and Engineers, the Royal Photographic Society of Great Britain and the Society of American Cinematographers. He has been active for many years on various committees of the American National Standards Institute and he has served as the American Delegate to three meetings of the International Standards Organization (Stockholm 1955; London 1971; Williamsburg 1973). His activities in behalf of the SMPTE have included service on the Color Committee, the Screen Brightness Committee and the Projection Practice Committee.

His hobbies include photography, cabinet making and carpentry. He resides at 100 Landing Road North, Rochester, NY 14625.

Motion-Picture Equipment Pioneer — Alysso de Faria

Back in 1907, Alysso de Faria then an eight-year old boy living in Cedro, a small town in Brazil, South America, built his first 35mm motion-picture projector, projecting random pieces of film obtained from an itinerant showman traveling the interior of the State of Minas Gerais. Alysso used an eccentric puller and a lens "borrowed" from his father's binoculars. In 1910, he moved to Pirapora and bought a Pathé Frères projector to experiment with. He initiated correspondence with motion-picture equipment manufacturers and with motion-picture producers in the United States and in France.

In 1918 he installed a motion-picture theater in Pirapora which he called "Cine Edison." He wrote to Thomas Alva Edison, who in return sent him catalogues and technical data on new motion-picture techniques and an invitation to visit him in the United States.

In 1920 he moved to Rio de Janeiro, then the capital of Brazil to continue his studies. Upon graduation in 1924 as an electrotechnical and mechanical engineer, he moved to Belo Horizonte, the capital of Minas Gerais. For a while he devoted himself to the construction of hydroelectric plants, but, faithful to his motion-picture vocation, in two more years he installed two new movie theaters, one in Corinto and the other in Sabará. He also became a motion-picture distributor in Belo Horizonte.

In 1930 only three cinemas in Brazil had started exhibiting sound motion pictures, and Alysso was requested by theater managers throughout Minas Gerais to adapt sound to their existing motion-picture equipment. Foreign sound reproducing equipment at that time was expensive and available only on lease. Furthermore, things were rapidly changing because silent motion pictures were becoming ever scarcer and sound motion pictures were being distributed in even greater numbers in Brazil, many through United States film distributors. Alysso de Faria then began to manufacture motion-picture sound reproducers first for Belo Horizonte, and afterwards for the Interior, finally covering all of Brazil.

In 1937 he was commissioned by the Minas Gerais State Government to produce promotional pictures on the State's agriculture and

cattle breeding. This forced him to build his own variable-area sound equipment for the soundtrack of his pictures.

In 1957 he built his first experimental 35mm sound motion-picture projector.

In 1960, together with his son Orion Jardim de Faria, who had become an expert, he established the Industria Cinematografica Orion Ltda. for the manufacture of 35mm projectors and similar equipment.

As a pioneer in the field of manufacture of sound equipment for Brazil's motion-picture theaters, Alysso de Faria received the Industrial Merit award and medal from the Federation of Industries of the State of Minas Gerais and was distinguished with an homage by Dr. José de Magalhães Pinto, then Governor of the State of Minas Gerais.

In 1967, once more together with his son Orion, he started the manufacture of combined 35/70mm projectors with 4- and 6-track optical and magnetic sound. The sound reproduction chain was fully transistorized with a seven-amplifier drawer-type rack assembly in a main panel. One of these serves as an emergency backup. Some of the mechanical features of these projectors are:

(1) The projector movement mechanism and the optical and magnetic sound heads are built into a single-block support structure. They are easily removable for repair. The back of the projector is water cooled.

(2) Projectors are provided with curved channel and film compression for improved image projection, the film gliding over flexible runners. All parts in contact with the sliding film are built with antimagnetic materials.

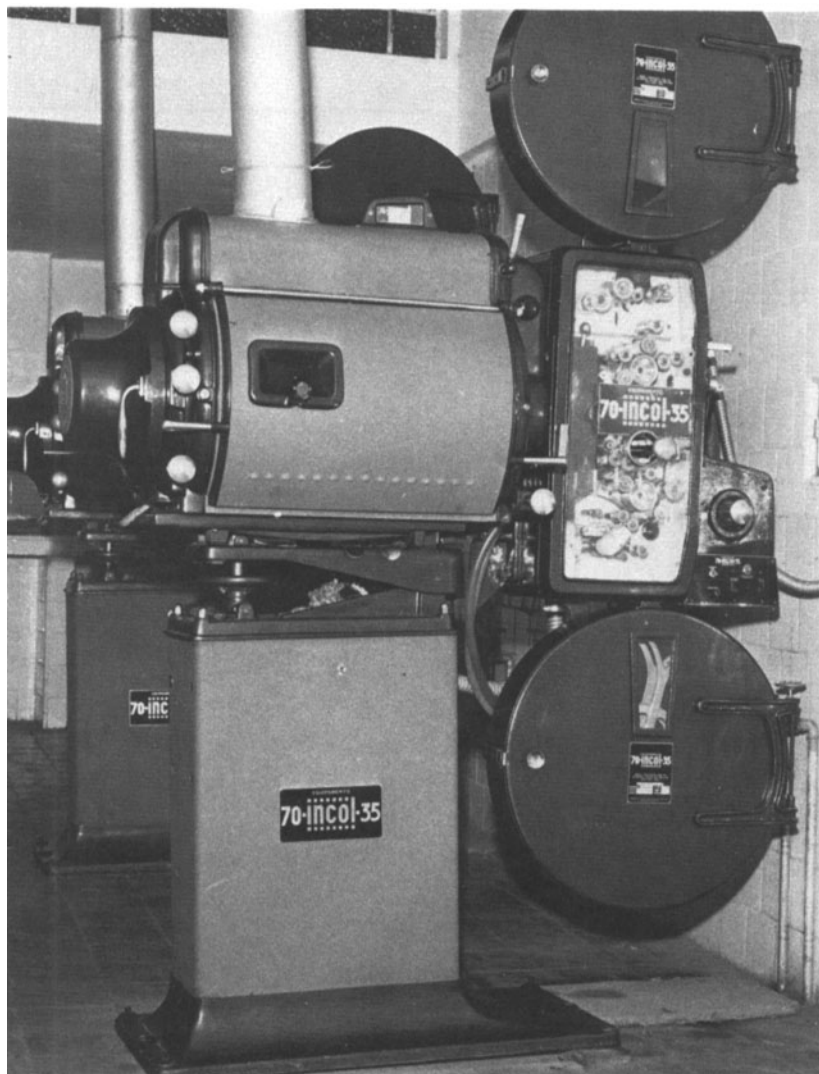
(3) Switchover from one projector to the other is automatically accomplished by a relay mounted into a separate compartment within the base of the feeding magazine.

(4) A silicon rectifier for the arc supply with three- and six-phase, 80- to 140-amp rectification is provided.

The plant is now under the total direction of Orion, but Alysso, now 71, besides being the manager of his own business, keeps a watchful eye on the factory's operation and proudly visits the main cities in Brazil, including Rio de Janeiro, São Paulo and Brasília (the new capital), where INCOL motion-picture equipment is installed in major motion-picture theaters and many others.

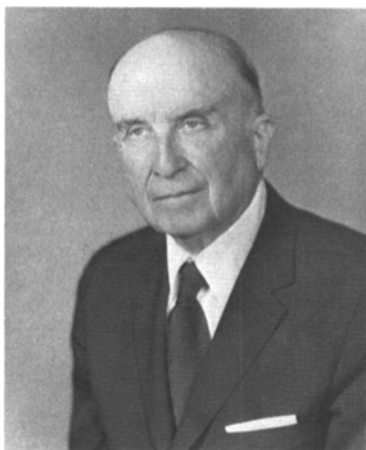


Alysso de Faria (right) speaks with Benedito Alves da Silva (left), owner of Cine Candelaria theater.



The 1970 model of the double purpose 70 and 35mm INCOL projector, totally designed and manufactured in Brazil.

Harry F. Olson: 40 Years of Acoustical Research and Honors



Harry F. Olson is the recipient of the first Silver Medal of the Acoustical Society of America "for his innovative and lasting contributions in microphones, loudspeakers, sound reproduction and electronic music; his many publications; and his constructive editing."

Born in Mt. Pleasant, Iowa, he attended the University of Iowa where he received the B.E. degree in 1924, the M.S. degree in 1925, the Ph.D. degree in 1928 and the E.E. professional degree in 1932. In 1959 he received the honorary degree of D.Sc. from Iowa Wesleyan College in Mt. Pleasant.

In 1928 he joined RCA Corp. as a member of the Research Department in New York City. After being placed in charge of acoustical research in 1934, he continued as head of RCA Corp.'s acoustic research activities during the ensuing years, retiring in 1967 as Staff Vice-President, Acoustical and Electromechanical Laboratory. He continued as Advisor to the RCA Laboratories until 1972.

Professional Activities

An early and important contribution of Dr. Olson's long career was the development of the velocity microphone. One of the problems in the early days of sound motion pictures was the sound pickup. He decided that a velocity microphone would have a distinct advantage

over a pressure microphone in that it would be directional and could thereby discriminate against reverberant and other undesired sounds. The velocity microphone which he developed did, indeed, prove superior due to the directional characteristics. The velocity microphone was followed by his development of the cardioid unidirectional microphone which was an immediate success due to the unidirectional pattern. Over the years, the cardioid microphone has continued to be the universal unidirectional microphone. Dr. Olson has also made pioneering contributions to loudspeaker development, improvement of phonograph pickup and recording equipment as well as motion-picture sound and reinforcement equipment.

In 1940, when the electronics industry was deeply involved in military projects, the Acoustical Laboratory personnel under Dr. Olson directed attention to underwater sound and antisubmarine warfare. Developments included sonar transducers with super directivity and an effective electroacoustic proximity fuse for depth charges.

Working with Herbert Belar, Dr. Olson developed the RCA Electronic Music Synthesizer. After being used by several composers at the RCA Laboratories, the synthesizer was moved to the Columbia-Princeton Electronics Music Center in New York City. Composer Charles Wuorinen was winner of a 1970 Pulitzer Prize for the *Time Encomium* record produced on the RCA Electronic Music Synthesizer — the first time the Pulitzer Prize had been awarded for an all-electronic work.

Dr. Olson is a frequent contributor to professional journals and he holds more than 100 U.S. Patents on devices and systems in the field of acoustics. He is the author of 10 books, the most recent being *Modern Sound Reproduction*. A review of this book appears on p. 1032 of the December 1974 issue of the *Journal*. Several editions of his books have been translated for Russian and Japanese language editions.

Contributions to SMPTE

Dr. Olson has been a member of the SMPTE since 1948; he was made a Fellow in

1954. Papers of which he is the author that appeared in the *Journal* include: "Unidirectional Microphone" (Sept. 1936); "New Monitoring Telephone Receiver" (Nov. 1936); "Horn Consisting of Manifold Exponential Sections" (May 1938); "Line Microphones" (Mar. 1941); "The Electrostatic Unidirectional Microphone" (Nov. 1938); and (the two following with co-author John Preston) "Wide-Range Loudspeaker Developments" (Oct. 1946); and "The Single-Element Unidirectional Microphone" (Mar. 1949).

In 1955 he was presented, by the Society, with the Samuel L. Warner Memorial Award "for outstanding achievements in audio engineering including his work on the velocity microphone, the duocone speaker for high-fidelity sound reproduction and for his contributions to the development and improvement of phonograph pickup and recording equipment, underwater sound equipment and sound motion-picture and public address systems."

Other honors that have been bestowed for his contributions in the field of acoustics include the Modern Pioneer Award of the National Association of Manufacturers (1940), the John H. Potts Medal of the Audio Engineering Society (1952), the John Scott Medal of the City of Philadelphia (1956), the Achievement Award of the IRE Professional Group on Audio (1956), the John Ericsson Medal of the American Society of Swedish Engineers (1963), the Emile Berliner Award (1965), the Mervin J. Kelly Medal of the Institute of Electrical and Electronic Engineers (1967), the Consumers Electronics Award (1969), and the Lamme Medal (1970).

Professional organizations (other than the SMPTE) of which he is a member include the National Academy of Science, to which he was elected in 1959, Tau Beta Pi, Sigma Xi and the American Society of Swedish Engineers. He is a Fellow of the American Physical Society, the Institute of Electrical and Electronic Engineers, and the Acoustical Society, of which he is a Past President. He is also an Honorary Member and Past President of the Audio Engineering Society.