

and two with the construction of sensitometers; others are on the action of 5-bromobenzotriazole in emulsions, hypersensitizing by exposure, the effect of corpuscular radiation on photographic emulsions, recovery of components from waste fixing solutions, a camera for testing resolving power, a meter for measuring silver ion concentration, coating of glass to reduce two-layer reflection, and the chemical composition of commercial emulsions. The paper on the latter subject gives the silver, gelatin, silver iodide, silver bromide, soluble bromide ion, and soluble chloride ion contents of 15 photographic emulsions of Western manufacture. In addition, the issue contains the complete Japanese

version of a review article on the use of photographic plates in spectrographic analysis, originally published in 1948, and 22 abridgments, in both English and Japanese, of papers published during the period 1936 to 1947.—*T. H. James, Eastman Kodak Co., Research Laboratories, Rochester 4, N.Y.*

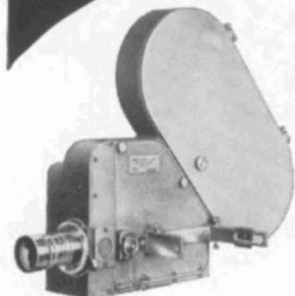
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Commercial Sound Catalogue No. 132 offers descriptions (including specifications) and illustrations of a wide range of microphones and speakers produced by Electro-Voice, Inc., Buchanan, Mich. The microphones are categorized according to the type of generating element: crystal, ceramic, carbon, and dynamic; and according to type of pickup pattern: nondirectional (omnidirectional), unidirectional (cardioid and sound spot) and differential (close talking). The catalogue is available upon request to the company.

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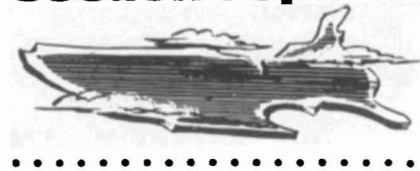
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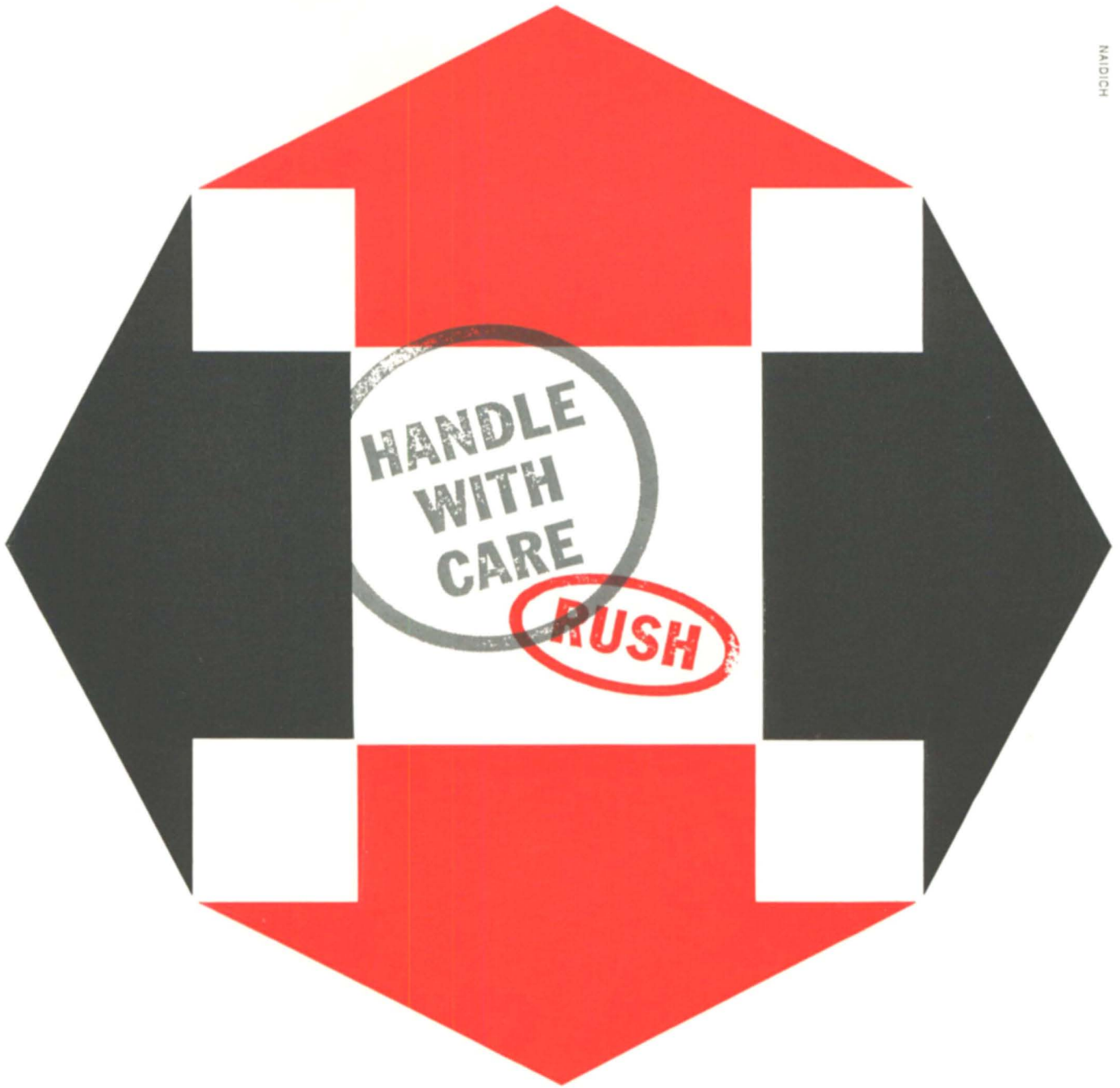
The Atlanta Section met on May 10 at WSB-TV with an attendance of 25. Guest speaker Edward Schmidt, Vice-President, Reeves Soundcraft, discussed "The History of Magnetic Striping." Mr. Schmidt gave an interesting presentation of the history of magnetic striping, a field that is much older than most people realize. The early problems and various methods of striping were discussed and slides of historical and contemporary equipment for striping film were shown.

Most of the basic problems of magnetic striping have been solved, and it has been firmly established in the theatrical and educational fields for five to ten years. It is now also making strong progress in the TV industry. It is felt by many that 16mm single-system sound on a magnetic stripe can rival 35mm optical sound.

The newest field for magnetic striping is 8mm film. This has been slower in developing because small defects that had held the tape away from the recording head have been relatively more serious on the very narrow stripe used on 8mm film than they have been on the broader stripes that can be used on 16mm and 35mm films. However, these problems have now been largely solved, and a good future is now predicted for magnetic striping on 8mm film.

Slides were shown of the Reeves Soundcraft production facilities. After the formal presentation a lively and informative question-and-answer period was held. It was felt generally that this program was

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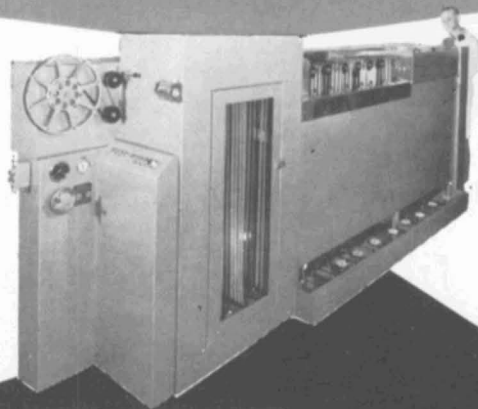
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one of the most instructive that we have had.—Wesley R. Sandell, *Secretary-Treasurer*, c/o Kodak Processing Lab., 4729 Miller Dr., Chamblee, Ga.

The Atlanta Section met June 10. Thirty-one members met at Redstone Arsenal, Huntsville, Ala., where they were privileged to take part in a guided tour of the installation. The welcoming address, given by Mr. Green of the Redstone Engineering Staff, was followed by an impressive motion picture showing various types of rockets and missiles. Following lunch at the Headquarters Cafeteria, the tour proceeded to Test Area No. 5. The tour included not only the test firing area, but the Block House or Control Building for the area. An especially interesting area seen on the tour is the Computer Center where the electronic equipment used to obtain and record data on work being completed at Redstone Arsenal and other installations is maintained. The next stop on the tour was the Test Firing Area and the group had the unforgettable experience of watching a test firing of one of the Saturn rockets. The Saturn and Jupiter rockets were viewed at fairly close range and an official guide was at hand to answer questions.—C. W. Wood for Wesley R. Sandell, *Secretary-Treasurer*, c/o Kodak Processing Lab., 4729 Miller Dr., Chamblee, Ga.

The Boston Section met on June 19 to hear a talk on "Magnetic Tape Synchronization" by Loren Ryder of the Magnetic Sales Corp., Hollywood. The meeting, which was held at the WBZ-TV Studios, was attended by 83 members and guests. Members of the Society of Photographic Scientists and Engineers were among the invited guests.

Mr. Ryder described a system which permits the synchronization of any motion-picture camera with any make of tape recorder by the addition of a synchronizing generator to the camera and an auxiliary sync recording head to the tape recorder. The sync signal on the tape can be used to drive the projector in synchronization with the tape recorder on playback. An ingenious method of maintaining synchronization between a tape made with a wild camera was also demonstrated. A demonstration of the various other systems was also given.

Interest in Mr. Ryder's talk was extremely high. Many of the members and guests preferred to stay on in the auditorium for further discussion rather than adjourn to the lobby where doughnuts and coffee were served at the conclusion of the meeting through the courtesy of Eastman Kodak Co.—Robert M. Fraser, *Secretary-Treasurer*, c/o Itek Corp., Waltham 54, Mass.

The Toronto Group of the Canadian Section met May 31. The meeting included a tour of the television and radio facilities of the Canadian Broadcasting Corp. This was the Section's first Ladies Night and the program of general interest was very well received.

Refreshments were served at the conclusion of the tour and CBC technical personnel, who had acted as guides on the



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tour, conducted a question-and-answer period. Reg Horton, Director of Technical Operation, CBC Toronto, deserves our hearty thanks for arranging these activities.—Lou T. Wise, Chairman, Program Committee, Toronto Group, Canadian Section.

(Ed. Note: This is the last report to be submitted by Mr. Wise in his capacity of the Chairman of the Program Committee, Toronto Group. He is succeeded by Robert MacKenzie of MacKenzie Equipment Co.)

The Hollywood Section met on June 21 at the Walt Disney Studios in Burbank, with an attendance of 250. Guest speakers were Major Daniel McGovern, Commander, Det. 1, 1352nd Motion Picture Squadron, Vandenberg Air Force Base; and Major Albert P. White, Chief, Electronic Counter Measures Branch HQ, 15th Air Force Strategic Air Command.

William Gibson of Douglas Aircraft provided an interesting opening 16mm color film consisting of clips collected over the past few years showing various types of missiles which have misfired and exploded either during or shortly after take-off.

In his discussion of "Photographic Instrumentation at Vandenberg Air Force Base," Maj. McGovern gave a very human and interesting description of the photographic instrumentation work being done at Vandenberg Air Force Base. He described the formation of the unit, indicated its recent growth, and showed an aerial view of the new photographic building which will house a complete motion-picture laboratory.

Maj. White outlined the type of activity encompassed by electronic countermeasures, gave several examples of such activity during World War II and touched upon more recent efforts in this very complex application of electronics. His subject was "Background and Use of Electronic Countermeasures, Their Use Actively, Passively and in Reconnaissance."—Ralph E. Lovell, Secretary-Treasurer, 2554 Prosser Ave., Los Angeles 64.

The New York Section met on June 8 at the Museum of Modern Art with an attendance of 453. Guest speaker Dr. William E. Glenn, Applied Physics Section, General Electric Company, discussed "Thermoplastic Recording."

Dr. Glenn presented an expanded version of the paper he read at the 87th SMPTE Convention in Los Angeles. He explained the process and described the equipment used, stating that the actual recording is done in a vacuum. Dr. Glenn illustrated his talk with excellent slides showing the details of the equipment as well as data charts. General Electric, he said, is now using the process for data reduction purposes and continued development is being carried out to make it available for use by others. The audience watched a showing of a thermoplastic record of off-the-air television at the conclusion of his talk.

The customary coffee break was dispensed with due to the large attendance and the meeting went into a lively question-and-answer period with a large number of the members present taking part.—James W. Kaylor, Secretary-Treasurer, c/o MoviLab Film Labs, Inc., 619 W. 54 St., New York 19.

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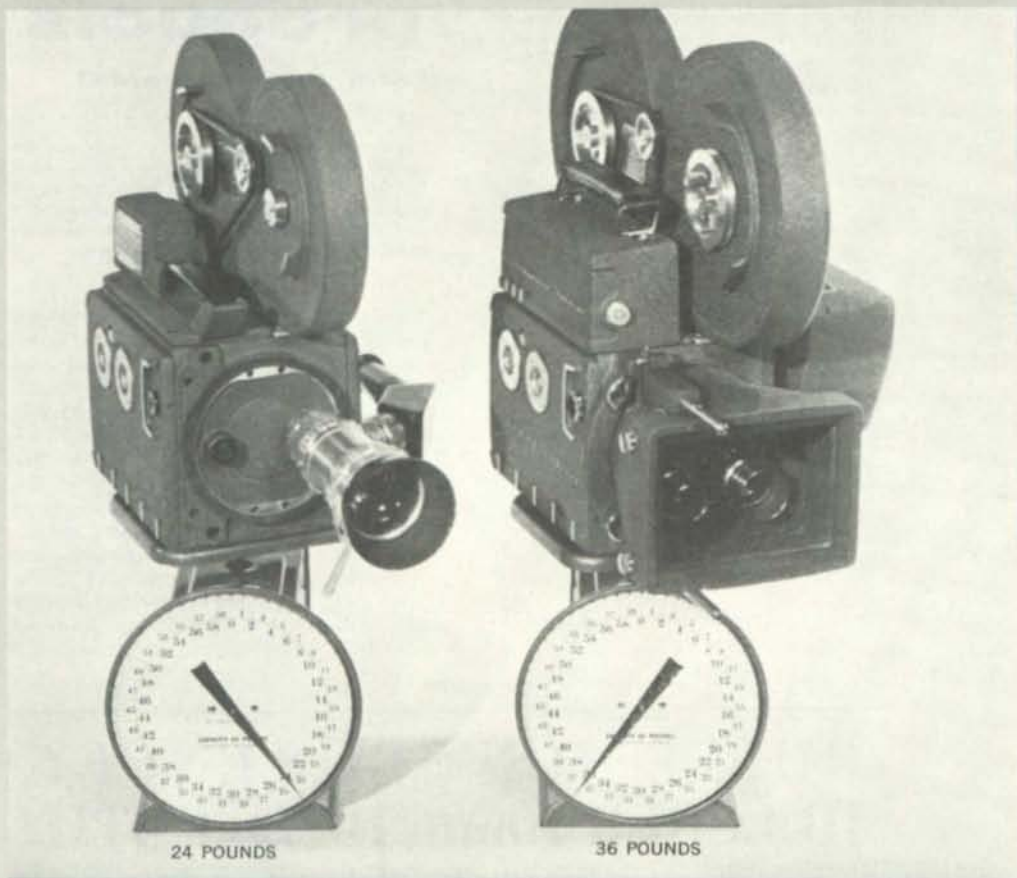
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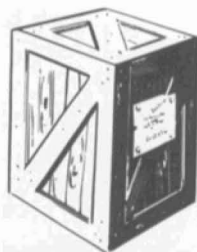
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The San Francisco Section met on June 14 at Ampex Corp. Plant in Redwood City with an attendance of 49. Guest speakers were Cyril Teed of Marconi Corp. of London; Charles Swisher and Charles Anderson, both of Ampex Corp. The meeting was devoted to discussions of the Marconi Mark IV Camera and new developments in video-tape recording.

Mr. Teed described the various features of the Marconi Mark IV in his discussion of the new 4½-in. image orthicon and emphasized the high stability and ease of operation of the camera.

Mr. Swisher, representing Ampex Corp. as distributor of Marconi products in the U. S., pointed out other features of the Mark IV including plug-in circuit board, remote iris controls and the new type of lens turret change mechanism. A demonstration of the camera with its associated equipment followed these discussions.

During the second part of the meeting, Mr. Anderson dealt with the newer developments in video-tape recording. He explained and demonstrated Inter-Sync. The use of this new development allows the playback unit to be locked to the station sync making supers and laps possible. The second part of Mr. Anderson's discussion was devoted to an explanation and exhibition of the new miniature Videotape* recorder.—Frank Mansfield, *Secretary-Treasurer*, 57 Stoneyford Ave., San Francisco 24. (*TM, Ampex Corp.)



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Further information about these items can be obtained direct from the addresses given. As in the case of technical papers, the Society is not responsible for manufacturers' statements, and publication of these items does not constitute endorsement of the products or services.

A pair of Norelco Universal 70/35mm projectors (originally the Philips/Todd-AO) have been installed in the Hollywood Theater of the Screen Directors Guild. The installation, announced by the Motion Picture Equipment Division of the North American Philips Co., 100 E. 42 St., New York 17, was completed early this year. The two Philips machines occupy the two center ports in the theater and are connected with a sound system installed by Ampex Corp. Two Simplex XL 35mm projectors occupy ports on either side of the Philips machines and an Eastman Model 25 arc 16mm projector occupies a

fifth port. The theater has a Raytone 2 : 1, 50 by 28-ft curved screen. Three hundred permanent seats have been installed and additional portable seats bring the seating capacity up to 437.

Earlier, this 70/35 projector made a long-run record in two British theaters, the Dominion Theater in London and the Gaumont in Manchester, each reporting that the first prints of *South Pacific* topped the 1000-run mark.

The design of the projector is based on an illumination principle developed by Philips of the Netherlands in which the light source is a super-high-pressure mercury-vapor lamp operated by current pulses, thus dispensing with the need for a shutter. The projector itself is of simplified design with all components relating to the film path mounted on the flat front panel of a sheet steel column of rectangular cross section to alleviate difficulty of lining up the film path when installing the projector (*Journal*, p. 61, Jan. 1960). About 100 of the Norelco projectors have been installed in the United States and Canada.

An experimental model of an electronic rear-projection system based on a light-modulation process developed by General Electric Co. to give extreme brightness and a wide range of image throw-distances was installed in the Los Angeles Sports Arena for the 1960 Democratic National Convention. Designated the Light Valve Projection System, it was leased by Tele-Prompter Corp. for use at the Democratic Convention. The screen, which shows greatly magnified images, hangs about 35 feet behind the speakers platform and about 55 feet above it. A G-E closed-circuit camera is mounted behind a transmissive mirror in the rostrum in front of the speaker. The mirror reflects the text of the speech and the camera is concealed from the speaker as well as the delegates. The projection system is self-contained except for power supplies. It is manufactured by General Electric Co. for military use. It is not commercially available.

A high-sensitivity color TV camera tube designed especially for colorcasts of night sporting events has been announced by the Radio Corp. of America. Designated the RCA-4401, the orthicon is directly interchangeable with types 5820, 6474 or 7513 in existing cameras. The 4401 tubes have been tested for operation under adverse lighting conditions. Results of the tests indicate that 40 ft-c of incandescent illumination can be used with a lens stop of f/5.6.

Anso Super Hypan, a black-and-white film used for such applications as high-speed studies, newsreels, instrumentation, time-lapse, etc., is now available in 16mm size, according to an announcement by Anso, Binghamton, N.Y. The exposure index is 500 Daylight and 400 Tungsten. It may, however, be exposed at indexes up to 1000 Daylight and 800 Tungsten (or higher), according to the manufacturer's report, which suggests a fine grain developer such as D-76. The film is provided with standard perforations along both edges and with single perforations, Sound B. It is also supplied specially perforated for use

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