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An original Lowel Kit after eighteen years of active rental.

Way back in 1959, we created the first tiny lighting kit. Inside a "briefcase" were five patented Lowel-lights that could clamp on, wedge-behind, tape-up and do other unheard of mounting feats. The kit also included a Lowel discovery which we named Gaffer-tape.™ The system, with its folding barndoors, was considered a big breakthrough in location lighting.

Many of the kits, like this one, have been in continuous use through rental houses for eighteen years. And you know how rental gear gets treated. None of these veterans will win a beauty contest, but they're still going strong. That's because we built them strong. Lowel specified a lot of high-resilience aircraft aluminum, a welded chain, and special spring-loaded socket that has provided unfailing electrical contact—for eighteen years.

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For equipment see an authorized Lowel Dealer. For brochures contact us. Lowel-Light Manufacturing Inc. 421 West 54th Street, New York, N.Y. 10019 (212)254-6744, West Coast: 3407 West Olive Avenue, Burbank, California 91505 (213) 846-7740.


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Section Meetings

Detroit, 8 and 9 Nov. — The same program on the TK-47 automatic color television camera was presented by John Adison of RCA at Beechwood Park in Southfield, Mich., on 8 November with an attendance of 32 members and guests, and on 9 November at WOTV in Grand Rapids, Mich., with an attendance of 26 members and guests.

The TK-47 is a new generation television camera representing a sharp departure from conventional camera design. Utilizing the latest developments in video and computer technology, a micro-processor control system simplifies camera setup and operation by automating interactive control functions. The range of applications has been expanded to include the possibility of operations under special standards other than those that apply to broadcasting.

Adison discussed the potential utilization of larger format, higher resolution pickup tubes for use in such applications as moviemaking. He also discussed the development of the design concept. — Warren Happel (Chairman), John F. X. Browne and Associates, 25 West Long Lake Rd., Bloomfield Hills, MI 48013.

Florida/Caribbean, 24 Oct. — The meeting, held jointly with the Society of Broadcast Engineers, took place at the L. D. Pankey Institute for Advanced Dental Education with an attendance of 26 members and guests. The speaker was Ralph Gould of McCurdy Radio Industries who gave a presentation entitled "An Overview of Audio in Relation to Consoles." With the aid of slides, Gould traced the evolution of audio mixing consoles from the simple source switching and volume control required by early radio broadcast installations to the extremely complex requirements of present-day audio switching and processing. He discussed solid-state amplifiers and, in particular, the basic operational amplifiers used in modern audio consoles. He explained the three different methods of evaluating the input noise levels which result in differences in the specifications of various manufacturers. A lively question-and-answer period followed the presentation. — Christopher Lankester (Secretary-Treasurer), Audio Engineering Consultant, 320 North Luna Court, Hollywood, FL 33021.

Hollywood, 16 Nov. — The meeting, which was held on Stage 55 of the ABC Television Center with an attendance of 145 members and guests, was a combination tutorial-technical-update-mini exhibition of the latest HMI lighting techniques, applications, and available hardware. Richard Glickman, Consulting Engineer, explained the reasons for efficient use of the ozram lamps, their characteristics and cautions, and suggested exciting uses of this type of lighting which would be prohibitive with arcs of another kind. Compactness, high brightness, predictable color temperatures and cold light output were pointed out, as well as a relatively low cost per hour, as outstanding features of this type of lighting. The reduction of field weight by means of stationing the ballasts at the generator,

allowing up to 500 ft of cable to the light heads, was also discussed.

Glickman accepted many and varied questions during the talk. He later remarked that this session was the most active and had more creative questions than any previous session.

Following the program, a mini-exhibition of hands-on use of the lighting while lit created quite an array of lighting patterns in the studio. Four manufacturers of HMI equipment (LTM Corp., Strand-Century, Mole-Richardson and Cinemobile) supplied equipment.

The meeting was preceded by a dinner at La Villa Taxco. — Craig Curtis (Secretary-Treasurer), NBC, 3000 W. Alameda Ave., Burbank, CA 91523.

Montreal/Ottawa/Quebec, 17 Oct. — The meeting was held at the National Film Board in St. Laurent, Quebec, with an attendance of 35 members and guests.

The first presentation was by Emil S. Mihalko of Inertial Motors, Doylestown, Penn., whose paper was entitled "Designs and Applications of Low Inertial Motors." "Would you believe," said Mihalko, "a four-inch-diameter magnet structure with flux densities exceeding 10 kilogauss, and a motor that starts and stops in less than 1 ms and may be used in applications requiring up to 2000 starts and stops in one second?" These motors can be used in animation cameras, avionics, optical benches, printers, videotape systems, etc. The motors have common speed ranges of 0 to 10,000 r/min. Mihalko put one of the motors through a demonstration and the audience was very impressed.

The second presentation was by K. R. Field of CBC who described the application of the Steffelbauer FEM-3 film emulsion tester at CBC headquarters. The Steffelbauer is a German-designed instrument used in European television for film quality control. The CBC unit is the first to be used in North America. The instrument has four main functions — to measure density, color saturation, sharpness and granularity. It uses three lenses so the measurements can be made on 8, 16 or 35mm films. The Steffelbauer is currently in a testing period at CBC, but expectations among engineers are that it will eventually be used to evaluate all color films before they are accepted for television transmission — Grant Deamaley (Secretary-Treasurer), National Film Board of Canada, 3155 Côte de Liesse, St. Laurent, Quebec.

Nashville, 14 Nov. — The meeting was held at the WDCN-TV Studios in Nashville with an attendance of 115 members and guests. The program covered digital, audio and video recorders. The speakers were John McCracken of 3M Company, who spoke on the 3M Digital Recording System, Stan Busby and Ed Engberg, both of Ampex. Busby spoke on Digital Video Recording and Engberg spoke on Digital Audio Recording. McCracken used transparencies to show the qualities of the 3M system and played a tape so the audience could hear the sound

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Ultra T 25mm (T1.25) prime lens shown with "state-of-the-art" GSMO 16mm camera (with 400' quick-change cassette-type coaxial magazine), CP orientable viewfinder and Sachtler 1+1 SB fluid head tripod.



Ultra T 9mm (T1.35) prime lens shown with "new generation" CP-16R/A 16mm single/double system sound camera.

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quality. A number of questions were asked by the audience following his presentation. Both Busby and Engberg gave interesting descriptions. Busby of video and Engberg of audio recording — Bill R. Watson (Secretary-Treasurer), Motion Picture Laboratories; home address: 3640 Merritt, Memphis, TN 38128.

Pacific Northwest, 3 Nov. — The meeting was held at the Canadian Broadcasting Corporation in Vancouver, B.C., with an attendance of 53 members and guests. A paper on "The SMPTE Time Code and Its Use by CBC in Vancouver, B.C." was presented by Dave Currie of CBC. He gave a history of the time code followed by an explanation of how CBC uses it. He then gave a demonstration showing how the time code is used with a reader and also recorded directly on the picture on videocassette for live editing. The videocassettes are viewed on players which have been modified for variable forward and rewind speeds and still frame. The demonstration was followed by a lively question-and-answer period. — C. Eugene Newcomer (Chairman), Pacific Northwest Bell, 1600 Bell Plaza, Seattle, WA 98191.

Rochester, 11 Oct. — The meeting was held at Hilton Inn-on-the-Campus with an attendance of 40 members and guests. Richard Levy, President of Seneca Communications, Inc., began the meeting by giving a brief history of videotape recording. Beginning in the early 1950s with the first Ampex units, recorders have diminished in size from literally a wall of equipment racks containing hundreds of vacuum tubes to the present portable units that can be slung over the shoulder. Likewise, vast improvements in tape and recorder technology have increased information packing density so that high quality color television pictures can be recorded on 1/2-in tape moving at speeds comparable to that of audio cassettes.

Nick Cattat, also of Seneca Communications, discussed some of the technical features of the Beta and the VHS formats. Track laydown, transport design and other features were compared. Both speakers felt that the two formats give similar performance and reliability. Deciding which to buy is usually dictated by features such as automatic timers, pause control (useful for editing out television commercials), and extended recording time.

The meeting ended with a discussion of future trends, including smaller formats and bubble memory recording. Tape units of both formats and a portable color video camera were used for a hands-on demonstration. — John P. Pytlak (Arrangements Co-Chairman), Eastman Kodak Co.; home address: 36 Devonshire Dr., Penfield, NY 14526.

Rochester, 8 Nov. — The meeting, devoted to the subject of film preservation, was held at the Dryden Theatre in George Eastman House with an attendance of 80 members and guests including members of the Dryden Theatre. John B. Kuiper, Director of Film at George Eastman House, gave a presentation entitled "Why Nitrate Can't Wait," in which he described recent film preservation efforts made at that facility. He showed an example of a nitrate print and an acetate safety-base copy which displayed the characteristic quality loss in duplication. Several examples were then shown of toned and hand-tinted nitrate prints. Concluding the meeting was the screening of the full-length film, *The Clock* (1945) — a beautiful acetate print made from an

original nitrate-base production duplicate negative. — C. Bradley Hunt (Arrangements Co-Chairman), Eastman Kodak Co.; home address: 11 Edgewood Ave., Rochester, NY 14618.

San Francisco, 14 Nov. — The meeting was held at KQED Studios in San Francisco with an attendance of 50 members and guests. The program included presentations on fiber optics and on subcarrier phasing and its effect on blanking width.

James Cole of Siecor Optical Cables provided an excellent presentation and demonstration on the state-of-the-art of fiber optics. He discussed fiber optics materials, specifications, standards, connectors and applications. Paul Welcome of Telemet Company described and demonstrated Telemet's Fiber Optic Transmission System, Model 4210. The system allows the transmission of high quality video signals with sound up to one mile, using an analog to LED transmitter and an avalanche diode receiver.

The second presentation of the evening (on subcarrier phasing and its effect on blanking width) was conducted by Bud Rees of Tektronix Company who demonstrated and explained the revised standard (RS-170A). Bill Owen, also of Tektronix, demonstrated how to measure blanking with respect to horizontal phase and color phase. There was also a discussion on the new FCH (4-field) system and how to identify different fields as defined by the new standards. — Joerg D. Agin (Chairman), Eastman Kodak Co., 3250 Van Ness Ave., San Francisco, CA 94109.

Washington, D.C., 6 Nov. — The meeting was held at Rodel Sound with an attendance of 45 members and guests — a capacity audience since, because of limited space, attendance had been limited to 45 persons with advance reservations required. The program was devoted to sound for motion pictures discussed from four viewpoints — recording, editing, mixing and the sound negative — by four speakers. Bob Funk, self-employed, spoke on "The Selection Care and Feeding of the On-Location Sound Recordist." Paul Lyons of Charlie/Papa Productions spoke on "Secrets of the Good Sound Editor." Nelson Funk of Rodel Sound presented a paper entitled "Fix It in the Mix?" John Arvonio of Photo Magnetics spoke on "Getting the Most Out of 16mm Optical Sound."

Bob Funk, speaking as a recordist, made numerous suggestions that a producer should consider when it comes time to hire an on-location sound recordist. From equipment to expertise, he cited many instances where a sound recordist had saved money and improved a film.

Lyons addressed himself to the role of editor and revealed some of the secrets he has developed over the years.

By the time the production gets to the mix, Nelson Funk advised the audience, it should be a matter of concern as to where the production would ultimately be displayed. He pointed out that he uses different techniques if he is mixing for videotape or if he is mixing for film, with its optical soundtrack.

Arvonio emphasized the necessity of insuring high fidelity optical sound by the use of a cross-modulation distortion test. He refuted several common misconceptions and verbally chastised some current lackadaisical optical soundtrack production practices. — Charles F. Wilkinson, Jr. (Chairman), Eastman Kodak Co., 500 12th St., S.W., Washington, DC 20034.