

# Exhibit Directory

## Exhibit Hours

Sunday, Aug. 2 . . . . .	12:00-5:00
Monday, Aug. 3 . . . . .	2:00-8:00
Tuesday, Aug. 4 . . . . .	10:00-5:00
Wednesday, Aug. 5 . . . . .	9:00-1:00
Thursday, Aug. 6 . . . . .	10:00-5:00

Admission to the Exhibit will be by Registration Badge or Exhibit Pass. Passes may be purchased for \$1.00 each at the Registration Desk.

**Abtronics, Inc.** Booth 61  
P. O. Box 712, Livermore, CA 94550

**Barr & Stroud Ltd., Scotland** Booth 44  
Represented by John Hadland (Photographic Instrumentation) Ltd., Newhouse Laboratories, Bovingdon, Herts., U.K.

*Exhibiting:* The CP.5. and CP.6 series of high-resolution rotating-mirror streak and framing cameras will be represented. Operating at the booth will be a framing camera with streak conversion unit and series II electronics, incorporating power supply, triggering and firing controls. The camera will be operating a 20/50/200  $\mu$ s square wave light source for nonluminous events.

*Personnel:* John Hadland, Ken Cooper, Roger Hadland.

**Cordin Co.** Booths 49, 58  
2230 S. 3270 West, Salt Lake City, UT 84119

**Eastman Kodak Co.** Booths 59, 60  
343 State St., Rochester, NY 14650

*Exhibiting:* Kodak sensitized materials for high-speed photography and instrumentation recording.

*Personnel:* J. Lee, T. Fleischman, R. Anwyl, A. Thomsen, R. Manchec.

**Eclair Corporation of America** Booths 46, 47  
7262 Melrose Ave., Los Angeles, CA 90046

*Exhibiting:* ECLAIR 35mm UR-3000 (6000 half frame) full 35mm rotating-prism camera for field use by recruits and other inexperienced personnel. Sophisticated safety interlock system; GV-16 Camera medium speed pin-registered ultra compact camera with instant changing magazine; GV-16 Bi-plane pair of cameras for cine-radiology and other special applications with photodiode pulses; GV-35 pin-registered ultra compact 35mm camera 0-150 fps, instant changing magazine.

*Personnel:* James Friedman, J. P. Carson, Lucien Thiriet, Ken Nelson

**E G & G, Inc.** Booth 26  
170 Brookline Ave., Boston, MA 02215

*Exhibiting:* 501 High-Speed Stroboscope—up to 6 KC flash rate with duration as low as 1.2 microseconds; 549 Microflash—output  $50 \times 10^6$  beam candlepower peak with 0.5  $\mu$ s flash duration. In addition, a new improved point source adapter for shadowgraph photograph will be displayed; 553 Multiflash—variable flash rate up to 120 flashes/s for motion study using multiple exposure; 565 Lumen Meter—direct meter readout in terms of lumens/ft<sup>2</sup>; 560B Lite Mike—wide spectral range, fast response for measuring CW and pulsed light signals; Mark VI Sensitometer—Xenon flash device for testing photosensitive materials offers three exposure ranges of 001, 0.001, and 0.0001 second.

*Personnel:* Joseph P. Lee, Dr. Harold Edgerton

**Field Emission Corp.** Booth 41  
Melrose Ave. at Linke St., McMinnville, OR 94128

*Exhibiting:* The Fexitron Model 730-2722 x-ray system which provides stereo-image pairs on a single film by firing simultaneously two x-ray tubes from a single pulser. A series of such tube pairs fired in time sequence will provide a stereo x-ray movie of high-speed phenomena with a position accuracy of 10 mils. Pulser operates at 180 kV and a 30-ns exposure time. Other systems are available which can be used in conjunction with the stereo x-ray unit to obtain nanosecond exposures with either light or electrons. Descriptive literature on these combinations will be available.

*Personnel:* F. M. Charbonnier, J. P. Barbour, J. G. Fowler, F. J. Grundhauser.

**GAF Corp.** Booth 33  
140 W. 51 St., New York, NY 10020

*Exhibiting:* GAF 1000 Blue Insensitive Color Film Type 2575; GAF 200 Gafstar Base Type 2235; GAF 500 Gafstar Base Type 2550; GAF 64 Color Reversal Type 2311; GAF 200 Color Reversal Type 2230; GAF T/100 Color Reversal Type 2240; GAF Recording Film Type 2111; GAF Recording Film Type 2112; GAF Recording Film Type 2121; GAF Recording Film Type 2005.

*Personnel:* John Farnham, William Metzger, Paul Chrushman, Richard Bennett

**General Radio Company** Booth 23  
300 Baker Ave., West Concord, MA 01781

*Exhibiting:* Type 1541 Multiflash Generator, used with any GR stroboscope synchronizes the strobe flashes to still, cine, or high-speed movie camera for single flash or burst on each frame. Used with several stroboscopes, the 1541 will generate bursts with as little as 10 microseconds up to 1 second between individual flashes. The time-between-flashes is controlled to 1% accuracy to permit precise velocity studies; Type 1540 Strobolume, a highlight-output stroboscope at low cost, that will illuminate large areas for photographing with brief 10 to 15 microsecond flashes. Several in-

terchangeable control units are available, one of which was designed specifically for photographic applications to permit simple camera synchronization for single-flash or for burst flashing up to 25,000 per minute; Economical combination of Type 1539-A Stroboslave and Type 1531-P1 Flash Delay will synchronize to camera and event to produce brilliant strobe illumination over limited area and repetition rates up to 25,000 per minute.

*Personnel:* C. E. Miller

**John Hadland** Booth 45  
**(Photographic Instrumentation) Ltd.**  
Newhouse Laboratories, Bovingdon, Herts., U.K.

*Exhibiting:* Imacon, the new multiframe and streak-recording system of image-converter cameras, including standard cameras for multiframe and streak operation, the Imacon Spectrograph, Imacon for ballistics studies, Imacon with image intensification, Imacon 300-MHz system for  $3 \times 10^8$  multiframe recording and with streak operation and Imacon circular scan system (currently under development with expected time resolution approaching 10 ps).

*Personnel:* John Hadland, Ken Cooper, Alec Huston, Roger Hadland, Robin Harris.

**Impulsphysik GmbH** Booth 42  
2 Hamburg 56, Sülldorfer Landstrasse 400, W. Germany

*Exhibiting:* High-speed photographic instrumentation, to be successfully employed for examination of breakage phenomena, separation, mixing, cleaning and multiple-phase events as well as for research into injection, spraying, boiling, combustion and explosion phenomena. Nanolite light sources, with their extremely short rise and decay times can be employed as analysis light sources for photolysis because of their spectral continuum and their high intensity and also as excitation sources for photostimulation. Different flash-lamp types in the energy ranges from 25 mJoules up to 2000 Joules and more for flash durations between some nanoseconds and up to milliseconds for photostimulation, photolysis and photosynthesis. The Strobokin instrument group — by this equipment programmed energy injection by dosed radiation for complicated manufacturing processes can be generated and electronically controlled. Kerr cells, also with continuously flowing liquid, can be employed for various applications and processes for measuring the refraction index or a Kerr constant. The Kerr cell shutters give transparencies down to UV, 300 nm.

*Personnel:* D. Ebeling, E. Spear, F. Früngel.

**Instrumentation Marketing Corp.** Booths 50, 51, 52  
820 S. Mariposa St., Burbank, CA 91506

**KDI Adtrol, Inc.** Booth 57  
700 Abbott Dr., Broomall, PA 19008

**L-W Photo, Inc.** Booth 40  
15451 Cabrillo Rd., Van Nuys, CA 91406

*Exhibiting:* 224-A Photo-Optical Data Analyzer: 16mm flickerless stop-motion projector; Athena 4000-TSM: flickerless stop-motion, heavy-duty 16mm television film chain projector, suitable for multiplex. Provides magnetic playback and record as well as optical.

*Personnel:* R. H. Lawrence, G. H. Williamson.

**LogEtronics Inc., Photomechanisms Div.** Booth 32  
15 Stepan Place, Huntington Station, NY

*Exhibiting:* Technical viewer projector specially developed for displaying 35mm motion-picture film with absolutely no flicker at any projection rate. Lightweight, portable desk-top unit with unique operational features facilitating engineering and scientific analysis in viewing, projecting and copying of image frames. High-speed cinematographic camera providing synchronized picture-taking rates of 60 and 120 frames/s in phase-synchronized mode of operation. Interchangeable 400-ft magazine and remote control. Focatron solid-state image focus-sensing system — a general purpose instrument for detecting image sharpness with applications in many photographic and optical activities.

*Personnel:* Carl J. Brassler, Robert P. Masin.

**National Camera, Inc.** Booth 43  
2000 W. Union Ave., Englewood, CO 80110

*Exhibiting:* Test instruments for photographic equipment: sync, condition of flash contacts, motion-picture equipment functions such as shutter speed and action, flash sync, condition of flash contacts, motion-picture equipment functions; reflecting adapter, slip-in comparator charts. Comparascope — newest solid-state oscilloscope test instrument for unparalleled stability, speed and precision. Pushbutton selection of USA Standard shutter speeds. Larger, flat-face picture tube for easy viewing; better than 1% accuracy. Pellicle auto-collimator — high-brilliance target permits checking of all lenses and checks focus of still and movie cameras under in-use conditions. True focus observed on film — flat, bulged, even in motion. Fast simple alignment of process and other cameras.

*Personnel:* S. L. Love, R. Miller, V. Denzer, D. Dilatash, L. Bartel.

**Optical Coating Laboratory, Inc.** Booth 31  
P. O. Box 1599, Santa Rosa, CA 95403

*Exhibiting:* Photographic high-efficiency antireflection coatings; dichroics, striped and standard, "cold" mirrors, "hot" mirrors, color correction filters and miscellaneous samples of vacuum deposited thin films.

*Personnel:* John Walker.

**Photo-Kinetics, Inc.** Booth 22  
1624 Stillwell Ave., Bronx, NY 10461

*Exhibiting:* Nova 16mm high-speed motion analysis camera system, Model 16-3; Micro Film Reader.

*Personnel:* Gene Ippolito, Peter Ippolito

**Photo Sonics, Inc.** Booths 55, 56  
820 S. Mariposa St., Burbank, CA 91506

*Exhibiting:* Photo-Sonics Model 70mm-10B high-speed full-frame rotary-prism camera with framing rates up to 360 frames/s; Photo-Sonics Model 35mm-4B rotary-prism camera, framing rates up to 2500 frames/s; Photo-Sonics Model 35mm-4E, pin-registered, intermittent camera, framing rates from 6 to 360 frames/s; Photo-Sonics Model 35mm-4m, magazine load, pin-registered, intermittent camera, framing rates to 180 frames/s; KB-19A/B airborne strike camera used by the U.S. Navy; the KB-21 Airborne Strike Camera

used on the USAF F4 and F105 aircraft; and the new 16mm-1V gunsight camera used on the F-4D/E aircraft.

*Personnel:* John Kiel, Darrell Lassiter, Russ Bunting.

**Photosystems Corp.** Booth 34  
112 Parkway Dr. So., Hauppauge, NY 11787

*Exhibiting:* Megadyne 303 high-speed camera — 3000 pictures at rates up to 1,000,000 frames/s; precision lens arrays, as many as 4000 lenslets per square inch; Tri-dex three-dimensional time sequence radiograph 3-d and animated radiography; P360 panoramic camera system — hand-held 360° panoramic camera at rates of 2 to 4 cycles/s.

*Personnel:* Michael P. Battaglia, Karl H. Grodewald, Richard A. Hayes

**Quick-Set, Inc.** Booths 27, 28  
8121 Central Park Ave., Skokie, IL 60076

*Exhibiting:* Tripods, pedestals, pan and tilt heads with gearing and calibrations plus necessary accessories for use as support equipment with high-speed cameras.

*Personnel:* A. J. Briglia.

**Red Lake Laboratories, Inc.** Booths 53, 54  
2991 Corvin Dr., Santa Clara, CA 95051

*Exhibiting:* Hycam — 16mm high-speed rotary-prism cameras, 10 - 44,000 pictures/s; Locam — 16mm intermittent pin-registered high-speed motion-picture camera, 6 - 500 pictures/s; Magcam — 16mm intermittent pin-registered magazine load camera, 6 — 200 pictures/s; Hytax — 35mm bidirectional streak camera with electronically regulated film travel of 30 ft/s to 250 ft/s; Ima-con — ultra-high-speed image-converter camera, frame rate range of 50,000 to 20,000,000 pictures/s; Fastax — 16mm high-speed rotary-prism cameras; and assorted accessories — stop-motion projectors, tripods, timing-light generators, lenses, exposure meters, etc.

*Personnel:* O. C. Ferrell, L. Brown, E. Whitley, R. Kiteley, J. Saunders.

**Sodern** Booth 38  
23, rue du Retrait, 75, Paris (20ème), France

**Teledyne Camera Systems** Booths 29, 30  
131 N. Fifth Ave., Arcadia, CA 91006

*Exhibiting:* Milliken high-speed motion-picture cameras and accessories; the new line of Milliken cameras features continuously variable speed control from 2 to 500 frames/s, reflex viewing systems and a field-conversion pulse kit.

*Personnel:* C. G. Holzapfel, W. E. Smith.

**Thomson-CSF** Booth 39  
BP 2000 (78), Versailles, France

**Traid Corp.** Booth 64  
777 Flower St., Glendale, CA 91201

**TRW Instruments** Booth 48  
139 Illinois St., El Segundo, CA 90245

*Exhibiting:* Model 77A image-intensifier camera, featuring highest gain available from any commercial ultra-high-speed camera system; series 300 pulsed solid-state laser system, with interchangeable ruby; YAG and Nd: Glass rods for maximum flexibility; Models 71B and 83A Pulsed Argon lasers and accessories.

*Personnel:* Max W. Jacobs, Robert L. Wallstrom.

**Vertex Development Corp.** Booth 62  
10 Stepar Place, Huntington Station, L.I., N.Y.

*Exhibiting:* 35mm Analytical Projector; Oscilloscope Camera (Low Cost); 105mm Spot Film Camera.

*Personnel:* F. H. Meyer, A. Dorman