

1964: Photography

When the Eastman Kodak Company, in 1963, introduced its revolutionary Instamatic system of film cartridges and cameras, the photography industry immediately predicted that the simplicity of the innovation would have unprecedentedly wide acceptance and that European manufacturers inevitably would offer a rival system. Both predictions materialized in 1964.

More than 6 million Instamatic cameras have been sold around the world, half of them in the United States; a steadily growing number of firms have been licensed to manufacture cameras to take the Instamatic's Kodapak cartridge; and several film makers have been licensed to produce the cartridge-loaded film. The Kodapak is a double-spool light-tight cartridge. To load, it is simply dropped into the camera, and the camera is closed. The transport lever advances the film frame by frame. When the film has been exposed, the camera is opened and the cartridge removed and processed. There is no rewinding. The cartridge uses No. 126 film with individual frames measuring $1\frac{1}{8} \times 1\frac{1}{8}$ inches, or 26mm. square.

Europe's answer came in the newly devised Rapid System, which is also a drop-in method but takes two spools separately, one of which is the take-up spool (no rewinding). At the end of the roll, of regular 35mm. film in 16-exposure loads, the full take-up spool is removed. The emptied spool is placed in the take-up position, and a fresh cartridge is loaded into the supply trough. The system was introduced by a group of 14 European manufacturers of photographic equipment and materials, and Japanese and American manufacturers were to follow their lead in making Rapid System cameras and cartridges. Although a half million cameras of an inexpensive model of the new type were sold by Agfa in Europe, none reached the United States.

The principle of behind-the-lens exposure metering in 35mm. single-lens reflex cameras, to permit direct exposure reading as the light enters the camera, was first introduced to the American market in the Beseler Topcon Super D (made in Japan) and later in the year in the Swiss-made Alpa 9d. The two cameras approach the exposure problem differently. The Beseler Topcon has the meter built into the reflex mirror, where a pattern of thin slits permits the entering light to pass through to a meter attached to the underside of the mirror. The Alpa system uses two photocells, behind the prism and outside the viewing path, which read the entering light. A third cell measures the light coming by chance through the eyepiece at the back, compensating electronically for stray light. In both cameras the exposure is set automatically, regardless of whether an accessory—a filter, extension tube, microscope, etc.—is used.

Electronic flash was an integral part of two new cameras. One was Voigtlander's 35mm. Vitrona, which stores the flash batteries in the pistol grip on which the camera is mounted.

The other was Polaroid's newest camera, the automatic CU 5, designed for close-up work such as dental photography, criminal investigation, and industrial applications. It incorporates an electronic flash ring light and a trigger-like shutter release. Neither focusing nor exposure adjustment is necessary.

Improving on the conventional commercial photography system of projecting backgrounds from behind the screen, a new system was introduced in which the background is projected from the front without affecting the subject photographed. The system was the new Front Projection Background System, which consists of a combination camera and projector, an electronic flash device, and a background screen with a new reflective surface. The subject is illuminated separately and does not cast a shadow on the screen.

Color.

CIBA, Ltd., of Basel, Switzerland, was said to have practically eliminated the hazard of fading color prints due to exposure to light, humidity, and heat. The material that does this, Cilchrome Print, appeared on the European market, but no date was set for its introduction in the United States. The color printing paper could be exposed by conventional black-and-white means in an enlarger, with the aid of a filter, according to CIBA, which added that the positive color prints were made directly from color transparencies.

Color printing by amateurs, a trend that has been growing steadily, was given some encouragement by the advent of Kodak's Rapid Color Processor, Model II, a revolving drum device that processes a color print in $7\frac{1}{2}$ minutes, exclusive of exposure in the enlarger. The \$200 price of the unit brought it within reach of advanced amateurs; the original model, for professionals, cost \$1,250.

A novel slide-screening unit was Honeywell's No. 652 Auto/Sharp Projector, which focuses slides automatically. After the first slide has been focused sharply on the screen, all succeeding slides, from 35mm. to $2\frac{1}{4} \times 2\frac{1}{4}$, are brought into sharp focus by means of magnetic action slide-changing and remote control.

Film.

The 8mm. moviemaking format may be in for a change to a larger size, perhaps as much as 50 percent greater than at present. The possibility was made public in a report of an experimental study by E. A. Edwards and J. S. Chandler, Eastman Kodak engineers. The conventional format uses only 47 percent of the film area for actual picture making; the experimental format would increase the picture area to 63 percent, or half again as much. The engineers have explained that the larger format would be achieved by reducing the size of the perforations by which the film is advanced in the projector and by placing them closer to the film edge. It was anticipated that the change would come in 1965.

Kodak introduced a new 120 roll film that yielded twice the number of exposures as the regular roll of this size and hence was dubbed the 220. The increased capacity was made possible by eliminating the usual paper backing, except at the start and end of the roll for lightproof loading and unloading. The new roll has film long enough for 24 square or 20 rectangular pictures. Initially, there are to be two films, Tri-X 320 ASA and Ektacolor. The price will be double that of ordinary 12-exposure rolls. Like its sheet film counterpart, the new Tri-X roll film is to have a retouching surface on both sides of the film. The Calumet Manufacturing Company designed and marketed a roll-film back to take the new film, and the Hasselblad camera took the film with no alterations in the present design of the camera's magazine. Other roll cameras were being designed to accommodate the new roll, and some cameras were being adapted to the new roll by a minor modification in the camera mechanism.

Exhibits and Galleries.

When the Museum of Modern Art in New York City reopened in May it had a new area for photography, the Steichen Photography Center, named in honor of the famous photographer who was director of the museum's department of photography from 1947 to 1962. The new facilities provide for a permanent photography gallery on the third floor and a study room on the fourth. The show in the gallery consists of selections from the museum's collection of about 8,000 prints and is to be rotated regularly.

In addition, the photography department, of which John Szarkowski is director, had its first large exhibition in the museum's new wing. There are to be four such shows each year. The opening display consisted of 200 prints under the title "The Photographer's Eye," an attempt to "define the special characteristics of this medium which gives it its unique place in the modern arts."

The American Museum of Photography in Philadelphia was in the process of completing the International Photography Hall of Fame, a five-year project to honor photography's inventors and scientists. The more than 100 people to be honored are being chosen by an international jury of experts covering all fields of photography. The project is under the direction of the museum's director, Dr. Louis Walton Sipley, and is to be followed later with similar recognition of photography's practitioners.

George Eastman House, the museum of photography in Rochester, N.Y., cosponsored, with the Society for Photographic Education, the first national symposium on the history of photography in the United States. The main purpose was to exchange information on the subject and to study its present position.

The 125th anniversary of Jacques L. Mandé Daguerre's announcement of his process in Paris on Aug. 19, 1839, was observed in several European cities by a world-wide exhibition of photography under the general sponsorship of *Stern*—a German illustrated magazine—and 42

museums in 12 countries. More than 265 photographers from 29 countries were represented. The jury was to pick what it believed to be the best of the photographs submitted and hung and to award cash prizes totaling about \$5,000. The show was reproduced in a catalogue entitled *What Is Man?* and printed in eight languages.

Other shows of importance were the exhibition of contemporary photography in the Kodak pavilion at the New York World's Fair and Harry Callahan's huge retrospective at the Hallmark Gallery in New York City. The Kodak show, prepared by Nathan Lyons, assistant director of George Eastman House, consisted of 124 prints by young photographers in various countries. Both shows were particularly significant in terms of sponsorship. The Rochester museum has made funds available to purchase the entire Kodak show for its permanent collection. The Hallmark company, which commissioned the Callahan show, was probably the first commercial organization to provide such patronage for photography solely on the basis of a contribution to the fine arts.

Literature.

The year's contributions included revised and expanded editions of important standard works. A new issue of *The Photo-Lab-Index* marked the 25th anniversary of this widely used loose-leaf reference work on standard photographic procedures. The fourth edition of Beaumont Newhall's *History of Photography From 1839 to the Present Day* is notable, especially for its better and bigger selection of well-reproduced photographs and general improvements in printing and format.

The reissue of Wilson A. Bentley's *Snow Crystals*, first published in 1932, recalls Bentley's remarkable technical feat in photographing snowflakes under a microscope.

The 20-volume *Encyclopedia of Photography* is a greatly revised and expanded edition of *The Complete Photographer* series published 20 years ago, bringing the venture up to date.

Outstanding books dealing with the achievements of individual photographers were Robert Capa's *Images of War*, a collection of Capa's war pictures published on the tenth anniversary of his death while covering the war in Indochina; *The Eloquent Light*, the first volume of Nancy Newhall's biography of the photographer Ansel Adams, covering the period from 1902 to 1938; Berenice Abbott's *The World of Eugène Atg  t*, a large selection, with text by Miss Abbott, from her collection of photographs by this noted early 20th-century documentary photographer; and *Photographs: Harry Callahan*, the first of a series of monographs on contemporary photographers by the El Mochuelo Gallery of Santa Barbara, Calif.

The rash of New York picture books inspired by the New York World's Fair was topped by Sam Falk and Gilbert Millstein's picture-and-word book *New York: True North* and Andreas Feininger and Kate Simon's *New York*.

Fellowships.

Four photographers received John Simon Guggenheim Foundation Fellowship awards, the largest number of photography awards in the foundation's history. The recipients, who were granted an average of \$5,000 each, were William R. Current of Taos, N.M., and New Yorkers Robert Adelman, Dave Heath, and Garry Winogrand.

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