

Amateurs Shoot

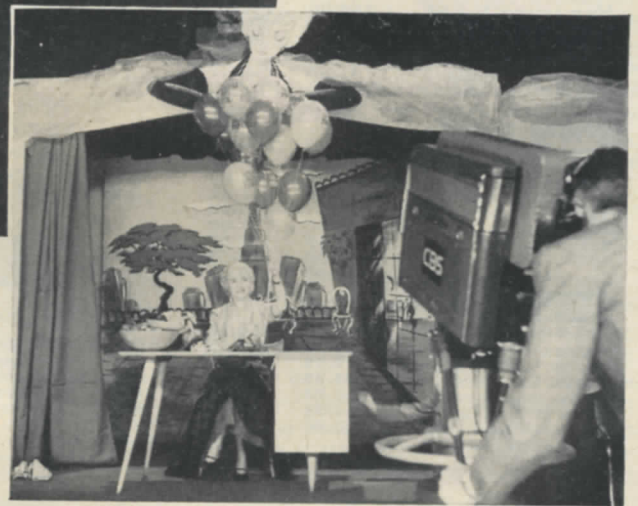
COLOR TV

By NORMAN C. LIPTON



Two amateurs, miniature cameras on tripods, focus on the color television screen in demonstration at the National Photographic Show.

The magic carpet of television brings colorful picture material to camera fans in this preview of things to come



TV camera picks up colorful stage action for transmission.

WHEN COLOR TELEVISION arrives in the American home, good color "stills" of the TV screen should be within the reach of hundreds of thousands of camera owners whose lenses open up to $f/3.5$ and faster. At least, they *should*, if the commercial system eventually licensed by the FCC is as crisp and brilliant as recent demonstrations of CBS color TV.

This exciting new aspect of amateur color photography had a thorough and successful trial last February at the 1951 National Photographic Show in New York. Here, the Columbia Broadcasting System and Pavelle Color Incor- (Continued on page 132)



Amateur color shots of the television screen provide reasonably accurate color rendition and are satisfactorily sharp if taken at a moment when there is little action. These two pictures by Alvin P. Freeman of New York were made with an exposure of 1/5 second at $f/2$ on Type A Kodachrome film. A tripod is essential. Most common defect is blur due to shooting with subject in motion.



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porated, the well-known color processing and print production laboratory, staged a joint demonstration of CBS color television for the benefit of the tens of thousands of dyed-in-the-wool photographic fans who attended the 4-day event in search of new subjects to shoot and new worlds to conquer. At regular intervals throughout each day, a CBS-TV color camera was trained on bits of "business" taking place on the main stage of the photographic show. The resulting image was conveyed by "closed circuit" to two pairs of CBS receivers—one color and the other black-and-white—in the Pavelle Color Incorporated exhibit booth, where the fans looked on in awe or took pot-shot exposures of the screen images.

Some of the photographic results were amazingly successful and a number of attempts ended in failure despite the explicit exposure instructions posted beneath the TV receivers in the booth. The results that accompany this article are typical of what can be accomplished with a good miniature camera without any special accessories. The camera was a Contax II with a 50-mm, $f/2$ Zeiss Sonnar lens, set up on a tripod exactly $3\frac{1}{2}$ feet from one of the two color screens. The exposures were made on 35-mm Kodachrome Film, Type A ($f/2$ at $1/5$ second) which received routine processing at the Kodak color laboratories in Flushing, New York.

For the present, color TV screen photography must be limited to relatively placid subjects. Under the best of con-

ditions, shutter speeds faster than $1/10$ second are impractical because of the slow speed of available color materials. Blurring results from shooting a moving screen subject with a slow-speed exposure. When home color television does arrive, rest assured that the audience will be given many opportunities to feast their eyes (and train their cameras) on colorful made-to-order stage sets and still-life arrangements within the scope of today's color photography.

Although the results illustrated here are quite satisfactory, even better pictures can be expected with well corrected, wide-aperture lenses of longer-than-normal focal length. Lenses like the 85-mm, $f/2$ Zeiss Sonnar and the 85-mm, $f/1.5$ Leitz Summarex, used at full aperture, can produce an image that is about 70 percent larger at the very same $3\frac{1}{2}$ foot minimum focusing distance.

This type of color photography is not limited to 35-mm miniature cameras. Twin-lens outfits of the Ikoflex and Rolleiflex type may be used at full aperture ($f/2.8$ or $f/3.5$) with Kodacolor rollfilm, Type A (20 ASA) or with Ansco Color rollfilm, tungsten type, to produce acceptable color prints or transparencies.

Color motion pictures of the color TV screen are impractical for amateurs at this time. Work along this line has been done by researchers at the Naval Photographic Center in Anacostia, D. C., during the past few years, but with specially modified professional cameras and radically designed shutters and lenses. The only reports of successful 24-frames-per-second results disclosed to date involved the use of an experimental 25-mm lens with a maximum aperture of $f/0.7$.—►



Movement of subject results in blur, as shown in these pictures. Relatively long exposure required ($1/5$ sec at $f/2$) makes it necessary to trip shutter at an instant when subject is still.