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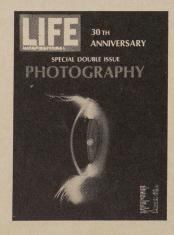
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The Cover

The close-up on the cover, taken from barely four inches away, looks right into the living eye from the side. The curving blue outer membrane, framed by the lashes, is the cornea. The dark space behind it is the aqueous humor and behind this, set in the iris, is the blue lens. The round shimmer on it is a reflection of the photographer's strobe light.



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The Third Member of the Team

The camera and the man who uses it are the first two members of a team of three. The third, and equally indispensable, member is the photographic laboratory. In our lab, under the leadership of its chief George Karas, 54 technicians operate 20 hours a day, seven days a week, and process 70,000 black-and-white and 34,000 color rolls and packs of film a year. They handle every sort of film, from that of the tiniest spy camera to 11x14, and are constantly being confronted with exotic new developments like the extended-range film discussed on pages 92-93. The lab can supply our photographers with almost any camera and with lenses ranging from a 2,000-mm (eleven feet long, if you count the lens shade) to a wide-angle camera that covers 360°. It can get together enough stroboscopic flash units to generate up to three billion beam candlepower-and once used 90 of them for a single picture in the Radio City Music Hall. When the Pope paid his visit to New York the lab set up 200 floodlights and lit the whole Yankee Stadium. It has a field kit, fully equipped with tanks and chemicals. ready to go anywhere at a moment's notice. The lab has processed film in airports, tents and bathrooms, and on the occasion of Churchill's funeral it developed 420 rolls of color in mid-air aboard a specially rebuilt transatlantic jet.

But processing pictures is only part of the laboratory's job. It checks out the resolution of every lens. It examines every new batch of film for slight variations in emulsion and suggests compensating speeds and filters. Photographers in the field, unable to tell how their cameras are working, get a steady flow of warnings and assurances. Some sample messages from Karas and his deputy, Herbert Orth: Burrows, NEW DELHI: ROLLS 30 AND 31 HAVE ORANGE CAST; TEST ROLL 19 IS ONE-HALF STOP UNDER; REST OF TAKE OKAY. DOMINIS, NAIROBI: FIFTH TAKE SLIGHTLY ON LIGHT SIDE; YOU COULD GENERALLY GO DOWN ONE-HALF STOP. CRANE, LOS ANGELES: HOUSEWIFE TAKE OVEREXPOSED; CHECK YOUR EXPOSURE METER. SILK, SYDNEY: ROLL FOUR NOT EXPOSED DUE TO SHUTTER FAILURE: ROLL FIVE FRAMES ARE OVERLAPPED.

If it is too late for these much appreciated warnings, then the lab uses all its skill to rescue the pictures. It has salvaged negatives that have been baked in fires and torn in airplane crashes. It can correct many of the familiar mistakes, such as overexposure and underexposure, and it can print, rephotograph and print again until the weakest negative yields tone and values. In 1956, when the *Andrea Doria* went down, a photographer who had taken underwater pictures of the wreck under almost impossible circumstances brought in his film. He was convinced there would be nothing on it. Instead of processing it in normal negative developer, the lab used a hot print developer (85°) and managed to bring the images out clearly. It is at times like this that the lab is the most important member of the team. Photographer Carl Mydans put it this way: "When one of us makes pictures and sends the film in to New York he seldom fails to include a note

of guidance to the lab—it sometimes ends with, 'Please save me on this one, boys.' It's extraordinary what a feeling of comfort and confidence this can bring—he knows how much they will expend to save him!"



GEORGE P. HUNT Managing Editor