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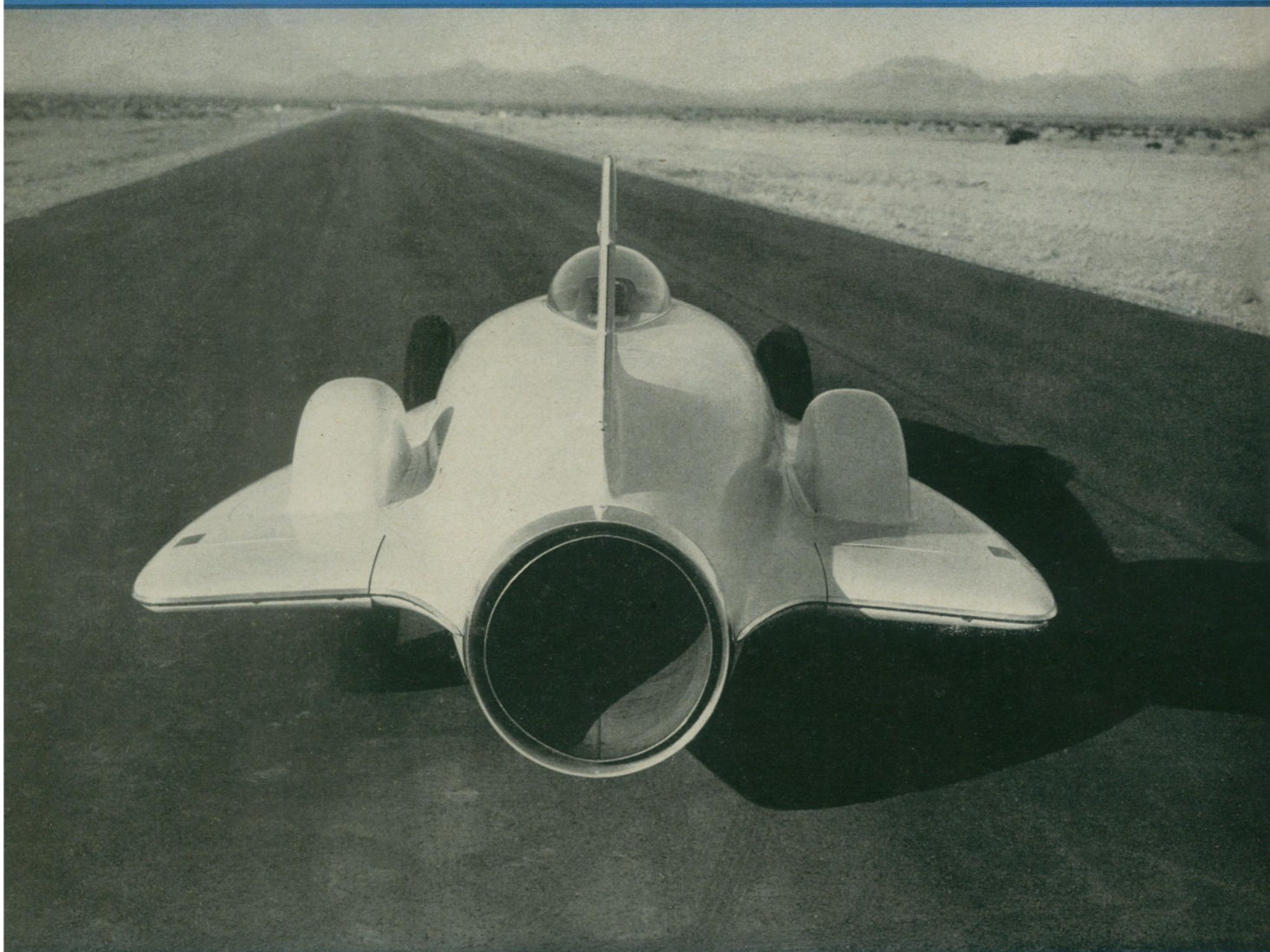
January 23, 1954

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# SCIENCE NEWS LETTER

®

THE WEEKLY SUMMARY OF CURRENT SCIENCE



**Jet Auto**  
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A SCIENCE SERVICE PUBLICATION

# Kodak reports to laboratories on:

making pH indicators easier to use... how to find out more about high speed movies... decoupling the sensitivity of infrared film

## Indicator solutions

In the more orderly laboratories, it hangs on the wall; in others, you have to rummage for it under somebody's desk blotter. Ubiquitous on the scientific scene it is, though—the famous Eastman pH Indicator

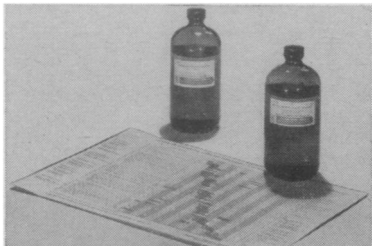


Chart with its array of bars that tell at a glance which of some 50-odd Eastman Organic Chemicals changes from what color to what other color over what pH range. The indicators themselves we have hitherto offered in dry form only—water or alcohol to dissolve them in is plentiful.

Now we have taken a second look at this policy, from the viewpoint of the business manager who knows that such laboratory drudgery as making up indicator solutions is still an expensive proposition. As a result, we report that nearly all the Eastman Indicators are now available as solutions in 500-cc bottles, with solvent, concentration, and pH range stated on the label. We continue to sell the indicators undissolved also.

Direct your inquiries and orders for Eastman pH Indicator Solutions to Distillation Products Industries, Eastman Organic Chemicals Department, Rochester 3, N. Y. (Division of Eastman Kodak Company). Write to the same address if the Eastman Indicator Chart is still not quite ubiquitous enough for your convenience. (It's free.)



## High speed booklet

For only \$1713.50 one may purchase from any Kodak Industrial Dealer a Kodak High Speed Camera. This is a 16mm movie camera, probably of no utility on picnics, that makes from 1000 to 3200 pictures

per second. High-quality pictures, too. They can be seen in super-slow motion with an ordinary movie projector at the customary 16 frames per second. There is also obtainable an attachment which photographs the corresponding oscillograph trace right over the pictures, the film advance serving as time co-ordinate.

Some of the best-known typewriters, diesel locomotives, cigarette lighters, oil-drilling bits, breakfast foods, circuit breakers, printing papers, auto tires, beet pickers, casserole dishes, power looms, power tools, addressing machines, shotguns, vacuum cleaners, airplanes, and adding machines are being manufactured today on the basis of information their makers learned or confirmed by buying a Kodak High Speed Camera and submitting their products or processes to its quick and glassy gaze. (On the more academic side, we know of at least one diverted biologist who used the camera to find out how holes in fluids appear and disappear when a missile passes through.)

The subject is mentioned at this time because we have just published a new booklet which explains how the camera works and how it has performed some of its industrial research feats.

For a copy of "High Speed Motion Picture Making in Industry," write Eastman Kodak Company, Industrial Photographic Division, Rochester 4, N. Y.

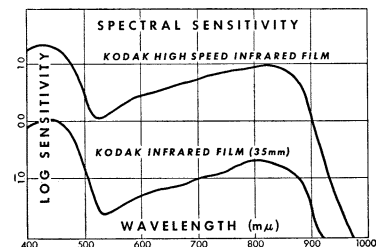
## High speed infrared

A close student of the course of photographic technology might surmise that some sort of photographic infrared barrier has been cracked within the past year or so. In a limited sense, he would be right. We have recently learned some new facts about the nature of sensitizing dyes, the substances adsorbed on silver halide crystals to extend their light sensitivity way beyond its natural wavelength limit of about 5000A. The photographic infrared still ends at about 12,200A (Kodak

Spectroscopic Plates, Type Z), but the magnitude of the sensitizing effect to that point can now be greatly stepped up.

As one of the new products consequential to this development, we now announce Kodak High Speed Infrared Film. Although it only goes to about 9500A, its practical sensitivity for such purposes as pigmentation penetration, photography in visual darkness, and heat-distribution studies is about ten times that of Kodak Infrared Film.

We don't try to quote an Exposure Index figure for Kodak High Speed Infrared Film because it depends so much on the proportion of infrared to visible in source emis-



sion and subject reflectivity. Granularity is somewhat higher than that of Kodak Infrared Film. The effect of this on image sharpness tends to be offset in some applications by the fact that the higher sensitivity of Kodak High Speed Infrared Film permits the use of smaller lens openings. This in turn reduces unsharpness due to errors in correcting for the difference between the visual and infrared optical behavior of the lens.

Kodak High Speed Infrared Film is supplied only in 16mm and 35mm perforated form as 100-foot rolls. It requires such extreme caution against fogging that we do not put it up in cartridge form. You can buy it from your Kodak Industrial Dealer. If you want the address of the one nearest you or more detailed information on the film, write Eastman Kodak Company, Industrial Photographic Division, Rochester 4, N. Y.

Price quoted is subject to change without notice.

This is one of a series of reports on the many products and services with which the Eastman Kodak Company and its divisions are... serving laboratories everywhere

Kodak  
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