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SCIENCE NEWS LETTER

®

THE WEEKLY SUMMARY OF CURRENT SCIENCE



Whooping Crane Chicks

See Page 355

A SCIENCE SERVICE PUBLICATION

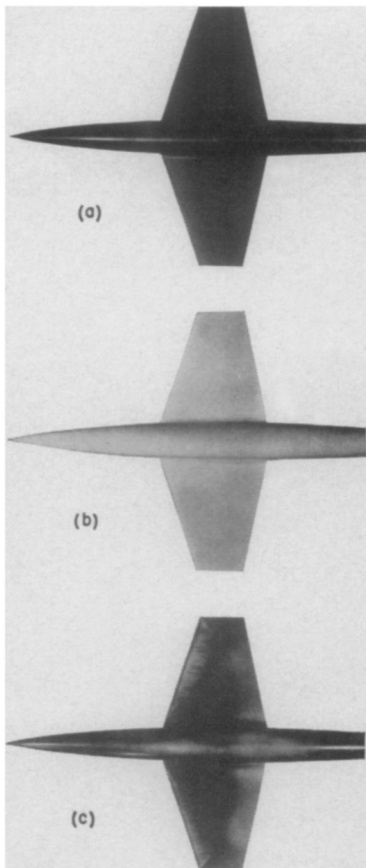
Kodak reports to laboratories on:

a use for *Biphenyl* in aerodynamics research . . . duodecupling the speed of dental x-ray film . . . modifying the spectral distribution of radiant energy

Wind writing

"Photography" means "light writing." To get light to write meaningful records of air movement, the wind tunnels of the world are festooned with complex and delicate optical arrangements.

Why not use the wind itself to write with? the men of the Ames Aeronautical Laboratory of the National Advisory Committee for Aeronautics asked themselves. Like the wind patterns in snow around a fence. It worked fine.



At (a) is a wind-tunnel model before and at (b) after spraying with a thin coating of *Biphenyl*; at (c), after the wind has etched into the sublimating stuff a pattern that tells of

laminar, turbulent, and separated flows and locates the shock waves.

Our connection with this is that we supplied the Biphenyl. Not that Biphenyl is big business for us. (Color and black-and-white film for schlieren and interferometric studies in aerodynamics is much bigger business!) The point we make is that somebody had an idea requiring a certain organic compound, looked into our catalog of some 3500 of them, and found it there. You, too, can get a copy of List No. 40 by asking Eastman Organic Chemicals Department, Distillation Products Industries, Rochester 3, N. Y. (Division of Eastman Kodak Company).

Save your roentgens

The general increase in the attainable sensitivity of photographic emulsions which we have perpetrated in the last couple of years now shows up in dental x-ray film.

For example, all things else being equal, the new *Kodak Periapical Ultra-Speed Dental X-ray Film* requires one twelfth the x-ray exposure that the old *Kodak Radiatized Dental X-ray Film* needed. This slower film, though itself now twice as fast as before, is still available to the dentist whose plan of attack calls for it. There is even a *Kodak Periapical Regular Dental X-ray Film* with half the speed of that (because the emulsion is on one side only).

But the heightened sensitivity widens choice. If sharper pictures are needed, the x-ray source can be farther away. Alternatively, the pictures can be sharper because the patient doesn't have to hold those packets still against his gums so long. There are also other benefits. If you can't see for yourself what they are, don't bother your dentist about them.

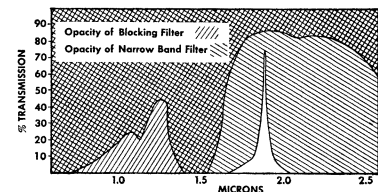
Filters: plea and offer

Once every few years a queer sense of obligation compels us to spend our hard-earned money on advertising to acquaint the next cadre of technical people with the existence of *Kodak Wratten Filters*. Of these

precisely dyed little sheets of gelatin we offer at present 116 different species, and though in truth they make little direct contribution to our prosperity, they do seem to contribute to the convenience of those who desire to modify the spectral distribution of radiant energy by simple and reasonably reproducible means.

The data book "*Kodak Wratten Filters*," which describes them all in the fullest, most quantitative spectrophotometric and colorimetric detail, has recently appeared in its 19th edition. Kodak dealers sell it for 75¢. The one niggardly favor we would ask in return for our magnanimity in selling the filters is that before an order is placed, this edition, and not one of its 18 predecessors, be consulted for current specifications and designations.

As for the newer-fangled and much costlier multi-layer interference filters, we make them but so also do several of our distinguished optical-manufacturing contemporaries. We shall not feel at all badly about your giving them your custom if you need transmission in the range up to 1.4μ . But if you find it necessary to specify a wavelength between 1.4μ and 4.5μ as a narrow transmission band or *any* wave-



length above 1.4μ as a cut-off for a blocking filter—there we think you need us.

In that event, just state your problem to Eastman Kodak Company, Military and Special Products Sales Division, Rochester 4, N. Y.


Price quoted is subject to change without notice.

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Questions

ASTRONOMY—Where is the supernova located that was recently reported by European scientists? p. 360.

GEOPHYSICS—How far do "whistlers" travel in completing their journeys from one hemisphere to another? p. 355.

RADIO ASTRONOMY—Why are astronomers limited in their telescopic observations of Jupiter? p. 357.

TECHNOLOGY—How does ultraviolet light help in studying living cells through the new ultraviolet color-translating television microscope? p. 360.

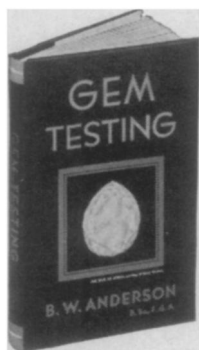
Photographs: Cover, Audubon Park Zoo; p. 355, Sperry Gyroscope Company; p. 357, Bell Telephone Laboratories; p. 358, Elgin National Watch Company; p. 359, Vertol Aircraft Corporation; p. 368, Johnson Smith Company.

Do You Know?

About nine pounds of liquid *why* are left from the manufacture of each pound of cheese, with some 12,000,000,000 pounds of *why* produced annually.

A plastic capsule one and one-eighth inches long and four-tenths of an inch in diameter is the world's smallest *FM radio* broadcast station, and is used for medical research.

A new optical device called the "Fabricometer" can measure the extent to which any fabric is *wrinkled* in comparison with another fabric.



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