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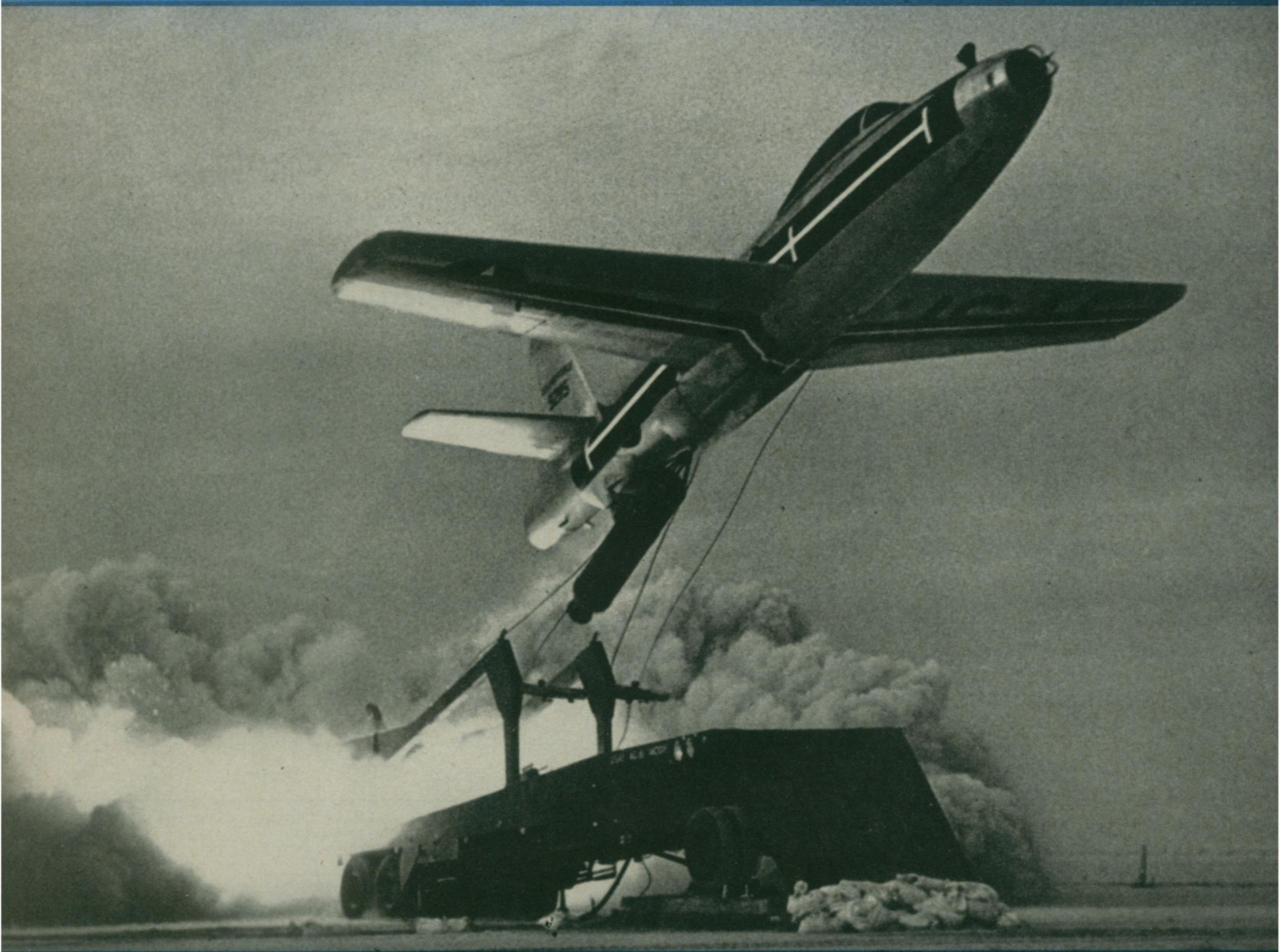
January 22, 1955

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SCIENCE NEWS LETTER

®

THE WEEKLY SUMMARY OF CURRENT SCIENCE



Piloted Jet Launched

See Page 57

A SCIENCE SERVICE PUBLICATION

HIGH-FIDELITY MUSIC-APPRECIATION RECORDS

TO HELP YOU UNDERSTAND MUSIC BETTER AND ENJOY IT MORE



ON ONE SIDE there is a full performance of a great musical work, featuring orchestras and soloists of recognized distinction in this country and abroad. You listen to this performance first, or afterward, as you desire, and then . . .



ON THE OTHER SIDE is an illuminating analysis of the music, with the themes and other main features of the work played separately with running explanatory comment, so that you can learn *what to listen for*.

A NEW IDEA OF THE BOOK-OF-THE-MONTH CLUB

ALL TOO FREQUENTLY, most of us are aware, we do not listen to good music with due understanding and appreciation. There is no doubt about the reason: we are not properly primed about *what to listen for*. MUSIC-APPRECIATION RECORDS meet this need—for a fuller understanding of music—better than any means ever devised. After hearing several of these records, all the music you listen to is transformed, because you learn in general what to listen for. This highly enjoyable form of self-education can be as thorough as the Music-Appreciation courses given in any university.

YOU SUBSCRIBE BUT TAKE ONLY THE RECORDS YOU WANT . . . A new Music-Appreciation Record will be issued—for subscribers only—every month. Ultimately

all the great masterpieces of music will be included. The announcement about each forthcoming record will be written by Deems Taylor. After reading this descriptive essay (presented in a form that can be kept for long use) you may take the record or not, as you decide at the time. *You are not obligated as a subscriber to take any specified number of records.* And, of course, you may stop the subscription at your pleasure—at any time!

TWO TYPES OF RECORDS AT A RELATIVELY LOW COST . . . All MUSIC-APPRECIATION RECORDS will be high-fidelity, long-playing records of the highest quality—33½ R.P.M. on Vinylite. They will be of two kinds: first, a so-called Standard Record—a *twelve-inch* disc—which will present the performance on one side, the analysis

on the other. This will be sold at \$3.60, to subscribers only. The other will be an Analysis-Only Record—a *ten-inch* disc—priced at \$2.40. The latter will be made available each month for any subscriber who may already have a satisfactory long-playing record of the work being presented. (A small charge will be added to the prices above to cover postage and handling.)

TRY A ONE-MONTH SUBSCRIPTION—NO OBLIGATION TO CONTINUE . . . Why not make a simple trial, to see if these records are as pleasurable and as enlightening as you may anticipate? The first record, **BEETHOVEN'S FIFTH SYMPHONY**, will be sent to you at once—at *no charge*. You may end the subscription immediately after hearing this record, or you may cancel any time thereafter.

As a demonstration
**WILL YOU ACCEPT
WITHOUT CHARGE**



Beethoven's Fifth Symphony

A NEW HIGH-FIDELITY RECORDING BY THE **LONDON SYMPHONY ORCHESTRA**

Norman Del Mar, *Conductor*

Analysis by Thomas Scherman

YOU HAVE HEARD this great work countless times—what have you heard in it? And what may you have failed to hear? This demonstration will show you what you may have been missing in listening to great music.

PLEASE RETURN ONLY IF YOU HAVE A RECORD PLAYER WHICH CAN PLAY 33½ R.P.M. LONG-PLAYING RECORDS

MUSIC-APPRECIATION RECORDS R25-1
c/o Book-of-the-Month Club, Inc.
345 Hudson Street, New York 14, N. Y.

Please send me at once the first MUSIC-APPRECIATION RECORD, *Beethoven's Fifth Symphony*, without charge, and enter my name in a Trial Subscription to MUSIC-APPRECIATION RECORDS, under the conditions stated above. It is understood that, as a subscriber, I am not obligated to buy any specified number of records, and may take only those I want. Also, I may cancel this subscription after hearing this first record, or any time thereafter at my pleasure, but the introductory record is free in any case.

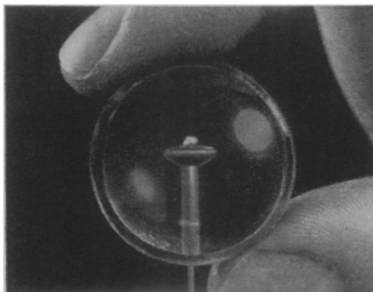
Mr. }
Mrs. }
Miss } (Please Print)
Address
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MAR 1

Kodak reports to laboratories on:

identifying very meagre samples . . . a great day for photography

Infrared beam squeezer



The lens you see here is not glass but silver chloride, which is transparent all the way out beyond 17μ in the infrared. The speck it magnifies is typical of specks for which we run infrared absorption spectra in the course of solving our daily little problems. We use such lenses not as magnifiers but to constrict one of the beams in a double-beam infrared spectrophotometer so that all its flux can be put through a $0.75\text{mm} \times 3.5\text{mm}$ aperture. This permits the use of a very small sample. Then a second such AgCl lens collimates the beam again.

The samples, frequently weighing 50 micrograms or less, are handled by grinding the material to be examined with a little potassium bromide and compressing to a narrow strip. Nothing is dissolved in the process, and there is less chance for reactions and extra absorption that might mask the few micrograms of organic material we seek to identify. KBr puts no dips of its own into the chart.

This procedure is much less expensive than working out reflecting microscope optics and hitching them to a spectrophotometer. We got into it in identifying spots on film that our testing department won't let us sell. It might interest others who have only very meagre samples to work with, like those who study blood and other life juices.

Since most infrared spectroscopists aren't as lucky as we in having

a great optical factory in the immediate family, we thought it would be a friendly deed if we made up a stock of silver chloride lenses for anybody who wants to try out this wrinkle of ours.

The price is \$102 for a set of Kodak Infrared Microsample Optics, consisting of an unmounted pair of plano-convex AgCl lenses of 24mm diameter and 22mm focal length, coated with a black Ag₂S smoke that cuts out radiation below 1μ , plus a similar plane-parallel plate for the reference beam. The deal is with Eastman Kodak Company, Special Products Sales Division, Rochester 4, N. Y. We'll throw in a set of mounting drawings or give you the name of an infrared equipment manufacturer who supplies the whole assembly ready to slip into his spectrophotometer. We can also supply reprints of our papers on the method.

Faster, faster



Where this man sits and writes pamphlets about photography 15 foot-candles hit his face. That's just within the lower limit of illumination recommended for office work. Nobody, of course, snapshots at that low a level. But good gracious, this picture was made with a \$6.95 camera (our esteemed *Brownie Hawkeye*), unassisted by any additional light source, at its one and only setting of $f/15$, $1/40\text{th}$ of a second! Imagine what an adjustable camera would have done under the circumstances.

How in the world, etc.? The catch is that our Brownie was loaded with a new kind of film, *Kodak Tri-X Film*. Not really a catch, for you, too, can now buy it at any film counter. Such husbandry of pho-

tons! Currently available in No. 620, No. 120, No. 135-36 exposure rolls, and No. 523 film packs. No sacrifice of graininess. Exposure index nominally 200 but not too meaningful because latitude is of a type the definition-framers hadn't anticipated. This is quite an announcement.

We also have a companion announcement about color. A new 35mm color film with approximately thrice the speed of *Kodachrome Film* has just gone on the market. To process it to full-color transparencies calls for no major capital appropriation and no chemical engineering talent but merely for a *Kodak Ektachrome Processing Kit, Process E-2*, priced at \$1.80. (It's really operable at the home darkroom level, but if you'd rather not bother, your Kodak dealer can handle it for you for processing by processors equipped to do the work.) This new film we identify as *Kodak Ektachrome 135 Film* (for 35mm miniature cameras, 20 exposures for \$1.85) and *Kodak Ektachrome 828 Film* (for cameras like the *Kodak Pony* and *Bantam*, 8 exposures for \$1). Photographic characteristics have been changed substantially from the sheet and roll film *Kodak Ektachrome* because the new film is intended to be viewed at large magnifications, as in projection, and the other isn't.

In sum:

1) The scope and even the style of black-and-white photography have been vastly extended by dispensing with the need for added light in many situations and in others permitting flash or flood lamp to bite far deeper into the gloom than ever before.

2) Color photography by 35mm camera can now be done in much less light than before, with results ready for inspection 65 minutes after the last shutter click.

It's a great day for photography.

Prices include Federal Tax where applicable and are 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
TRADE-MARK