# SCIENCE NEWS LETTER





# THE WEEKLY SUMMARY OF CURRENT SCIENCE



**Promise of Christmas** 

A SCIENCE SERVICE PUBLICATION

# Kodak reports to laboratories on:

telling your story without jump or jerk...a new material for the base of our business

## Talking with film

There is a man in your trading area who calls himself an audio-visual dealer. This mid-20th-century addition to the roster of trades is a merchant of various devices for captivating a captive audience into granting access for your message to their minds through their eyes and ears. Assuming you have a message—most successful people nowadays have one—we point here to a new



and advanced example of one of the basic devices which your audio-visual man has for conveying it, the Kodaslide Signet 500 Projector, Filmstrip Model.

First we ask you to grant that the smoother the mechanical aspects of your presentation, the less likely it is to distract your audience from your subject matter. Therefore we have proceeded on the assumption that the pictures should follow each other instantaneously, quietly, positively, without jumping, without jerking. Instead of holding a lot of engineering conferences on how to accomplish this without resorting to a costly Geneva movement, we went ahead and actually used the Geneva movement and then made the engineers figure out how they could still keep the selling price down to \$98.

And, since the customers were to be asked to lay their dough out for a projector, not just a Geneva movement, we had to insist on 1) sufficient brilliance and evenness of illumination to dispense with room darkening in most cases; 2) safeguarding the filmstrip by automatic separation of the glass pressure plates before it can move; 3) fast setup by virtue of drop-in loading for immediate sprocket engagement, a quick framing lever, and a quick rewind device; 4) cool operation of a 500-w lamp with little or no blower noise and no danger of burning a hole in the film; 5) automatic leveling capable of compensating for unevenness of support.

All this they did, our engineers, muttering all the while that sales people are unreasonable; for they knew all along that not only were they expected to come up with a world-beater of a filmstrip machine but also that the \$98 package had to include a mechanism that the user could easily insert when he had Kodachrome slides to show!

To have the audio-visual man show you how well they fulfilled the assignment, drop a line to Eastman Kodak Company, Department 8-AV, Rochester 4, N. Y. As for how you prepare the filmstrips in the first place, you can ask in your note for a little pamphlet of helpful hints we call "Making Filmstrips With Amateur Equipment."

### P(olystyrene) B(ase)

The first Kodak film on a base other than cellulose ester is now on regular sale. This is an historic and portentous pronouncement only to those who have devoted their careers to the manufacture of photographic film. Those engaged in the preparation of full-color printed illustrations will be pleased, though possibly not set trembling with excitement over the news: using this new Kodalith Ortho PB Film, they will no longer have to turn to bulky glass plates to avoid register difficulties from the size change of film with relative humidity. Those interested in photography in a more general way may be curious to know what's

Kodalith Ortho PB Film has a .005" base of extruded polystyrene. This material is optically clear and

as free from visible blemishes as cellulose ester film had become about the time of the Harding administration.

Extruded polystyrene can be produced in rolls of the proper length and width for efficient emulsion coating. It can be held sufficiently uniform in thickness at the thickness required for proper strength, toughness, rigidity, and suitability as photographic film base.

None of which would justify turning to it but for the fact that when you coat a pelloid on it and then put a photographic emulsion on the other side and then cut it up and then expose it in a camera and then put it through sundry processing baths and then dry it and then store it through wide swings of temperature and humidity and then measure how much size change has occurred in the image it carries, you find it is about three times as dimensionally stable as cellulose ester film. Furthermore, what little change has occurred is the same in all directions.

Where we go from here we prefer not to say at the moment. (We have competitors.) The subject is far more complex than the finding of a dimensionally stable sheet plastic, for a plastic with gelatin bonded to it is a far different proposition mechanically from the same plastic by itself. Gelatin is doubtless the most exasperating structural material known to man. Under some conditions of extremely low humidity we have seen it develop enough pull to gouge glass. Fortunately, after 75 years of experience with it and almost as long with plastics, we've accumulated a few ideas and quite a few boys to work on them.

Anybody who has been looking for a high-contrast film that probably won't change dimension by more than 0.02% for a 10% change in relative humidity is invited to purchase a box of Kodalith Ortho PB Film from his Kodak Graphic Arts Dealer.

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

