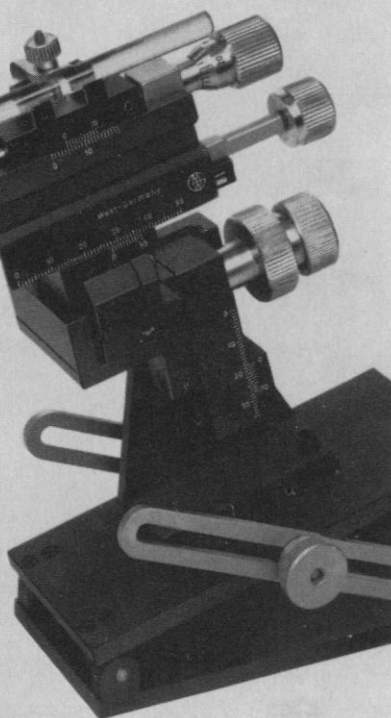


Our compact MM-33 micromanipulator drives by hand or motorized 'joy stick'.

Ideal for working at magnifications up to 250X, the MM-33 provides coarse movements in 3 planes (XYZ) plus fine movement in the thrust axis. Excursions calibrated in millimeters with vernier readings to 0.1 mm; final drive calibrated to 10 microns. Ball-bearing raceways assure smooth, backlash-free operation. All controls aligned in same vertical plane permits use of several MM-33's side by side. Mounts on Flexbar or a variety of bases.

Also available in a motorized version (MM-33M), with 'Joy Stick' remote unit for vibration-free control of speed and direction. For literature, write: Brinkmann Instruments, Cantiague Rd., Westbury, N.Y. 11590.

Brinkmann
Micromanipulators



Circle No. 136 on Readers' Service Card

THE SATELLITE SPIN-OFF

by
GÜNTER PAUL

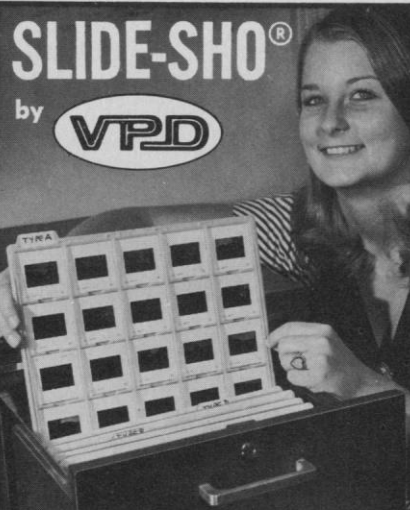
How the exploration of outer space is benefiting mankind.

From improved weather forecasts, cheaper international phone calls, and television broadcasts from remote areas, to reconnaissance of missile sites, crop surveillance and the detection of likely deposits of raw materials—this new book fully explores the myriad ways that space exploration is contributing to the material well-being of man and his Earth. *Illustrated.*

ROBERT B. LUCE, INC. S-1
2000 N Street, NW, Washington, D.C. 20036
Please send me postpaid a copy of **THE SATELLITE SPIN-OFF** by Günter Paul.
I enclose \$10.00. ☐ Check ☐ Money Order

Name _____
Address _____
City _____ State _____ Zip _____

Circle No. 285 on Readers' Service Card



THE VERSATILE SLIDE FILING AND RETRIEVAL SYSTEM FOR 100 OR 100,000 SLIDES

adapts to your specific needs

SEE 20 SLIDES AT A GLANCE

on VPD Slide-Sho Pages, molded of lightweight, rigid, translucent plastic with matte, light diffusing back panel. For file cabinets, ring binders, rear-screen illuminators.

ASK FOR FREE SAMPLE
and brochure "Slide Filing Ideas"

JOSHUA MEIER DIVISION
W.R. Grace & Co., North Bergen, N.J. 07047

Circle No. 346 on Readers' Service Card

LETTERS

Metrically Speaking

In their editorial of 16 January (p. 141), Mina Rees and Arthur H. Livermore conclude that scientists can help promote the use of the metric system by "scrupulously using the metric system themselves." A more appropriate title for their editorial might have been: "Kilometerstone legislation for a metric United States."

JAMES S. KANE

*Energy Research and
Development Administration,
20 Massachusetts Avenue, NW,
Washington, D.C. 20545*

How paradoxical of Rees and Livermore to use the word "Milestone" in the title of their otherwise timely and informative editorial regarding the signing of the Metric Conversion Act of 1975. Surely "kilometerstone" would have been more appropriate, but since stone (plural) is equivalent to 14 pounds avoirdupois in Great Britain, perhaps "metric rock" would have the best choice.

W. A. NELSON-REES
ROBERT B. OWENS

*Cell Culture Laboratory,
School of Public Health,
Naval Biosciences Laboratory,
University of California, Oakland 94625*

We used milestone intentionally in our editorial to suggest subtly (too subtly?) that (i) the Metric Conversion Act of 1975 is a significant step in the direction of a change in our system of measurement and that (ii) we do not at the same time have to purge our language of all non-metric referents. We expect that "milestone" will remain an English idiom long after "mile" as a unit of measurement has become archaic.

The suggestion by Nelson-Rees and Owens that "metric rock" be substituted for "milestone" leads us to propose that we should "metrify but not petrify." Can we look forward to "metric rock" as a new genre of modern music?

We are pleased at the response to our editorial. Others besides Kane, Nelson-Rees and Owens wrote and took us to task for "milestone." We hope that they and other scientists will heed the suggestions in the last paragraph of the editorial for ways in which scientists and science educators can help smooth the transition of the United States to the metric system.

ARTHUR H. LIVERMORE

*AAAS Office of Science Education,
1776 Massachusetts Avenue, NW,
Washington, D.C. 20005*

SCIENCE, VOL. 191