

level in order to assure an adequate flow of scientific talent upward.

The piece does seem to imply that NASA has been impetuous and excessively aggressive in launching its new fellowship program. It fails to take account of the fact that NASA has a very specific mission and timetable and can hardly afford to await the ordering of the federal fellowship situation. It must seek now to stimulate the training of scientists; otherwise an even more severe manpower shortage in the late 1960's could lead to the failure of its program. Likewise, it cannot single-handedly persuade the Congress to modify its long-standing reluctance to support education below the graduate level.

It should also be noted that these and many associated problems were thoroughly explored with NASA prior to the inauguration of its fellowship program. This was no spur-of-the-moment venture. True, the program was developed expeditiously, but only after widespread consultation in the government and among the universities.

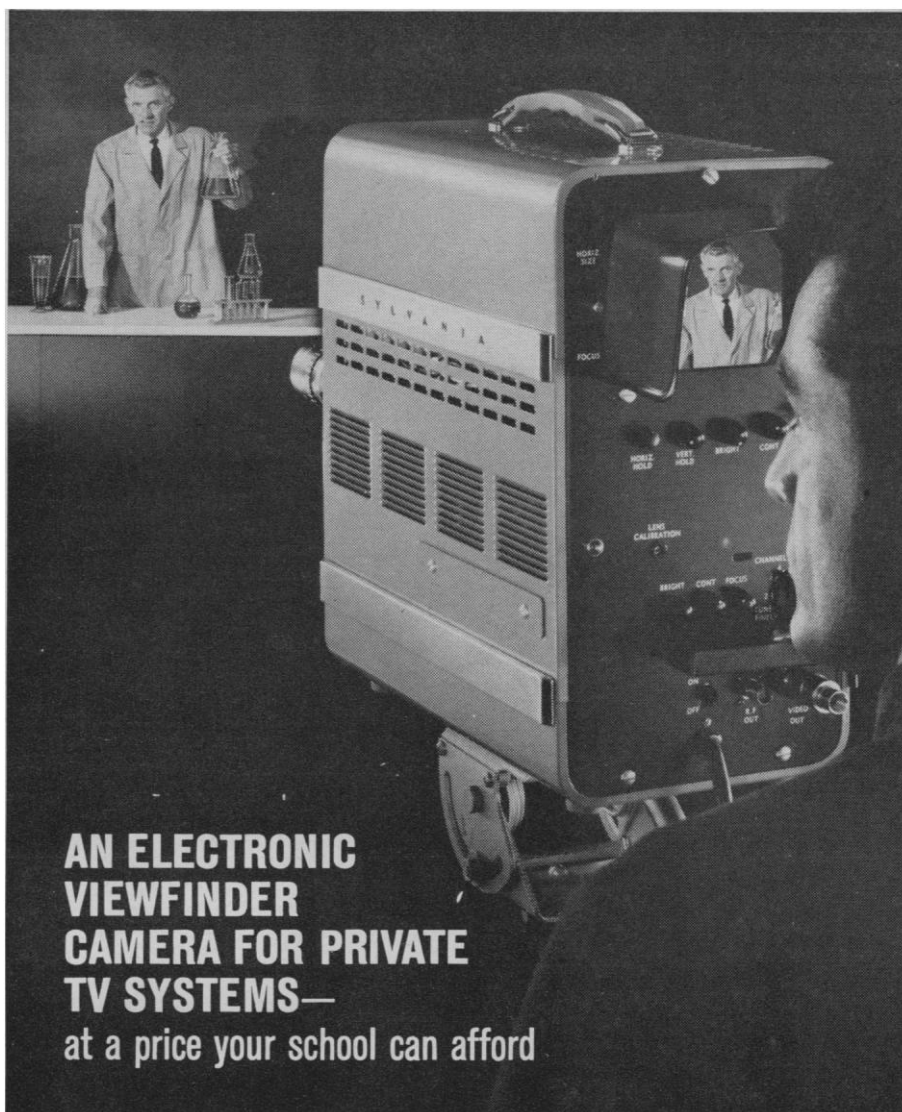
JOHN C. HONEY

*Institute of Public Administration,
New York*

Retirement

At this time, when our country needs to expand vastly its scientific and engineering manpower and when, indeed, strenuous efforts are being made to induce able young people to enter scientific and engineering professions, able, active-minded, experienced scientists are being forced to retire just because arbitrary age limits for employment have been firmly set by universities, governmental agencies, and industrial establishments. The criterion for such forced retirement is chronological, not physiological, age. Thus, there is both a shameful neglect of very useful, much-needed brainpower and a complete disregard for the vital and social needs of those compelled to retire.

Recently, a nonscientific friend of mine, a retired librarian, Elizabeth Woodruff, of Mineral Wells, Texas, who is greatly concerned with the social problem of older citizens, wrote me suggesting ways in which such scientists and engineers could continue to serve our nation and continue to lead fruitful lives. She wrote: "I feel that the professor (and his kind) should



**AN ELECTRONIC
VIEWFINDER
CAMERA FOR PRIVATE
TV SYSTEMS—
at a price your school can afford**

New Sylvania Electronic Viewfinder camera—with built-in monitor—permits perfect picture composition. Lets you control precisely the quality of the picture your students will see on remote classroom monitors.

Never before has a Viewfinder camera for private TV systems been available at a price schools can really afford. It's the newest addition to Sylvania Direct Wire TV...one of the lowest-cost, easiest-to-use private TV systems.

Sylvania Direct Wire TV helps overcome the teacher and classroom shortage. Makes it easy to teach large groups. Effective in showing lab experiments, microscope slides, and complex demonstrations.

Write for free Educational TV Manual

This manual has been carefully planned and written for school administrators and other interested personnel. It is a thorough, up-to-date study of the value of television in education today. Discusses how TV can solve vital problems of today's overcrowded



schools. Answers many common questions about TV in education. Tells what TV can bring to the classroom. Explains how schools can plan for TV. Describes equipment, and gives basic information on how TV is transmitted and received—all in nontechnical language.

This 32-page manual is the result of extensive research, and is the most complete and concise study ever offered. It should serve as a valuable guide and introduction to one of the most significant technological developments in education since the invention of printing. Write today!



SYLVANIA
SUBSIDIARY OF
GENERAL TELEPHONE & ELECTRONICS

Sylvania Home & Commercial Electronics Corp.
Marketing Subsidiary of
Sylvania Electric Products Inc.

730 Third Ave., Dept. S, New York 17, N. Y.

☐ Please send more information on Sylvania's new low-cost Electronic Viewfinder camera.

☐ Please send Sylvania's new Educational TV Manual and more information on how to arrange a free visual communication survey for my school.

Name

School

Address

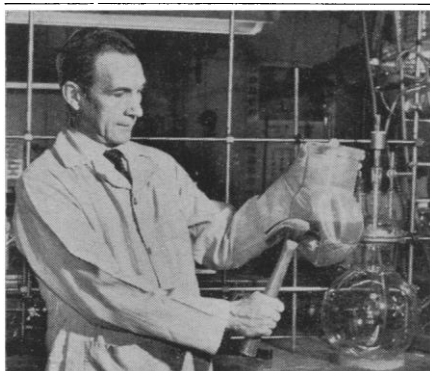
City Zone State



The most convenient and economical instrument for measuring low pressures from 1 micron up. Ace McLeod Gauge, supplied with Hammertone green stand, has metal locking device with position holding action eliminating the need for glass hooks and springs, will hold to any position to which it is rotated. Calibrated **TRUBORE®** Tubing assures accuracy and changeability in each of the following pressure ranges:

Type	Pressure Range mm. Hg.	Lowest Reading mm. Hg.
A	0-1.0	0.001
B	0-5.0	0.005
C	0-10.0	0.010
D	0-15.0	0.050

For complete line of Ace gauges, see Ace Catalog 60.



New ACE plastic coating makes glass safe has many uses

- When glass breaks during hazardous experiments, coating contains flying glass particles, prevents injury.
 - Retains valuable research results long enough to permit recovery.
 - In vacuum systems, prevents flying glass when evacuated flasks are broken.
 - Seals joints, stopcocks.
 - Increases resistance to mechanical shock, builds up handles on spatulas, coats clamps, rings, tongs.
 - Easy to apply. Directions included.
 - Economical. Price \$5.50 500 cc. Half gallon \$17.25
- Order or write for folder.



ACE HEAT CONTROL HANDY LOW COST UNIT WITH PILOT LIGHT

Low cost proportional power input controller rated at 1500W non inductive load. One unit substitutes for 2 Power-stats on 12 and 22 liter Glas-col lower unit mantles. Holds mantle temperature constant for days. The Control applies full line voltage in a continuously adjustable dial setting which varies the on/off ratio from 10% to 90% (100% by adjustment). Ample in most cases to drive Glas-col mantle to full rated temperature. Top mounted neon light is visible across the room. The line plug is double fused on 15 amp cord. Easy maintenance, cleaning —Bud snap-together box comes apart or together again in a jiffy. Green fume-resistant Hammertone finish. Price \$13.95 Net. Order now or send for literature.



ACE DURA-VAC® VACUUM PLASTIC DESICCATOR

- ★ Safe—extremely implosion resistant.
- ★ Strong—spherical shape presents maximum strength, both in resistance to pressure and deflection of impact blows.
- ★ Light weight—52% lighter than glass.
- ★ Transparent—92% light transmission.
- ★ Large working area—6½" height available at center above 9¼" dia. porcelain plate. Holds 2 lbs. Drierite or similar material. Ample space for air circulation. Price complete without plate \$46.00.

Also available, Ace Dura-Vac® "Standard" with the new instant vacuum release. Send for Brochure.

use his knowledge to create new avenues in which his ability could be expanded and take new growth." She offers the following suggestions.

1) The present retirement age limit of scientists and engineers could be raised, provided the potential retiree desired it.

2) Libraries could establish or enlarge scientific departments in which retired scientists could serve to make a knowledge of science more easily and readily available to the public.

3) The various communication media (newspapers, magazines, and radio and television stations) which have potential for useful instruction could engage retired scientists either to teach or to assist others in teaching science to nonscientists.

4) Scientists having their own businesses could employ scientists of retirement age on an equal footing, or could form partnerships to expand such businesses.

NATHANIEL TISCHLER

Monroe School Lane,
Jamesburg, New Jersey

The Cost of Credit

It is alarming to me that Reavis Cox [*Science* 135, 48 (1962)] overlooked entirely the basis upon which the editor wrote in support of the Douglas "Truth in Lending Act" (S. 1740) [*Science* 134, 913 (1961)]. The editorial concludes: "The statement of simple annual interest rate would permit a customer to compare the true costs of different forms of credit and to act rationally on that basis. *On balance, we favor any step that encourages rational decisions* [*italics mine*]." Although the bill requires disclosure of both the dollar cost and the simple rate, the editor selected the latter aspect to be "the main feature of the bill." This is the most controversial and significant feature of the bill. Therefore, one conversant with the subject would have appreciated why the editorial was headed "Tricks with numbers," and why the subject was introduced with the theme that a comparison of absolute numbers instead of rates may lead to fallacious conclusions.

But instead of arguing the promotion-of-rational-decisions issue, Cox chose to argue the absolute-number-versus-rate issue, and said that the editor "claimed too much." How did Cox prove that rate information is not needed? He reduced the simple formula $I = Prt$ to an



Circle No. 168 on Readers' Service Card