

## What's the best replacement for a Beckman electrode?



### Another Beckman electrode.

Only Beckman quality can replace Beckman quality. Substitutes fall short. With every Beckman electrode you get over 30 years of technological development. You get a choice of over 100 different electrodes in stock for immediate shipment. You get superior, more reliable performance from any pH meter for measurements of pH, ORP, or specific ions.

It's easy to order Beckman electrodes. Just call your nearest Beckman Sales Office and order from your comprehensive Beckman Electrode Catalog. To obtain a copy of this catalog, request Data File LpH 266.

Choose a Beckman electrode first ... choose one again. You'd be settling for less with any other.



INSTRUMENTS, INC. SCIENTIFIC AND PROCESS INSTRUMENTS DIVISION FULLERTON, CALIFORNIA + 92634

INTERNATIONAL SUBSIDIARIES: GENEVA; MUNICH; GLEN-ROTHES, SCOTLAND; TOKYO; PARIS; CAPETOWN; LONDON ing to pay the additional cost of dual brakes. In my opinion the difference in cost would be so small that buyers wouldn't feel it. (The American Motors design consists of a simple mechanical separation in the master cylinder between the flow of rear-wheel brake fluid and the front-wheel brakes.) The industry has been busy selling a "new" brake innovation, disc brakes. The disc-brake patent is more than 40 years old and is in the public domain....

The automobile industry used to be looked upon as the leader in quality control and reliability. In recent years these have been sacrificed because of higher labor costs . . . and the practice of including an obsolescence factor in design. . . .

ABRAHAM L. KORR 8712 Hickory Drive, Philadelphia, Pennsylvania

#### **Project Orion**

In "Death of a project" [F. J. Dyson, *Science* 149, 141 (1965)], Project Orion is described as "a project to design a vehicle which would be propelled through space by repeated nuclear explosions occurring at a distance behind it." The author says that "Designs were worked out in detail for vehicles that could carry eight men and a payload of 100 tons on fast trips to Mars and back" after the vehicle had been "lifted into space by Saturn chemical rockets."

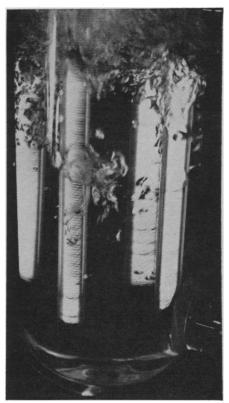
Space travel consists essentially not of being "propelled through space" but of acceleration, followed later by equivalent deceleration. The original acceleration given to the proposed vehicle by the Saturn rockets could, as is now standard practice, be later counteracted by the decelerative effect of returning through the earth's atmosphere. But where is there any discussion of the fact that all of the acceleration added by the exotic means of "propulsion" would have to be sub-tracted later by *conventional* means, since it is quite obvious that the new, exotic means could not be used for deceleration?

Perhaps that is why the project was dropped.

Jo Fisher Freeman

American Embassy, Agency for International Development, APO, New York 09674

### Glassdistilled water?



# Just say "CORNING"

Now you can match volume in glassdistilled purity to the needs of your lab with the three packaged units in our line of CORNING® Water Distillation Apparatus. The new AG-1A yields 1 liter/hour; the AG-3, 3 liters/hour; the AG-10, 10 liters/ hour. A big plus: you can see when these units need a quick and simple flushing to keep purity high. For data on these new standards of convenience in automatic production of glass-distilled water, send today to Laboratory Glassware Department, Corning Glass Works, 9303 Crystal Street, Corning, N.Y.

THE NEW STANDARDS COME FROM CORNING SCIENCE, VOL. 151