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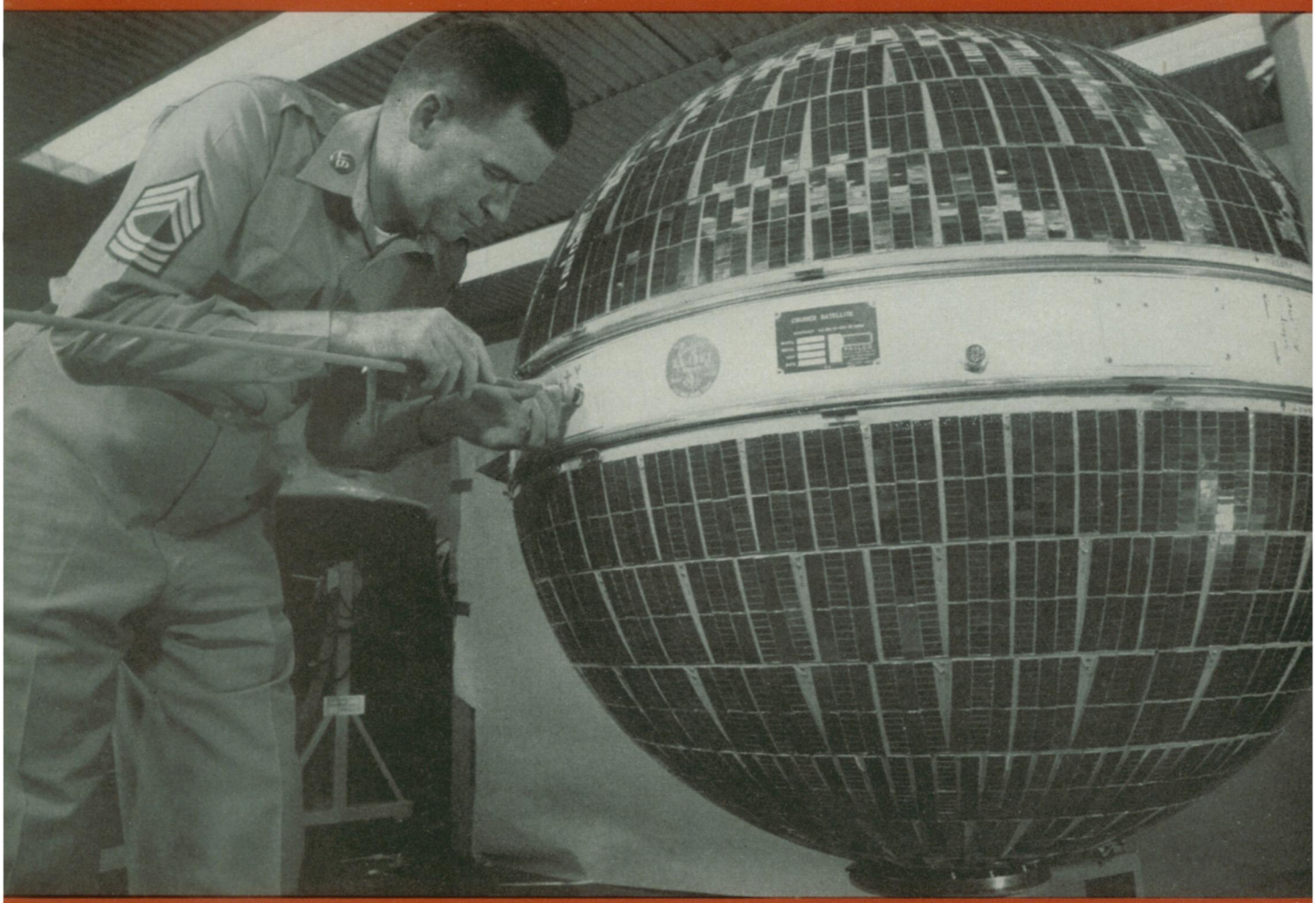
SCIENCE NEWS LETTER

®

THE WEEKLY SUMMARY OF CURRENT SCIENCE



Courier Ready to Go

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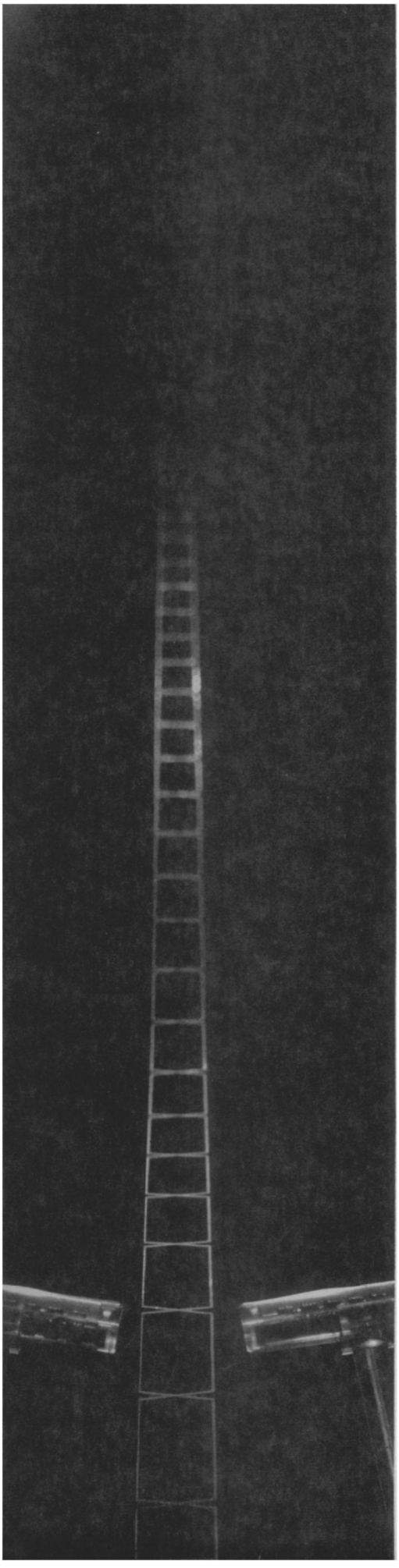

One of a series

The Case for the Terrestrial Traveler

Figure that every thirteen seconds American drivers motor 238,000 miles — the distance to the moon. Increasing the efficiency, comfort, and safety of this incredible private transportation system (60 million cars!) is a top project goal of the General Motors Research Laboratories. From this sizable R & D program have already come a number of experimental controls and driver aids now being evaluated in the field.

New ways of supplying drivers with traffic and road information — electronic edge-of-road detectors; communication systems for giving drivers audible road and emergency information.

Simplified driver controls — Unicontrol, a servo system in which the driver steers, accelerates, and brakes his car with a single control stick.

Tested methods of automatic vehicle control — refined computers and electro-hydraulic servomechanisms that automatically guide cars and control their speed and spacing.

Underlying these developments are a continuing series of fundamental studies. In vehicle dynamics research: investigations of the effect of tire properties, suspension geometry, mass distribution, springs and dampers on the ride and handling characteristics of cars. In human factors research: experiments to determine the perception and response of drivers to various traffic situations using different car control systems.

At GM Research, we believe such fresh approaches will improve car-driver compatibility, providing additional convenience and enjoyment for tomorrow's terrestrial traveler.

General Motors Research Laboratories

Warren, Michigan

Car pickup coils and road wiring used for guidance and speed control in one experimental automatic highway system under study.

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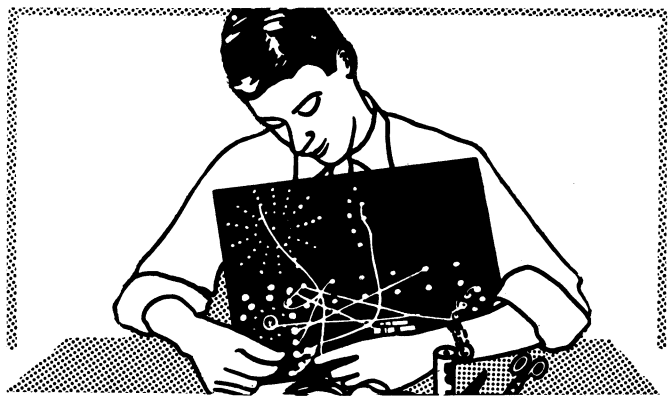
WITH OUR BRAINIAC KIT K18, you can build over 200 small electric brain machines and toys which "think," compute, reason and display intelligent behavior. Each one works on a single flashlight battery . . . is FUN to make, FUN to use and play with, and TEACHES you something new about electrical computing and reasoning circuits. All connections with nuts and bolts—no soldering required. The Brainiac K18 kit is the result of 12 years' design and development work with miniature mechanical brains including: the original 1955 kit, Tyniacs (1956), Relay Moe (automatic relay machine playing tit-tat-toe—pictured in Life Magazine, March 19, 1956), Simon (miniature automatic digital computer with 129 relays—see "Simple Simon" by E. C. Berkeley in scientific American, November 1, 1950), Squee (electronic robot squirrel —see "Light Sensitive Electronic Beast" by E. C. Berkeley in Radio Electronics, December 1951), etc.



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- "How to Go from Brainiacs to Automatic Computers" by Edmund C. Berkeley.
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