

# Popular Mechanics



**FIRST '85s**  
World Class  
Sport Sedans  
From Chrysler

## Step-By-Step 7 WAYS TO MAKE BUTCHER BLOCK

**8 LOW-COST CARS  
CANADIANS CAN BUY**  
But We Can't

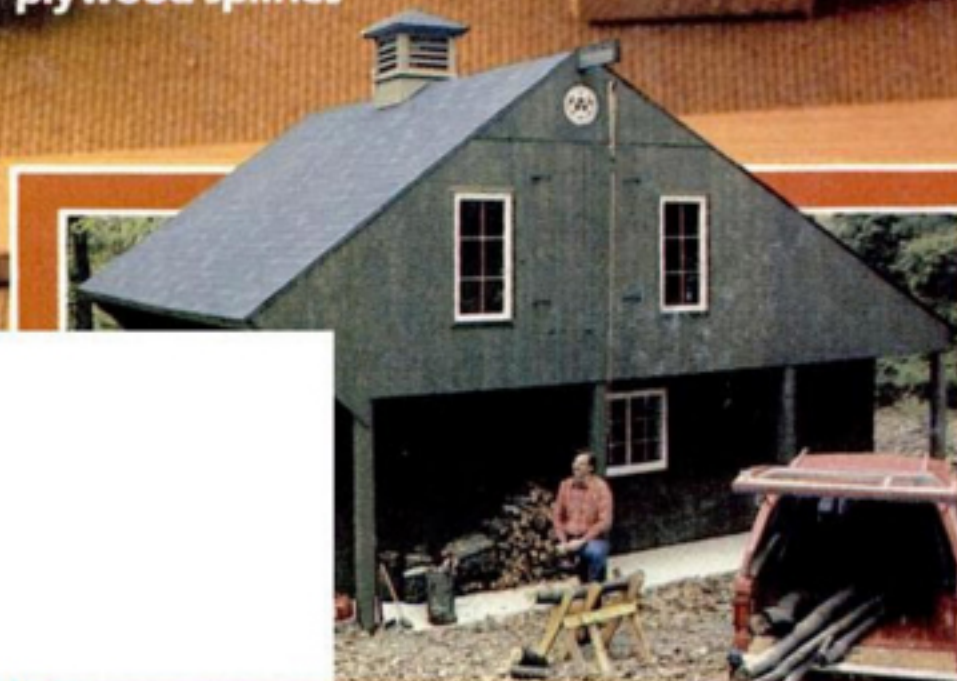
**EXCLUSIVE:** My Hopes  
For Our Space Station,  
By President Reagan

**PM GUIDE:** What's  
Really New About  
Home Insulation

**TINY COLOR TVs**  
That Fit In The  
Palm Of Your Hand

**PM Takes On The  
World's Toughest  
Road Rally**

Assembling an ash  
butcher block with  
1/4-inch mahogany  
plywood splines



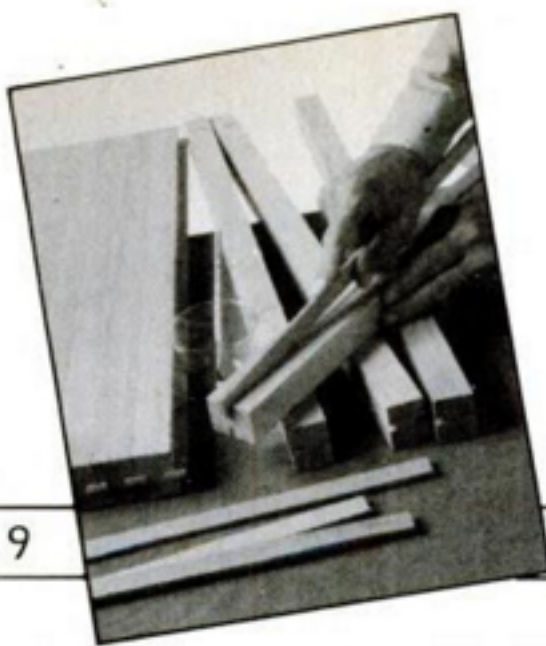
**PLANS OFFER**  
Build Our 2-Car  
Country-Barn  
Garage With  
A Giant Loft



### ON THE COVER

The warm, rich look of real butcher block is back in style for kitchen counters and other work surfaces. Here are seven ways to make your own laminated tops, plus plans for a handsome roll-around serving cart. Story begins on page 76.

—PM photo by George Ratkai



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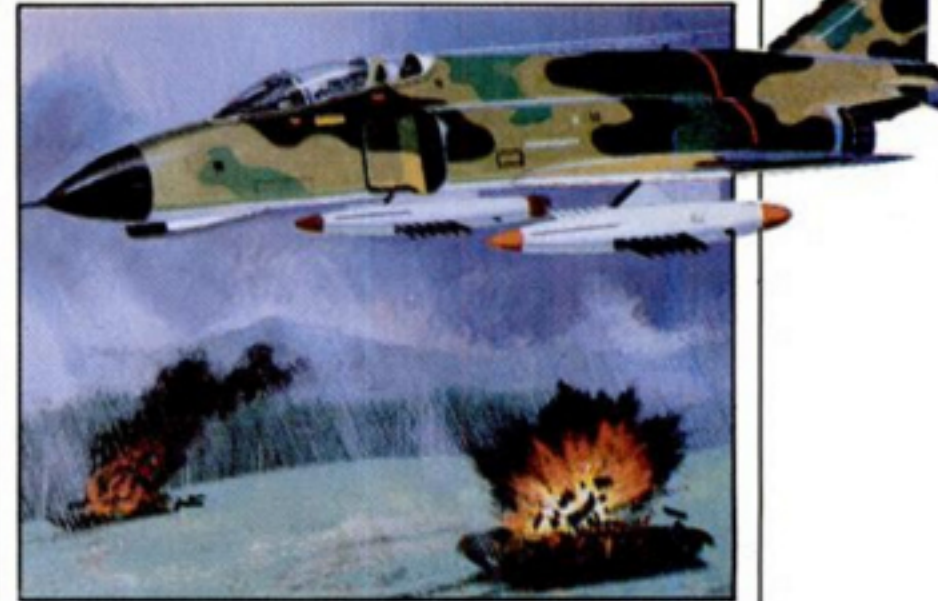
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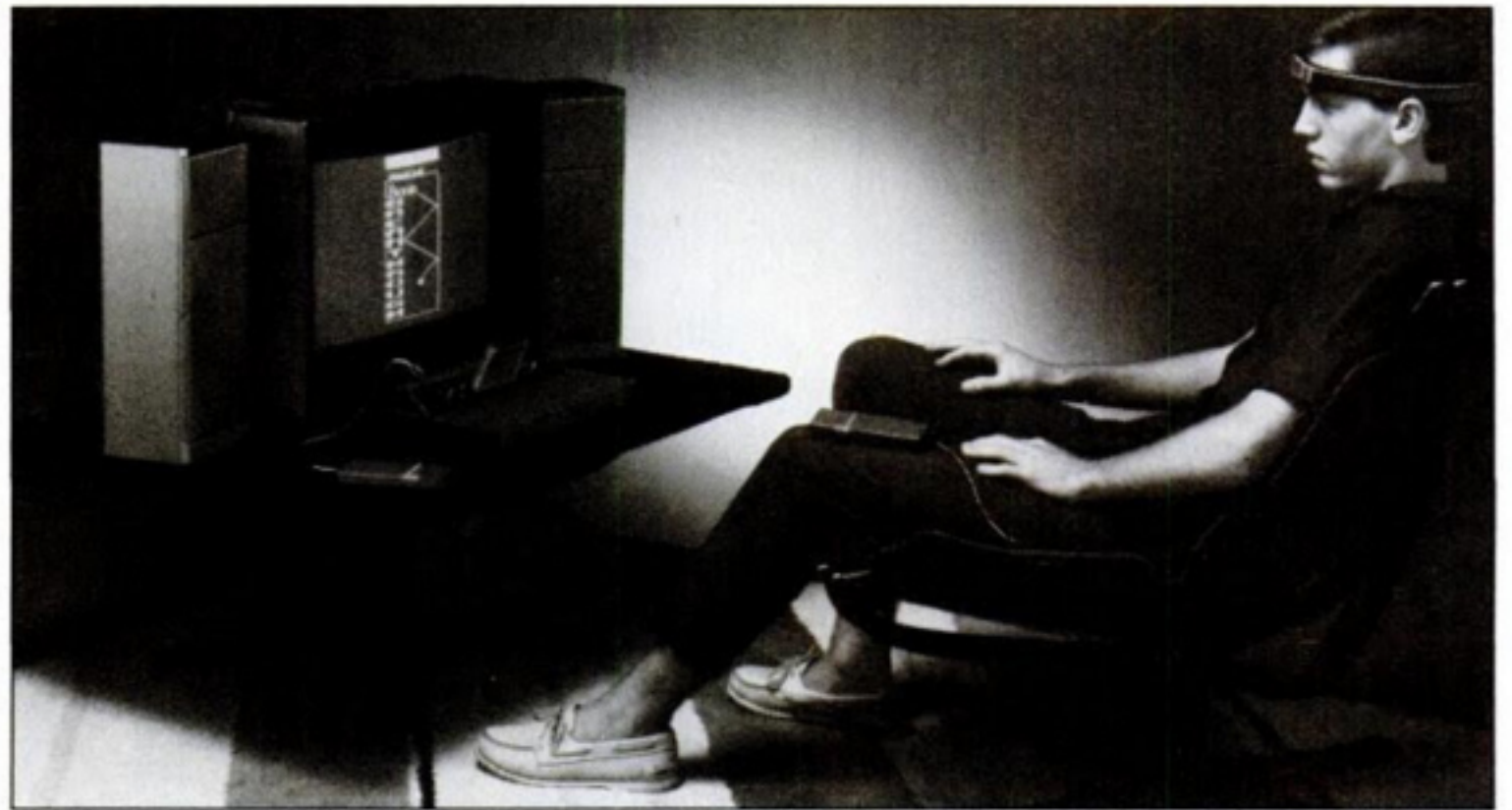
# PM ELECTRONICS MONITOR

## New frontiers for video games

Atari has pushed back the frontier of video-game technology with two new products. Their MindLink system lets you control game action without conventional hand controllers. Instead, you slip on a special headband with attached infrared sensors that pick up slight electrical impulses generated by muscle movement in your forehead. The signals are sent remotely from an attached transmitter to a receiver connected to the Atari video game or computer.

It's the closest thing yet to controlling the action with your mind. You can sit up to 20 feet away from the video screen and still control the action. If someone walks between you and the infrared receiver, the program automatically pauses. This is the first totally new development in home video games since the craze began.

On the hardware side, Atari's 7800



Startling new MindLink game is the closest thing yet to video-game mind control.

ProSystem video-game console, with 256 color shadings, sets new standards in color graphics and resolution and can display more than 100 video characters simultaneously. The system plays a new line of software and game cartridges designed for the Atari 2600, and can be expanded into an introduc-

tory computer by adding an optional full-stroke keyboard. The keyboard operates with 4K RAM, expandable to 20K.

Obviously, Atari is trying to pump some new life into a rather flat video-game market, and these two new goodies just may do it.

## Mouse in the house



WICO's mouse setup doesn't require special software to control the cursor.

One of the important features of some of the new computers is the mouse, a delightfully easy-to-use pointing device. It's a tiny box about the size of a pack of cigarettes, and you run it around a bare area of your desk, instead of using the keyboard, to move the cursor on the screen.

Because of the mouse's popularity on the Macintosh, Apple produced one for the ubiquitous Apple II series of computers, with a plug-in interface card that fills one internal expansion slot.

There are other mouse entries from companies like joystick-maker WICO and monitor-maker U.S.I. In both cases, while a plug-in card is also used, special software isn't needed, and in fact, the mouse can be used to control the cursor on most kinds of programs.

The controller cards for the Apple and IBM mice are costly—typically \$199 to \$249—but have the advantage of not needing special software and being able to work with other controllers besides the mouse.

## New circuitry for snappy photos

Photography hobbyists have traditionally been polarized into two segments: those who want high-quality photos and are willing to fiddle with sophisticated equipment to get them, and those who want high-quality photos from an aim-and-shoot box.

Now, electronic technology has made the newest breed of 35mm cameras so automatic that, finally, high-quality photos are possible with no effort on the part of the photographer.

We recently tried the newest of these 35mm automatic cameras—the Olympus Quick Flash AFL. This camera has a Zuiko 38mm F2.8 lens and electric programmed shutter (1/8 to 1/500 sec-

ond). Operation is totally automatic. The camera loads, winds and rewinds the film, focuses and sets the exposure.

The feature we liked best is the quick 1.5-second recycling time of the automatic flash. Other cameras of this type take seven to eight seconds to recycle for each flash. A newly designed condenser that's smaller in size but with a larger capacity, special electronic circuitry that allows superquick response time, and more powerful lithium batteries all combine to allow the Quick Flash to recycle so quickly.

During our test, the Olympus delivered sharp pictures with excellent exposure control in a variety of lighting

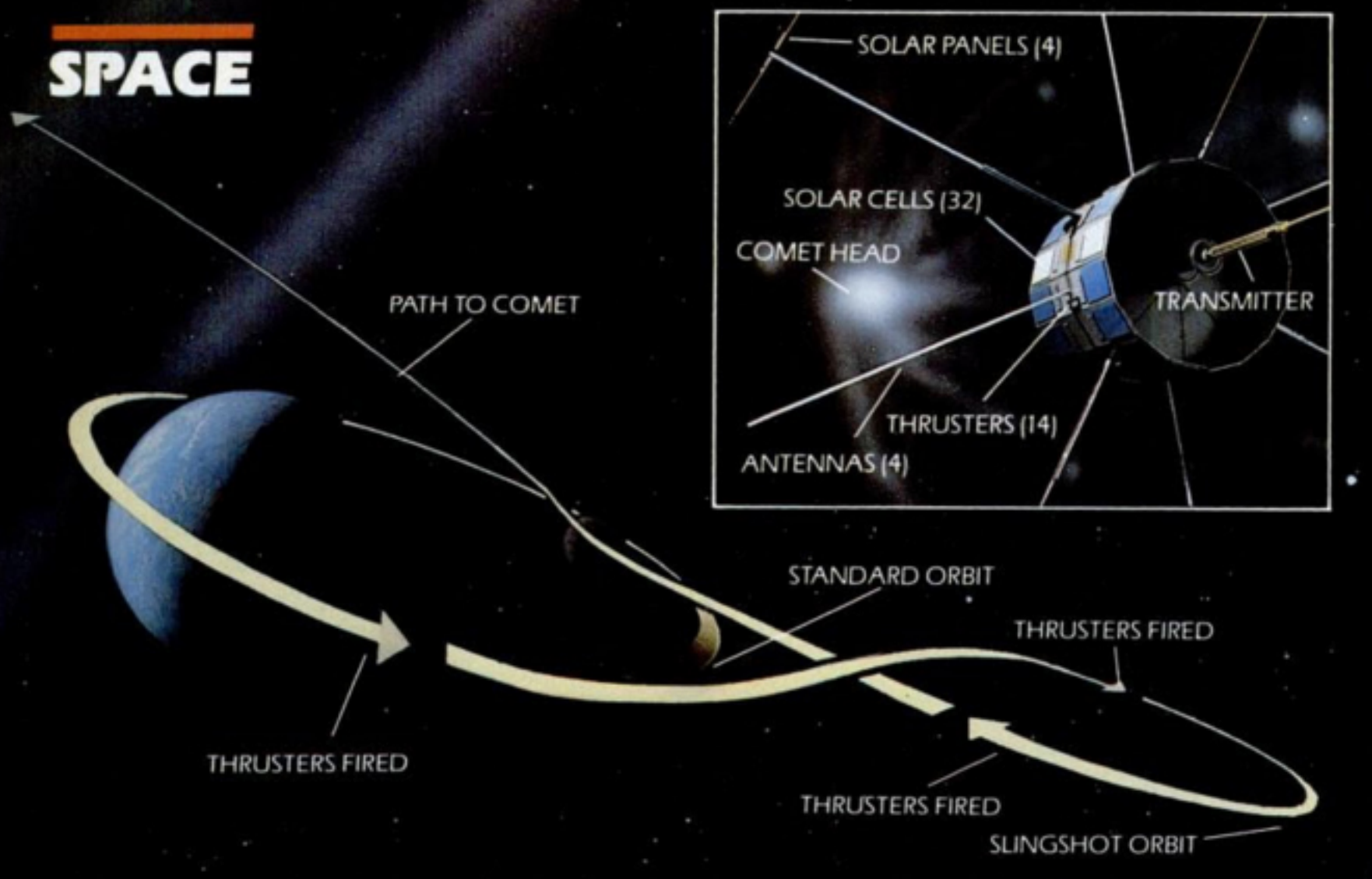


Quick Flash  
AFL's strobe can  
recycle in just 1.5 seconds.

conditions, including a series of shots that we banged off as quickly as the camera would fire. The Olympus lists for \$235 and it's one camera you'll use a lot. We did.

PM

## SPACE



ART BY BRIAN SULLIVAN

## Catch a comet

Next year, America is scheduled to become the first nation to put a space vehicle inside a comet. The International Cometary Explorer had been in orbit around the Earth and moon collecting gravitational data. But last winter NASA fired the vehicle's 14 thrusters to put it on a complicated "slingshot" orbit, flinging it out of the Earth-moon system into the path of comet Giacobini-Zinner.

The ICE satellite will enter the comet's tail Sept. 11, 1985, where it will activate using a powerful transmitter to send to Earth man's first readings of the environment inside a comet.

## ALTERNATIVES

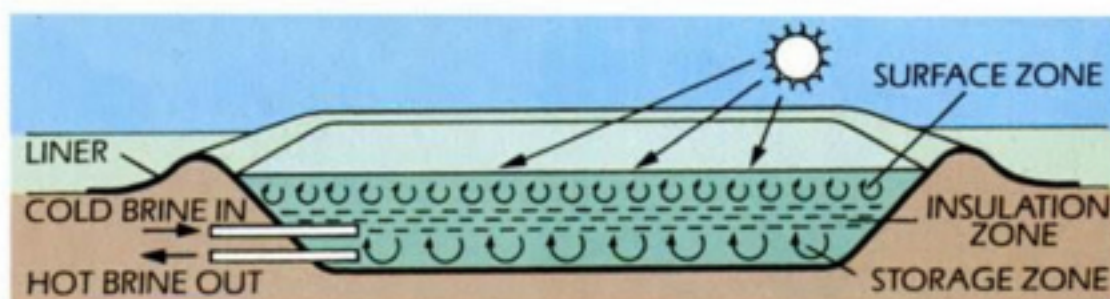
### Antacid shot

West German scientists have devised a method to revive trees nearly destroyed by acid rain. To get a neutralizing agent to the tree roots, they've built a 3-foot-tall pneumatic injector that shoots the agents right to the root, reviving the tree.

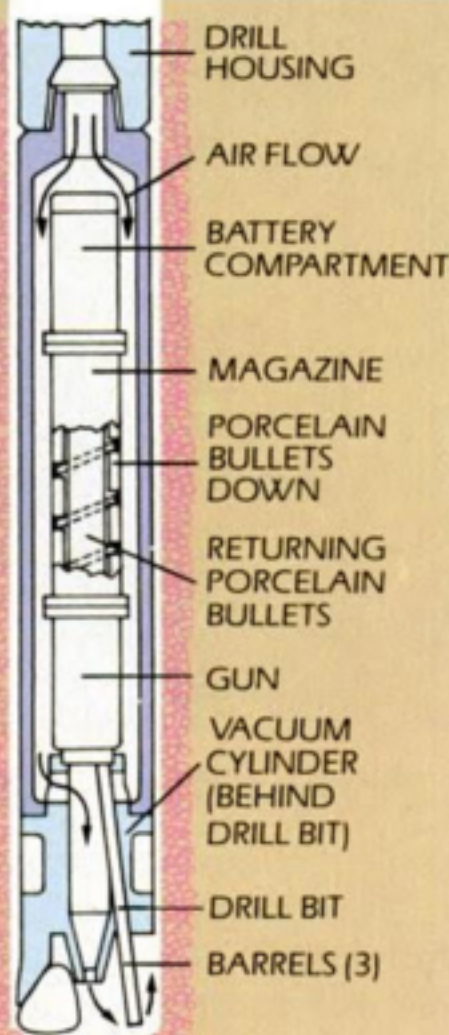


## Solar recipe: Add pinch of salt

Solar-produced electricity at 2 cents a kilowatt-hour? That was thought impossible until this past winter when Argonne National Labs produced that energy from a quarter-acre pond of brine covered with solar-collecting insulation. The brine slows heat loss in the water, making low-cost energy use feasible.



## ENGINEERING



## Gun for oil

It sounds like a machine gun, but it looks like an oil well drill. Actually, it's both. The Tround drill pneumatically fires porcelain bullets into granite, saving wear on the drill bit. The porcelain rounds hit the granite and re-enter the drill through a suction chamber. The device speeds drilling, in addition to extending the life of a bit.



## Let chips fly

Metal milling is a dangerous process because the metal chips fly every which way. Now the Kenametal company has developed a high-speed photographic system to help predict exactly where the chips will fly in a mass production process. By predicting the path of flight, workers can be stationed in positions out of harm's way.

## GAMES



## Tron revisited

In the Walt Disney film *Tron*, a computer engineer got zapped into his computer and became part of the game. That's no longer a tinsel fantasy. In Dallas you can play *Photon*, a 10,000-sq.-ft. living video game. Fire a ray gun to hit a sensor target and score points. But you can be "killed" first if an opponent's light hits sensors you wear.