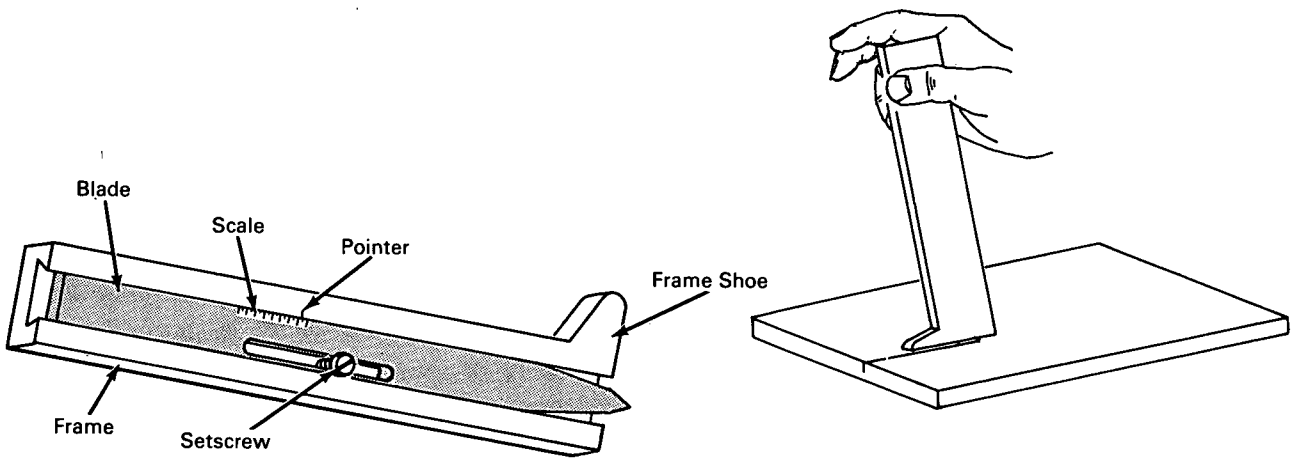
NASA TECH BRIEF

Adjustable Knife Cuts Honeycomb Material to Specified Depth



The problem:

To find a means of cutting aluminum honeycomb or other soft materials to a desired depth. Commercially available knives have no depth control and may cut too deep or not deep enough.

The solution:

A calibrated, adjustable knife that cuts honeycomb material to a discrete depth.

How it's done:

The device consists of two machined parts, a frame and calibrated blade, held together with a setscrew riding in a blade slot. The knife is adjustable to a depth of cut of 0.750". The depth of cut is maintained by the frame shoe that rides on the work surface. Depth of cut is set by aligning the desired scale mark on the blade with the pointer scribed in the frame and then securing the setscrew.

Notes:

1. The frame of the device accommodates standard commercial blades. The blade is always visible to the operator.
2. The device can be used on any straight or irregular layout line because the blade is always visible to the operator.
3. Inquiries concerning the innovation may be directed to:

   Technology Utilization Officer
   Manned Spacecraft Center
   Houston, Texas, 77058
   Reference: B66-10237

Patent status:

No patent action is contemplated by NASA.

Source: J. A. Rauschl
of North American Aviation, Inc.
under contract to
Manned Spacecraft Center
(MSC-475)

Category 05