Coaxial Cable Stripper for Confined Areas

The problem:
To provide a quick and accurate means of preparing coaxial cable for connector attachment in confined areas. Because the existing tools are too large and inconvenient to handle, and because of the proficiency level required to operate them, most cables are prepared by hand. This task is time consuming and frequently the cable is improperly prepared due to human error.

The solution:
A manual coaxial cable stripper which can quickly and accurately prepare a coaxial cable in a confined area. With this tool, preparation time is greatly reduced, and a completely inexperienced technician can perform the operation. The tool is small, easy to handle, allows the depth of cut to be preset, and has spring-loaded cutting members which give a constant cutting rate.

How it’s done:
The improved coaxial cable stripper, shown in the figure, consists of a cable guide, a cutter holding assembly, pivoted cutting members, an adjustable cable stop assembly, and a handle.

Two spring-loaded pivoted cutting members are positioned on the shaft in the cutter holding assembly with lock screws to ensure that the required length of insulation is removed from the cable. The cutting members have adjustable lock screws to limit the depth of cut. The cutting member nearest the handle is adjusted to cut through the outer insulation, shield, and inner insulation to expose the conductor. The second cutting member is adjusted to cut through the outer insulation, exposing only the copper shield.

To operate the tool, the spring-loaded cutting members are raised by depressing the coaxial cutting blade handle with the index finger. The coaxial cable is inserted into the end of the tool until the end of the cable

(continued overleaf)
is against the cable stop. The spring-loaded cutting members are then lowered until they rest against the outer cable insulation. Holding the cable with the left hand, the tool is rotated counterclockwise around the cable. When both cutting members have cut to the adjusted depth (3 to 4 revolutions), the cable is pulled out of the tool. The cable end is now properly prepared for a coaxial connector.

**Notes:**
1. This tool can be used in any industry where coaxial or similar cable must be prepared for connectors.
2. No additional documentation is available concerning this Tech Brief.

3. Questions concerning this invention may be directed to:

   Technology Utilization Officer  
   Kennedy Space Center  
   Code AD-PAT  
   Kennedy Space Center, Florida 32899  
   Reference: B68-10444

**Patent status:**
Inquiries about obtaining rights for the commercial use of this invention may be made to NASA, Code GP, Washington, D.C. 20546.

Source: Jesse D. Brown and William G. Lipscomb of The Boeing Company under contract to Kennedy Space Center (KSC-10167)