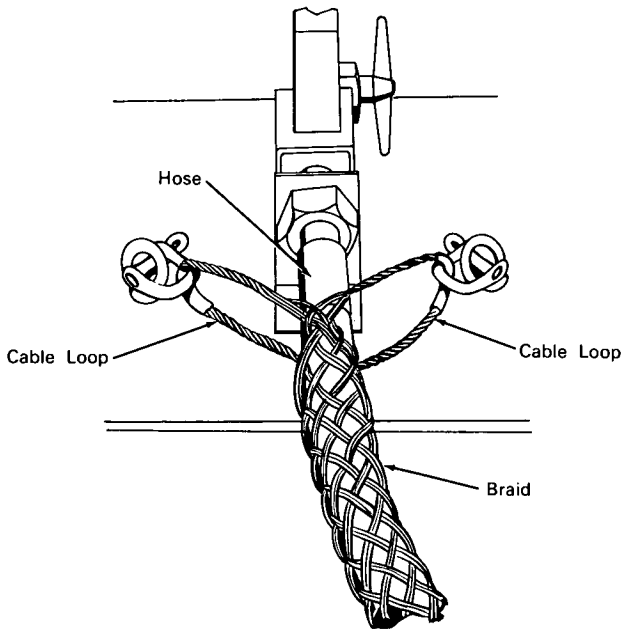
NASA TECH BRIEF

This NASA Tech Brief is issued by the Technology Utilization Division to acquaint industry with the technical content of an innovation derived from the space program.

Safety Restrainer Prevents Whipping of Ruptured High-Pressure Hose



The problem: Failure amounting to rupture in fluid transfer hoses under high pressure can cause whipping action damaging to equipment and dangerous to personnel.

The solution: A modification of a standard electric cable puller reinforces high-pressure, flexible, fluid-transfer hoses and restrains them if a failure occurs.

How it's done: The braid at each end of a standard electric-cable puller is modified to the form of a double cable loop. The modified cable puller is installed over the high-pressure hose and the two loops are secured to some structural member at each end of the hose, for example, a fuel trailer frame member or a fluid manifold support structure member. If a failure occurs in the hose, it is safely restrained while corrective action is taken.

Notes:

1. This device provides a strong anchoring method that securely restrains even a completely severed hose under very high pressure.
2. Inquiries concerning this innovation may be directed to:

   Technology Utilization Officer
   Lewis Research Center
   21000 Brookpark Road
   Cleveland, Ohio, 44135
   Reference: B64-10348

Patent status: NASA encourages commercial use of this innovation. No patent action is contemplated.

Source: William E. Thompson
(Lewis-99)

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