

Martin

Space Bola To Snatch Satellites or Men

A space-grappling system based on the bolas of South American Gauchos is being evaluated as a technique for snatching hostile satellites or stranded astronauts out of space.

The space bola, being developed at Martin Co.'s Denver Division, uses tentacle-like arms to wrap and hold its target in a snug embrace until a manned vehicle can rendezvous with the coupled pair. It is being considered for such missions as space maintenance, assembly, satellite inspection and rescue.

A Gaucho's bola is made by attaching balls of stone or iron to the ends of a cord. Another ball is attached to the end of a second rope, which is tied to the middle of the first cord. By hurling the contraption at the legs of animals, the Gauchos entangle the creatures and capture them easily.

The space bola would be deployed from a manned ship on an intercept path with the target. Its arms would be inflated to keep them fully extended. At the instant of contact with the target, the arms would be partially deflated, and their momentum, aided by small solid-propellant rockets, would wrap them around the target in a tight grasp.

The most difficult potential targets would be hostile satellites, which might be booby-trapped and for which size and motion data would be limited. The easiest type to retrieve would be a friendly satellite with no antennas or other appendages and which was not tumbling.

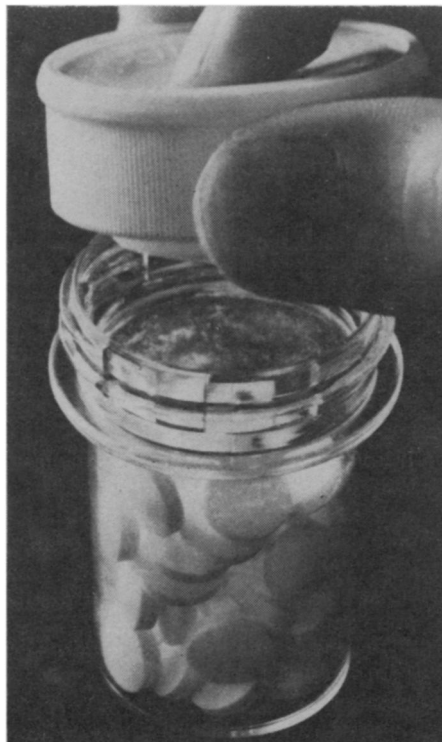
For tumbling targets, the bola would have to tumble right along after locking on, then use attitude-control jets to stabilize the joined vehicles so the retrieval ship could dock with the grappling unit.

New Ideas and Gadgets

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Safety Jar

This new container for toxic products will help prevent children from



accidental poisoning. The plastic container has a safety closure that requires more coordination and strength to open than preschoolers possess. To open, the top must be depressed with a thumb or finger while the margin is held between two other digits. The bottom part is then unscrewed.

Chancellor Industries, Inc.,
1218 Leigh Ave., San Jose, Calif.

Hydrogen Sensor

Resembling an adhesive bandage, this small stick-on device warns of potential hydrogen hazards from leakage by turning from pink to blue. Finely powdered palladium metal enclosed in a porous pocket in the sensor reacts with hydrogen gas, liberating heat. This causes the paint on the outside of the packet to change color.

Rocketdyne,
6633 Canoga Ave., Canoga Park, Calif.

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