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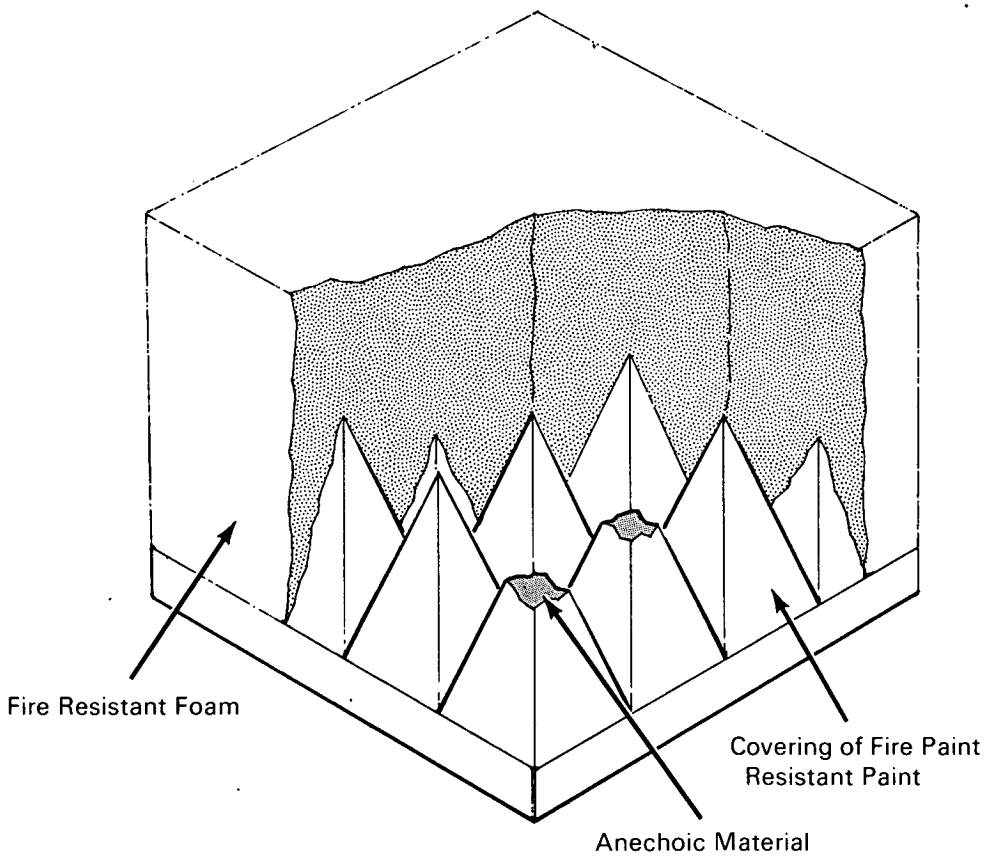
NASA TECH BRIEF

Improved Fire Resistant Radio Frequency Anechoic Materials



The problem:

Improve the resistance to fire and surface contamination of low-cost radio frequency absorbing and shielding anechoic materials. These materials normally have a surface sprayed with fire resistant paint. If fire is applied to damaged anechoic material, it will burn readily. Fires of this type are very difficult to contain because they burn under the sprayed surface.

The solution:

Apply a protective, flameproof foam covering on the anechoic material surface. This promotes safety of operating personnel and of equipment being tested

(continued overleaf)

in an otherwise combustible anechoic chamber. A lowering of fire insurance rates often results. Improved resistance to surface contamination also ensues and enhances clean room compatibility.

How it's done:

Spray fire resistant polyurethane foam insulation on the radio frequency anechoic materials. The drawing shows the resulting product. Use of this method increases versatility of an anechoic chamber by eliminating walkways. The spray foam can support the weight of a man working in the chamber.

Notes:

1. Designers, manufacturers, and users of communication testing equipment for high gain antennas will be interested in this information.
2. No further documentation is available. Inquiries may be directed to:

   Technology Utilization Officer
   Marshall Space Flight Center
   Huntsville, Alabama 35812
   Reference: B69-10450

Patent status:

No patent action is contemplated by NASA.

Source: D. A. Robinson of
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