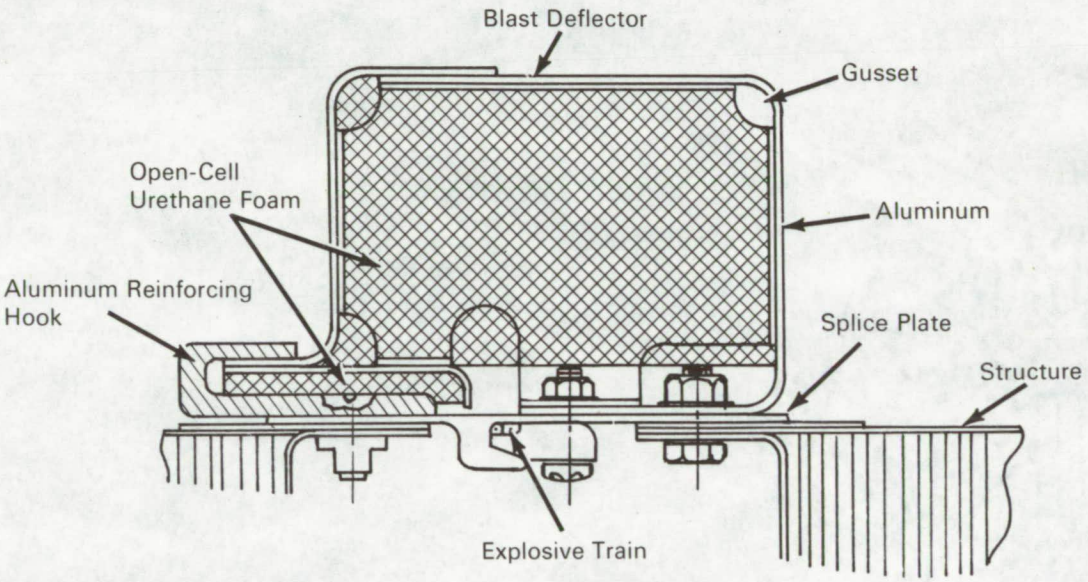
NASA TECH BRIEF

Blast Deflector Traps Smoke and Debris from Explosive Trains



The problem:

To protect interior areas and personnel from the smoke and debris of explosive trains. Prior methods, utilizing closed-cell foam and fiberglass laminates with an overlapping seal, were inadequate since the closed cell configuration resists entrance into the foam.

The solution:

A blast deflector, containing open-cell foam, absorbs the pressure loads generated by explosive charges and controls the smoke and debris.

How it's done:

When the explosive trains are detonated, the splice plate, separating the blast deflector and the explosion area is fractured. The smoke and debris, which would normally be propelled into an undesired area, are trapped in the open-cell foam within the aluminum housing of the blast deflector. A hook overlapping the housing provides structural rigidity to the blast deflector and maintains a seal with the structure to which it is attached.

Note:

This information is complete in itself. It is presented here for its potential value in the application or adaptation to the reader's own needs.

Patent status:

No patent action is contemplated by NASA.

Source: J. C. Wilkowski
of North American Aviation, Inc.
under contract to
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