

## **HARDENING OF COMMAND, CONTROL AND COMMUNICATION SHELTER SYSTEMS**

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A combined theoretical and experimental program conducted to develop a retrofit kit to harden the S-280 Electronic Shelter to the hostile environment of the tactical battlefield is described in this paper.

A design using KEVLAR/Aluminum honeycomb sandwich panels bonded to the walls of the shelter was chosen to provide protection.

The static and dynamic response of the hardened shelter were determined by the use of the NASTRAN code. Panel tests were conducted prior to exposing two retrofitted shelters on the DICE THROW Event (a large scale high-explosive test).

This paper presents comparisons of analytical predictions and test data.