

## **EXPERIMENTAL VERIFICATION OF PREDICTED BLAST EFFECTS ON AIRCRAFT STRUCTURE**

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The DICE THROW program, sponsored by the Defense Nuclear Agency, offered a unique opportunity to obtain experimental data on a true-to-life aircraft structural response to blast generated by a high explosive detonation equivalent to 4.2 TJ (1 kt) nuclear yield.

Within the framework of this program, the Naval Weapons Evaluation Facility project involved fielding three A-4C aircraft, one of the instrumented with strain, pressure and deflection gages. The prime objective of the project was to obtain suitable experimental data which, through an appropriate correlation process, would provide a verification of the analytic predictions.

This is a preliminary report which describes the scope, arrangements and procedures of the test. Selected experimental data are presented together with the related analytic predictions and their correlation is also included.