

STRUCTURAL RESPONSE OF A HELICOPTER TAIL BOOM TO COMBINED THERMAL AND BLAST LOADING

QUIGLEY,E.F.;BERTRAND,B.P.

A limited experimental program was conducted to study the influence of the thermal loading on the structural response of a helicopter tail boom to a subsequent blast loading. The tail boom was subjected to thermal loading only, to blast loading, and to combined thermal and blast loading. An analysis of the response data showed that the thermal loading can influence the blast loading response and that there are structural effects produced by the combined loading which cannot be ascertained by the analysis of the structural effects of each of the loads independently.