



The enclosed information was provided by Boeing to be used for the vulnerability studies being conducted at SNL for the NRC.

Department 6141
Manager: Ken Sorenson
PI: Jeremy Sprung

Included at the front of this package is Boeings response to some initial questions. The other information provided by Boeing was to support these questions.

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Jeff Smith
Dept. 6141
845-0299



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Information in this record was deleted
in accordance with the Freedom of Information
Act, exemptions
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~~Transparency~~
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Ex 4

1) What is the mass distribution along the length of the aircraft and along the wings.

Ex 4

2) Global locations of the landing gear and engines.

Boeing Structures material enclosed gives data.

3) Details of landing gear (particularly the nose gear):
weight of landing gear assembly
geometry, so a representative finite element model can be developed
orientation when in the "up" and "down" position
description of material properties (either type of material or representative material)
how the landing gear are attached to the aircraft

Boeing Structures material enclosed gives data. Details of the weight is in 1) above. The material for the landing gear is mainly steel with some aluminum and titanium.

4) Configuration of the fuselage and wings, including thickness of each component, materials and construction details

Boeing Structures material enclosed gives data. Thickness of each component, materials and construction details are proprietary.

5) Details of connections between the wings and the fuselage

Boeing Structures material enclosed gives data.

6) Locations of the hard components, such as the landing gears and the engines, on the aircraft

Boeing Structures material enclosed gives data.

7) Configuration of the hard components, including materials and construction details

Landing gear is covered in 3) above . For engine contact engine manufacturer.

8) Maximum vertical dive velocity before loss of control, and what is the mode of the loss of control whether wing aerodynamics such as wing control surfaces or rear tail assembly components

Ex 4

9) Maximum vertical dive velocity before loss of wing assembly

See 8) above

10) Dynamic shear and moment capacities of wing to fuselage connection, and the engine mounts to the wing structure, for a horizontal frontal loading/attack orientation

Details are proprietary.

11) Maximum achievable velocity at 1000' above sea level or at lower altitudes, under full load with horizontal flight under maximum power.

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12) Maximum performance envelopes for the aircraft, including associated margins of safety, for flights at cruise altitudes and at lower altitudes. For example, the maximum achievable speeds at various angles of attack without loss of control and structural integrity of the aircraft

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