

Author: Aubrey Carter at TOC-ENG4

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Priority: Normal

TO: Jim Anderson at FLDSVC-GO

CC: Ray Valeika at TOC1A-5

CC: Jack D'Arcy at TOC1A-5

CC: Andrew Gallagher at TOC-ENGL

Subject: McDonnell Douglas Report of Survivability of PNS Accident

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DCA 96M4068

Jim,

As requested by Bill Steelhammer, McDonnell Douglas, have reviewed their report on survivability of MD-88 with extent of airframe and systems damage encountered during PNS accident, assuming the aircraft became airborne. Bill requested our concurrence with their report; and is late with NTSB submission, facing deadline tomorrow.

I concurred with their analysis based on the following remarks, with contingencies taken on as action items:

1. Flutter analysis of the airframe/empenage with similar damage for all speeds up to dive speed. This is an FAA 25.571-1B Advisory Circular requirement for "following the incident" analysis survivability criteria. There was no mention of flutter analysis in report.
2. FEA model used in their analysis appears to have not considered that Fuselage Longerons 5, 7, & 11 RH were also severed, and that L-8R had no compression capability remaining due to buckling damage. These are critical loadpaths, and affect axial load and panel shear residual strength.

These action items will not be completed prior to NTSB submission. Analysis is quite critical, since this degree of damage will become the "new" standard for rotorburst airframe survivability in the future, and could have certification consequences.

Aubrey

DELTA AIR LINES PARTY COORDINATORS
SUBMITTED COMMENTS ON McDONNELL
DOUGLAS' SUBMISSION