

AVMAX ANTENNA INSTALLATION

Structural Analysis

The Avmax Corporation had a requirement to install eleven new antennas on the fuselage skin of a Dash-8-102 aircraft. The antennas were installed on the crown and belly of the aircraft. In addition to the antennas, new avionics racks and a console were installed in the main cabin. Avmax was on a tight schedule and required assistance in designing and substantiating the installation of the antennas as well as substantiating the main cabin structural components. TASS Inc was also asked to carry out the damage tolerance analysis of the changes. TASS Inc's smaller company size and fluid skill set allowed us to provide a fast turn-around for a large engineering project with rigorous design development including finite element modeling.

Durability and Damage Tolerance Analysis

Not only do new designs have to have to meet ultimate load requirements, they must also be evaluated for durability and TASS has an entire suite of tools to run damage tolerance evaluations. TASS was requested to determine the inspection requirements due to the modification changes.

