

P3 Radar Integration – Operation Ice Bridge

Developed a large antenna array to sound and image polar ice sheets

NASA, University and industry partnership– WFF, KU and DARCorporation

Designed, simulated, fabricated, installed and flight tested in ~ 3 months

Ready for the mission: May 3-28, 2010

Involvement of graduate and undergraduate students in AE and EE

High-fidelity, physics-based, interdisciplinary simulations for geometry, aerodynamic loads, aircraft performance, static and dynamic structural response, and radar performance



MCoRDS Array

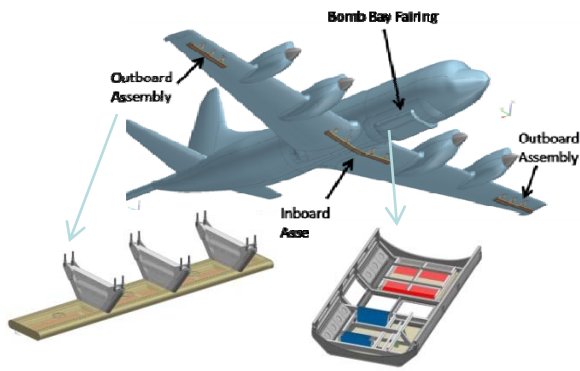
Accumulation, Snow, and Ku-band radars



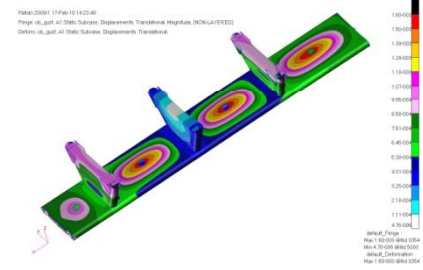
CRISIS



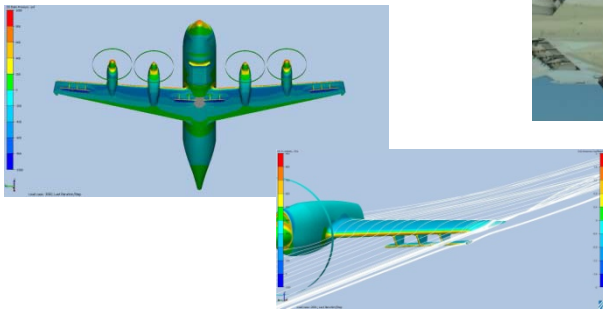
P3 Radar Integration – Operation Ice Bridge



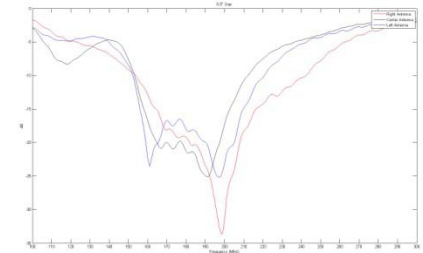
3D Solid Parametric CAD



12 Static and Dynamic Structural Trade Study Cases



21 Aerodynamic Trade Study Cases



Antenna Performance Simulation and Testing

