

COCKPIT CONTROL PANEL DESIGN

Commercial Aviation

*Project
Management*



*Mechanical
Engineering*



*Electrical
Engineering*



PROVIDED ENGINEERING AND DESIGN SUPPORT TO OPTIMIZE COCKPIT CONTROL PANELS

APPROACH

- Redesigned cockpit control panels based on production version one design feedback from pilots and engineers
- Optimized and updated control panel design, including operator interface device selection and layout, light plate design, and panel architecture

RESULTS

- Delivered cockpit control panel designs, including:
 - > Mechanical CAD
 - > Cable assembly design/routing
 - > Light plate design
 - > Electrical schematics, circuit card design, and panel architecture
- Developed validation and verification (V&V) test plans for new circuit cards to DO-160 requirements
- V&V included environmental factors such as temperature, vibration, voltage spike, emission of RF energy, electrostatic discharge, and operational shocks and crash safety

KEY TOOLS & TECHNOLOGIES

- Pro/E WF4 and Pro/Cabling
- DxDesigner
- PADS Layout

ALTEN TECHNOLOGY