

Aviation & Defense

ALTEN ADDED VALUE

Aerostructure design and technical expertise
Involved in the client's entire design process
and serial life cycle for added quality and
performance commitment
Continuous improvement of client's
procedures and implementation
Optimization of design costs

KEY DATA

Team Size: 40 Engineers
Time: Since 2012
Work Package

KEY TOOLS & TECHNOLOGIES

Process: EDR and client standards, client
process linked to structural part design
Mechanics:
CATIA V4/V5, 3DEXperience (airframe)
Electrical: EHI/EHA
Configuration management:
PACMAN/GLI – VPM, 3DEXperience

MILITARY AIRCRAFT AND BUSINESS JET AEROSTRUCTURES

OVERVIEW

ALTEN is involved in the entire design process of a major aircraft manufacturer's aircraft and during a military aircraft's serial life in support of the engineering office. From the project initiation phase to the serial life cycle, ALTEN provides designs, studies, justification, digital mock-up management, layouts, and more.

ALTEN's set of skills are used to provide:

- Digital mock-up management
- Mechanical design and modification with manufacturing feedback
- Equipment and electrical layout

PROJECT DETAILS

Military aircraft:

- Used manufacturing and assembly site feedback and ALTEN analysis to improve over 1,000 layout and structural parts in the digital mock-up
- Conducted structural improvement studies in the initiation phase
- Re-industrialized the windshield, electronic warfare equipment housing, and equipment bays
- Performed electrical layout of 36 compartments, additions/removals of harness, route studies, bracket design, and standards management
- Performed integration study of subsystems (accumulator, probes, etc.)

Business jet:

- Developed and justified APU, structure, skin panels, stringers
- Defined fixation points and bracket design for mechanical and electrical equipment installation, including FTI-specific configurations and system development
- Updated digital mock-up to integrate feedback from static and vibratory studies

