

STAR TRACKER ELECTRONICS
& ENCLOSURE DEVELOPMENT

Aerospace

*Project
Management*



*Mechanical
Engineering*



*Systems
Engineering*



*Electrical
Engineering*



FLIGHT ELECTRONICS HARDWARE & MECHANICAL PACKAGING FOR STAR TRACKER SYSTEM

APPROACH

- Applied Agile product development methodologies to rapidly execute the development of three design iterations—engineering, qualification, and flight models
- Performed structural, thermal, derating, and failure mode and effects analyses.
- Developed and executed qualification test plans and procedures for vibration, shock, EMI/EMC, and thermal vacuum testing
- Built custom mechanical, electrical, and optical ground support equipment (GSE)

RESULTS

- Achieved on-time completion of all major phase-gate reviews and program deliverables
- Delivered flight hardware on time and on budget with an extremely aggressive program schedule to meet the launch milestone date

KEY TOOLS & TECHNOLOGIES

- Thermal Desktop for thermal analysis
- Femap and Nastran for structural analysis
- Aerospace environmental testing

ALTEN TECHNOLOGY