



A Cohort plc Company

Systems Engineering Capability



Commercial In Confidence



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System Development

Requirements Identification:

- Requirements Capture (Doors, VCRI etc)
- Customer Friend
- Feasibility and Technology Studies

System Design:

- Hardware and Software Design Specifications
- Test Plans and Specifications

System Realisation:

- Hardware Build and Test
- Software Code and Test
- Space Models & Functional Prototypes
- Form, Fit and Function Prototypes
- Low Rate Initial Production
- Full Production



System Proving:

- Functional Test
- Qualification
- Accreditation

Electronic Engineering

Schematic Capture:

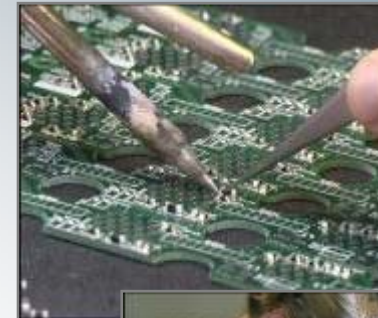
- ORCAD – Electronic Schematic Capture

Development Tools:

- Synplify, Modelsim, PSpice.

Capability:

- In-house workshop capability for prototyping and small-scale manufacture of electronic assemblies
- Well-equipped laboratory areas
- Surface-mount workbench and separate assembly area for production builds
- Subcontract management for more specialist tasks i.e. PCB manufacture, component procurement etc



Build



Inspection



Assembly &
Test

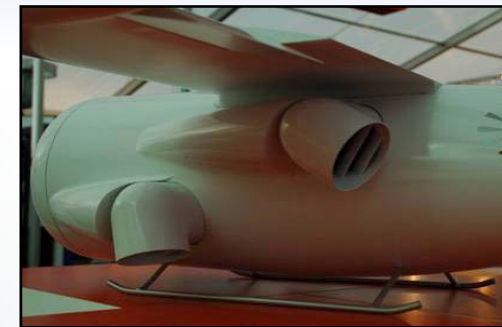
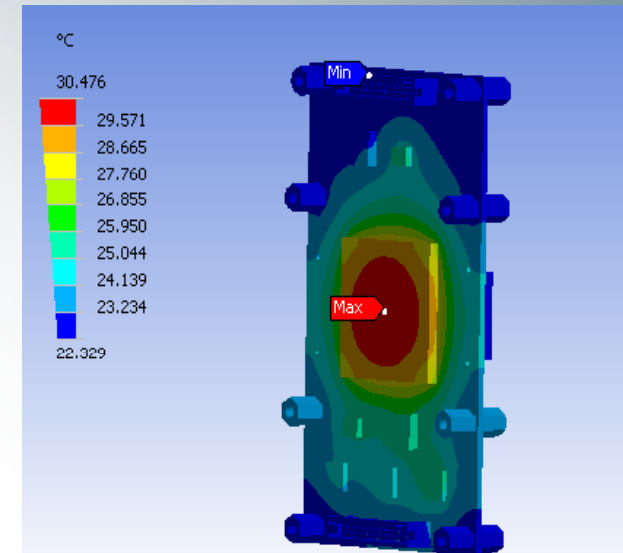
Mechanical Engineering

CAD:

- Autodesk Inventor – 3D mechanical CAD and parametric solid modelling
- Aero-dynamic, Finite Element and CFD analysis
- Thermal, shock and vibration analysis

Capability:

- In-house workshop capability for prototyping and small-scale manufacture of mechanical solutions
- Well-equipped laboratory areas
- Subcontract management for more specialist tasks i.e. sheet metalwork, castings etc



Software Engineering (System & Embedded)

Languages:

- Oracle, Java, Visual C++, C, Basic, Assembler, SQL, Delphi, Pascal, HTML, Ada, Paradox, Visual Basic, Fortran, Access, VHDL

Operating Systems:

- VxWorks, Unix, Windows, Linux

Tools/Environments:

- Visual Studio, DOORS, Labview, Rhapsody, Simulink, MathCAD, MATLAB, Visual Development Studio, Visual SourceSafe, Rational Toolset, Artisan Real-time Studio, SystemView, ModelMaker, Telelogic Tau, Oracle Developer, WindRiver, Windows Embedded Target Designer.



Test and Qualification

Test Facility:

- Independent of Development and Manufacture facilities
- Temperature cell (+150 to -40C) for ESS and product proving
- Support for bespoke test rigs/SPTES

NMAS Approved Test Facilities with Partner Organisations:

- Local EMC test house
- Environmental testing
- NBC and contaminates testing



Engineering Support

Post Design Services:

- 4th Line Repair
- System Enhancements
- Design and Support of 2nd/3rd line test equipment
- Obsolescence Studies
- Training Users or Trainers
- Equipment Maintenance

