# **Training Needs Analysis**

The synergy between the company's use of formal methods in systems engineering and the design & application of **generic emulation** is a key differentiator for Customers seeking to maximise their operational effectiveness.

It has enabled Aerobel to provide well-focussed Training Needs Analyses that result in:

- a low risk training strategy
- practical options for its implementation with high confidence
- *quantitative* cost-benefits of new training methodologies & technologies.

Realtime IR courtesy of CSI & MTL





Naval Map with Realtime Overlays

DIS Crewstation at RMCS

Mast

# **Training Systems**

Aerobel is now bringing together these skills to develop **reconfigurable & affordable** training systems such as:

- desk-top flight data replay systems
- cab/driving/bridge simulators
- part task trainers
- instructor operating stations.

# Aerobei

The Company's offices are located opposite Motspur Park BR station, on the south west outskirts of London. The site is just off the A3 trunk road, 20mins from central London and 40mins from Heathrow and Gatwick airports.



SG Reseller





CSI Reseller



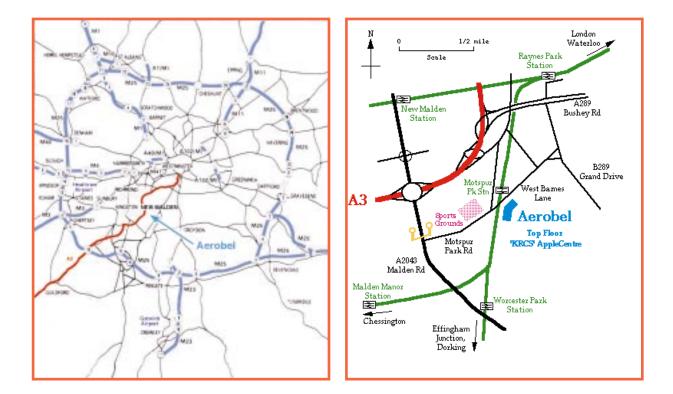
MTL Reseller





Crystal River Eng. Reseller

BG Systems Reseller



For further information on our products & services, please contact:

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Interactive 3D Visual Systems

Systems Engineering

**Training Systems** 

# Aerobei

Aerobel Defence Technology Ltd is a privatelyowned British IT-based engineering company, which was formed in 1987. It is an established UK MoD defence contractor having:

- DCL & List 'X' accreditation
- Quality Assurance certification to AQAPs 1 & 13 (being converted to ISO 9001 & 9000-3).

The Company applies specialist expertise to the examination & solution of problems and the identification of opportunities in the following areas:

- Systems Engineering
- Interactive Visualisation
- VR & Synthetic Environments
- Operational Aids
- Training Needs Analysis
- Training Systems
- Aero/Fluid Dynamics & Ballistics.

Customers include:

- British Aerospace
- Comator (Sweden)
- CrossRail
- DERA
- Elco (Spain)
- KLM (Holland)
- London Underground
- ◆ MoD(PE)
- Railtrack.

Urban Planning





Signalling Design

Aerobel offers its Customers the following benefits:

- independence, responsiveness and reliance on maintaining Customer satisfaction
- as an MoD-approved contractor, the infrastructure to undertake discreet, independent programmes conforming to recognised management, security and quality assurance standards

Proposed M25 Link Roads

- 90% of the staff have a degree and are directly involved with Customers resulting in low overheads
- cost-effective solutions through the use of innovative state - of - the - art techniques & computer-aided tools.

#### **Systems Engineering**

Aerobel has refined a top-down systems engineering approach to undertake studies of physical systems having complex interactions.

Studies include:

- the analysis of potential SDI terminal defence systems
- the feasibility of setting up major new UK research facilities including an EM gun range and 2-stage light gas gun
- an assessment of novel railway signalling & operations control architectures.

Interactive Walkthroughs





Impact on Environment for Co Councils

Station Design by CrossRail

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# **Interactive Visualisation**

The company has developed powerful interactive visualisation tools which enable users to:

- □ understand the processes & interactions involved
- □ present the results to Funding Sponsors.

Applications include:

- design of signalling, stations and major road schemes
- engagement modelling & trials reconstruction
- CFD flow visualisation for design of yachts to munitions.

by Aerobel 1994

#### **VR & Synthetic Environments**

The company has built up **unique** expertise using **open format**, **productivity-enhancing** software tools for 3D modelling, VR & visual simulation.

These tools enable the generation **without programming** of the following for realtime applications:

- *dynamic* 2/3D instruments
  - *articulated* 3D models
    - internal layouts
  - out-the-window scenes.

# **Operational Aids**

Aerobel is using these **open format** software tools to provide **easy-to-use** operational aids having high quality realtime visuals.

Examples of such operational aids include:

- navigation & mine warfare using digital sea-bed data
- mission planning/rehearsal & replay.

