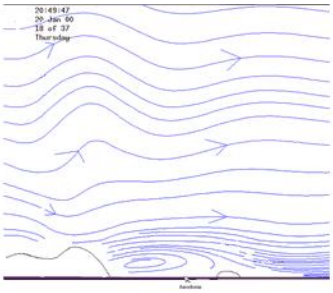
natural hazards inc.

Project Sheet:

Dunedin Airport Wind Shear



Project Description

Project: Dunedin Airport Wind Shear

Location: New Zealand

Client: Air New Zealand

Total Project Value: Confidential

Start Date: November 2002

End Date: July 2004

Lead Company: Meteorological Service of New Zealand Limited (MetService)

Associated Consultants: None

Key Features:

- Innovative
- Cost-effective
- Quality environment
- Safety focussed

Wind shear in westerly conditions is a safety concern for aircraft operating in and out of Dunedin Airport. The wind shear can be transient and severe at times. MetService modelled a number of past incidents using its high resolution forecast computer model and established that the model was capable of providing a useful prediction of possible wind shear. An operational product for aircrew was designed based on the International Civil Aviation Organization's criteria and software development was completed. The product has application at any airport in the world. MetService was awarded the Chartered Institute of Logistics and Transport 2004/5 Award for Safety Innovation for this work.

Reviewing a number of past wind shear incidents experienced and determining whether MetService's operational high resolution forecast computer model would have predicted the risk of wind shear; Poviding a report and presentation on findings; Developing a wind shear operational product for use by aircrew; Completing software development within an ISO9001 environment; Integrating the software to the product to ensure an automated production and delivery; Commissioning the service; Ongoing product performance analysis and subsequent model fine-tuning.