

RFT Systems (Aerospace) Limited Develop Aircraft Cabin Conditioning Mathematical Model

RFT Systems have developed a mathematical model to accurately predict temperatures within aircraft cabins and other airborne enclosures such as pods and UAV's for all worldwide environments.

Castle Douglas, Scotland ([PRWeb](#)) September 5, 2007 -- RFT Systems (Aerospace) Limited are proud to announce the development of their Aircraft Cabin Conditioning mathematical model.

The model is able to accurately predict the amount of heating and cooling required to maintain the mean cabin temperature at set levels throughout all phases of flight.

Tom Benzie, Engineering Director, said, "The model works in two stages. The first stage sizes the heating and cooling sub systems based on the worst case, steady state, environments that the aircraft is expected to operate in. The second stage is to dynamically model the cabin through typical flight profiles to determine the response required from the system. This then aids the definition of the control logic for the actual Environmental Control System."

The model was recently used in anger, when Farnborough Aircraft Corporation approached RFT to size and specify a development vapour cycle system for their Kestrel prototype aircraft. RFT were able to model the aircraft cabin, size the system and determine the control philosophies within a few weeks. RFT then sourced the equipment, helped arrange shipment and were on hand to answer technical queries during the installation. Amazingly, the entire process took less than 2 months.

The good news is that this model can be adapted to simulate any enclosed environment such as Pods and Unmanned Air Vehicles (UAV's), providing a fast and accurate means of determining the temperatures that equipment will be exposed to.

RFT Systems (Aerospace) Limited is a Systems Engineering Consultancy, specialising in Aerospace Mechanical Systems and Thermal Analysis. Based in Scotland, RFT provides services world wide and currently lists many top Aerospace Companies as clients.

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