— 3rd Fire & Cabin Safety Research Conference -Atlantic city , October 2001





The VERRES project VLTA Certification Issues

by Eric ANDLAUER
Email: andlauere@sofreavia.fr

The VERRES project



- Sponsored by European Commission Direction General TRansport ENergy (DG TREN)
- Consortium:
 - Sofreavia (leader)
 - Airbus
 - British CAA (SRG)
 - University of Greenwich
 - Cranfield University
 - SNPNC (representing ETF) (Observer)
- One year study
 - Starts in November 2001

Goals



- Identify specific issues raised by futur Very Large Transport Aircraft (VLTA) cabin certification.
- Provide partial certification means for VLTA
- Provide JAA with recommendation to cover new issues raised by VLTA cabins

Work organisation



- The project is divided into 5 Work packages:
- WP1: Configurational aspects for VLTA.
- WP2: Investigation the requirements of a methodology utilising analysis and partial testing.
- WP3 : Aspects of occupants safety for VLTA concepts.
- WP4 : Synthesis.
- WP5 : Dissemination.

Work Package 1 - 1/2







- Configurational aspects for VLTA
- Leader: Cranfield University.
- Participants : Sofréavia; University of Greenwitch, Virgin Atlantic; SNPNC.
- Description of work (1):
 - Review of previous research into configurational issues in evacuations.
 - Analysis of Civil Aviation Accident Reports involving major loss of lives as a result of fire over last two decades.

Work Package 1 - 2/2





- Configurational aspects for VLTA
 Description of work (2):
 - Evaluation of information available on the interaction between configuration aspects and human performance in emergency evacuations in other scenarios
 - Collation of information from cabin crew regarding configurational aspects for VLTA
 - Identification of the configurational issues and rules which will need to be re-evaluated for VLTA.
 - Proposal for requirements for future evacuation testing.

Work Package 2 - 1/2





- Investigating the requirements of a methodology utilising analysis and partial testing
- Leader: University of Greenwitch
- Participants : Sofréavia; Cranfield University,
 Virgin Atlantic; SNPNC.
- Description of work (1):
 - Review state of the art of evacuation models, their validity, data requirements and current availability of data.

Work Package 2 - 2/2





- Investigating the requirements of a methodology utilising analysis and partial testing
- Description of work (2):
 - Investigate model capability and limitations with regard to crew and configurational aspects using a generic VLTA layout and a relevant evacuation scenario.
 - Propose requirements for future model development and data requirements through partial testing.

Work Package 3





- Aspects of occupants safety for VLTA concepts
- Leader : Sofréavia
- Participants: Airbus; University of Greenwitch;
 Cranfield University, Virgin Atlantic; SNPNC.
- Description of work :
 - Cabin crew co-ordination in emergency.
 - Building a mental representation of the aircraft for passengers.
 - Conduct limited evacuation experimentation with an evacuation simulator.

Work Package 4







- Synthesis
- Leader: CAA/SRG
- Participants : Airbus.
- Description of work :
 - Synthesis of the 3 work packages to determine high level statements and recommendations.

Work Package 5







- Dissemination
- Leader : Sofréavia
- Participants : All.
- Description of work :
 - Publication in scientific review.
 - Presentation to JAA Safety Group.
 - Participation to major international events.