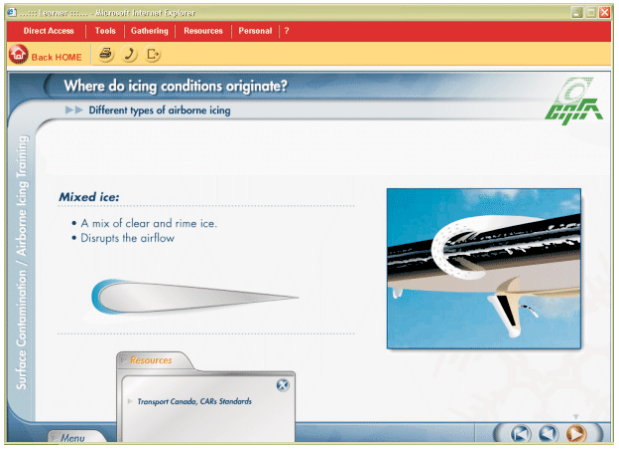

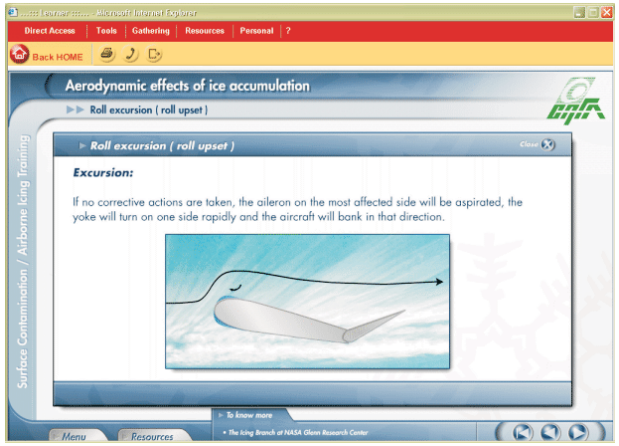

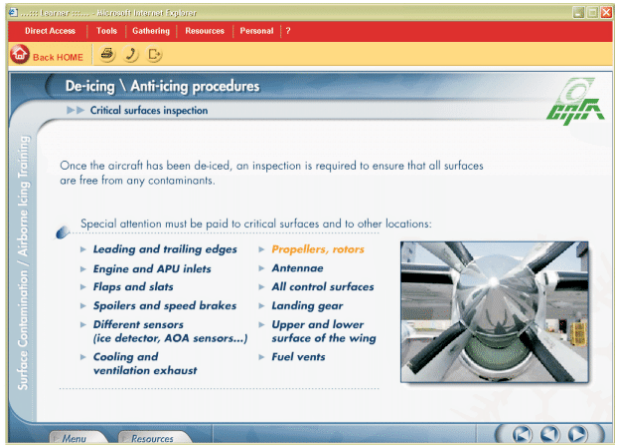

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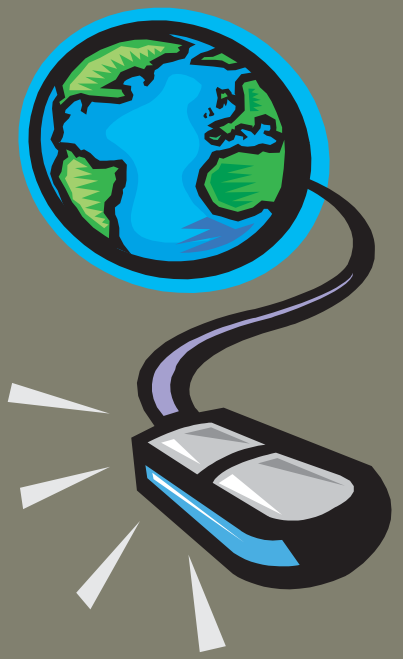
Online training

Surface contamination & airborne icing Training



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Whether we talk about Washington's Air Florida crash in the 80's or the more recent G3 crash in Aspen Colorado, it makes no doubt that accumulation of any contaminants on a aircraft surface is a potential danger to the safety of the passengers and crew.

As a crew member, it is your duty to ensure safety of you flight by recognising factors that lead to surface contamination and knowing the adverse effects of that contamination on the dynamics of flight.
The hazard of flying with surface contamination is so real that Transport Canada and most of al the other transport agencies in the world made it illegal to take off with critical surfaces contaminated

An approved surface contamination initial and recurrent training program is required for all operations personnel to ensure they are aware of the hazards and procedures for ice, frost and snow critical contamination on aircraft. The training program shall include:

(a) responsibility of pilot-in-command and other operations personnel;
(b) regulations related to operations in icing condition;
(c) weather conducive to ice, frost and snow contamination;
(d) inspection before flight and removal of contamination;
(e) in-flight icing recognition; and
(f) hazards related to critical surface contamination of ice, frost and snow.

Approved initial and recurrent training programs for all flight crew shall include airborne icing training to ensure they are fully aware of the hazards presented by airborne icing and the operating procedures to avoid and exit hazardous icing conditions. The training program shall include:

(a) basis of certification for flight into known icing conditions;

(b) airborne icing definitions and terminology;

(c) aerodynamic effects of airborne icing;

(d) airborne icing weather patterns, including both classical and non-classical mechanisms for freezing precipitation;

(e) flight planning and in flight icing information;

(f) information specific to aircraft fleet(s) concerning operation de- and anti-ice equipment, and operational procedures; and

(g) company directives concerning operations in airborne icing contained in COMs, SOPs, and other company documents.

COURSE CONTENT

Introduction:
- Preface
- Presentation of the CQFA
- Course presentation
- Why do we train for surface contamination and airborne icing ?
- TC and surface contamination and airborne icing training

Where do icing conditions originate ?
- Different types of contaminants
- Different types of airborne icing
- Intensity of icing
- Systems associated with icing conditions
- Factors influencing the accumulation of ice on critical surfaces

Aerodynamic effects of ice accumulation:
- Types of effects
- Roll excursion (roll upset)
- Pitch excursion (tail stall)
- Certification for flight into known icing

De-icing:
- Different ways to de-ice aircraft
- Types of fluids
- Factors that will influence holdover times
- Holdover time tables
- Quality of fluid and temperature buffer

De-icing / Anti-icing procedures:
- One step method
- Two-step method
- Spraying order
- Areas not to be sprayed
- Critical surfaces inspection
- Health affects
- Conclusion