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15. Supplementary Notes (Funding programs, titles of related publications, etc.) Several research reports for testing of de/anti-icing technologies were produced for previous winters on behalf of Transport Canada. These are available from the Transportation Development Centre (TDC). Several reports were produced as part of this winter's research program. Their subject matter is outlined in the preface. This project was co-sponsored by the Federal Aviation Administration.					
16. Abstract Additional research related to aircraft anti-icing in aircraft hangars was conducted in the winter of 2009-10. The objective of the research was to determine if any holdover time relief could be provided to operators conducting these types of operations, as currently they must start the holdover time clock when fluid application begins, even if the treated aircraft is not immediately exposed to precipitation.  A number of comparative endurance time tests were conducted to evaluate the protection time provided by anti-icing fluids applied in a hangar operation relative to the protection time of the same fluids applied in a standard operation. Tests were conducted in natural snow and in simulated freezing fog, light freezing rain and freezing drizzle.  Analysis of the data collected determined that allowance times can be provided for hangar anti-icing operations. The allowance times are calculated as a percentage of published holdover times and vary by fluid and precipitation type. Testing conducted in 2009-10 provided allowance times for two fluids, Dow UCAR Endurance EG 106 and Clariant Safewing MP IV Launch. The allowance times are limited to hangar waiting times of 30 minutes or less. Transport Canada guidance material was changed to enable operators to use these allowance times by incorporating them into their Transport Canada approved ground icing program.  Supplementary testing looked at the influence of pre-treatment anti-icing on aircraft holdover times. The limited testing indicated it may be possible to provide allowance times for pre-treatment anti-icing operations. It is recommended that further research on this topic only be conducted if required/requested by operators. If so, an allowance time approach is recommended.					
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